

Columbia Gas of Pennsylvania, Inc.  
2015 General Rate Case  
Docket No. R-2015-2468056  
Standard Filing Requirements  
Exhibits 109-117  
Volume 7 of 10

COLUMBIA GAS OF PENNSYLVANIA, INC.

53.53 I. VALUATION

A. ALL UTILITIES

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

Response: The depreciation methods utilized in calculating annual and accrued depreciation are discussed in Exhibit No. 109 in the section titled "Calculation of Annual and Accrued Depreciation", beginning on page IV-2. The factors considered in arriving at estimates of service life and dispersion by account, begin in the section on page II-2 and the section on page III-4.

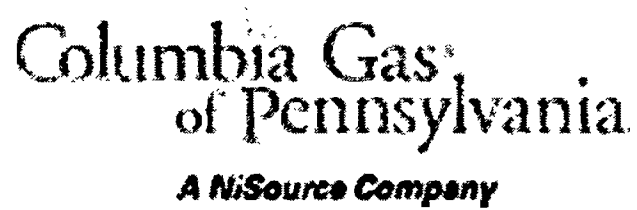
Field trips and facilities visited over the years for Columbia Gas of Pennsylvania are presented in Exhibit No.109, in the section "Field Trips", beginning on page III-2.

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, 2015, 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, 2016, by vintage by account and including applicable depreciation reserves and accruals begins on page II-8 of Exhibit No. 109 Attachment B.



## **2015 DEPRECIATION STUDY**

**CALCULATED ANNUAL DEPRECIATION  
ACCRUALS RELATED TO GAS PLANT  
AS OF NOVEMBER 30, 2015**

*Prepared by:*



*Excellence Delivered **As Promised***



COLUMBIA GAS OF PENNSYLVANIA, INC.  
Pittsburgh, Pennsylvania

2015 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS  
RELATED TO GAS PLANT  
AS OF NOVEMBER 30, 2015

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



**Gannett Fleming**

*Excellence Delivered As Promised*

March 6, 2015

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, 2015 are presented in the attached report. The results of our study as of November 30, 2014 are presented in our report titled "2014 Depreciation Study- Calculated Annual Depreciation Accruals Related to Gas Plant as of November 30, 2014". 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, 2015.

Respectfully submitted,

GANNETT FLEMING VALUATION  
AND RATE CONSULTANTS, LLC

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ADMITTED

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## PART I. INTRODUCTION

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

### **PART I. INTRODUCTION**

#### **SCOPE**

This report sets forth the results of the depreciation study conducted for Columbia Gas of Pennsylvania, Inc. to determine the annual depreciation accrual rates and amounts for ratemaking purposes applicable to the original cost of gas plant as of November 30, 2015.

The depreciation accrual rates and amounts presented herein are based on estimated survivor curves and on methods and procedures set forth in previous orders approved by the Pennsylvania Public Utility Commission. The estimated survivor curves presented herein were based on the results of a service life study incorporating statistical analyses of data through 2011.

#### **BASIS OF STUDY**

##### **Depreciation and Amortization**

Depreciation, as defined in the Uniform System of Accounts, is the loss in service value not restored by current maintenance, incurred in connection with the consumption or prospective retirement of gas plant in the course of service from causes which are known to be in current operation and against which the utility is not protected by insurance. Among the causes to be given consideration are wear and tear, decay, action of the elements, inadequacy, obsolescence, changes in the art, changes in demand, and requirements of public authorities.

Depreciation, as used in accounting, is a method of distributing fixed capital costs over a period of time by allocating annual amounts to expense. Each annual

amount of such depreciation expense is part of that year's total cost of providing utility service. Normally, the period of time over which the fixed capital cost is allocated to the cost of service is equal to the period of time over which an item renders service, that is, the item's service life. The most prevalent method of allocation is to distribute an equal amount of cost to each year of service life. This method is known as the straight line method of depreciation.

The calculation of annual and accrued depreciation based on the straight line method requires the estimation of survivor curves and the selection of group depreciation procedures. These subjects are discussed in the sections which follow.

For most plant accounts, depreciation accruals and accrued depreciation were calculated using the straight line method, the remaining life basis, the average service life (ASL) procedure for plant installed prior to 1976 and the equal life group (ELG) procedure for 1976 and subsequent vintages. The calculations were based on the attained ages and estimated service life characteristics for each depreciable group of gas property. For certain general plant accounts, the amortization amounts, annual and accrued, were based on the age of the vintage and the selected amortization period.

Survivor curves were used to reflect the expected dispersion of retirements, thus providing a consistent method of estimating service lives and depreciation for mass property. Iowa type curves were used to depict the estimated survivor curves. For life span groups, the estimate of life characteristics is consistent because the calculated lives of the units within a group are obtained by employing a single probable retirement date for the entire group.

### **Service Life Estimates**

The method of estimating service life consisted of compiling the service life history of the plant accounts, subaccounts or depreciable groups, reducing this history to trends through the use of acceptable actuarial techniques, and forecasting the trend of survivors for each depreciable group on the basis of interpretations of past trends and consideration of Company plans for the future. The combination of the historical trend and the estimated future trend yielded a complete pattern of life characteristics from which the average service life was derived.

The Company's service life estimates used in the depreciation calculation incorporated historical data compiled through 2011 from the property records of the Company. Such data included plant additions, retirements, transfers and other activity. Generally, retirement data for the years 1939 through 2011 were used in the actuarial life table computations which were the primary statistical support of the service life estimates.

A general understanding of the function of the plant and information with respect to the reasons for past retirements and the expected future causes of retirement was obtained through field trips conducted during the course of the service life study. Discussions with operating and management personnel also provided information regarding plans for the future which was incorporated in the interpretation and extrapolation of the statistical analyses.

### **AMORTIZATION OF NET SALVAGE**

Inasmuch as this report relates primarily to Pennsylvania rate regulation practices, under which experienced costs of negative net salvage are amortized after their occurrence, no adjustments for expected salvage were made to either the annual



depreciation accrual or the calculated accrued depreciation for the individual accounts. The annual provision for recovering negative net salvage is based on the amortization of net salvage over a five-year period, as established in the Opinion and Order of the Commission at Docket Nos. R-891468 and R-801873.

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## PART II. ESTIMATION OF SURVIVOR CURVES

## PART II. ESTIMATION OF SURVIVOR CURVES

### Survivor Curves

The use of an average service life for a property group implies that the various units in the group have different lives. Thus, the average life may be obtained by determining the separate lives of each of the units, or by constructing a survivor curve by plotting the number of units which survive at successive ages. The use of survivor curves, which reflect experienced and expected dispersion of service lives, is a systematic and rational means of estimating average service lives to be used to calculate depreciation for utility property. A discussion of the general concept of survivor curves and the Iowa type survivor curves is presented.

The survivor curve graphically depicts the amount of property existing at each age throughout the life of an original group. From the survivor curve, the average life of the group, the remaining life expectancy, the probable life and the frequency curve can be calculated. In Figure 1, a typical smooth survivor curve and the derived curves are illustrated. The average life is obtained by calculating the area under the survivor curve, from age zero to the maximum age, and dividing this area by the ordinate at age zero. The remaining life expectancy at any age can be calculated by obtaining the area under the curve, from the observation age to the maximum age, and dividing this area by the percent surviving at the observation age. For example, in Figure 1 the remaining life at age 30 years is equal to the crosshatched area under the survivor curve divided by 29.5 percent surviving at age 30. The probable life at any age is developed by adding the age and remaining life. If the probable life of the property is calculated for each year of age, the probable life curve shown in the chart can be developed. The frequency curve presents the number of units

retired in each age interval and is derived by obtaining the differences between the amount of property surviving at the beginning and at the end of each interval.

### **Iowa Type Curves**

The range of survivor characteristics usually experienced by utility and industrial properties is encompassed by a system of generalized survivor curves known as the Iowa type curves. There are four families in the Iowa system, labeled in accordance with the location of the modes of the retirements in relationship to the average life and the relative height of the modes. The left moded curves, presented in Figure 2, are those in which the greatest frequency of retirement occurs to the left of, or prior to, average service life. The symmetrical moded curves, presented in Figure 3, are those in which the greatest frequency of retirement occurs at average service life. The right moded curves, presented in Figure 4, are those in which the greatest frequency occurs to the right of, or after, average service life. The origin moded curves, presented in Figure 5, are those in which the greatest frequency of retirement occurs at the origin, or immediately after age zero. The letter designation of each family of curves (L, S, R or O) represents the location of the mode of the associated frequency curve with respect to the average service life. The numerical subscripts represent the relative heights of the modes of the frequency curves within each family.

The Iowa curves were developed at the Iowa State College Engineering Experiment Station through an extensive process of observation and classification of the ages at which industrial property had been retired. A report of the study which resulted in the classification of property survivor characteristics into 18 type curves, which constitute three of the four families, was published in 1935 in the form of the

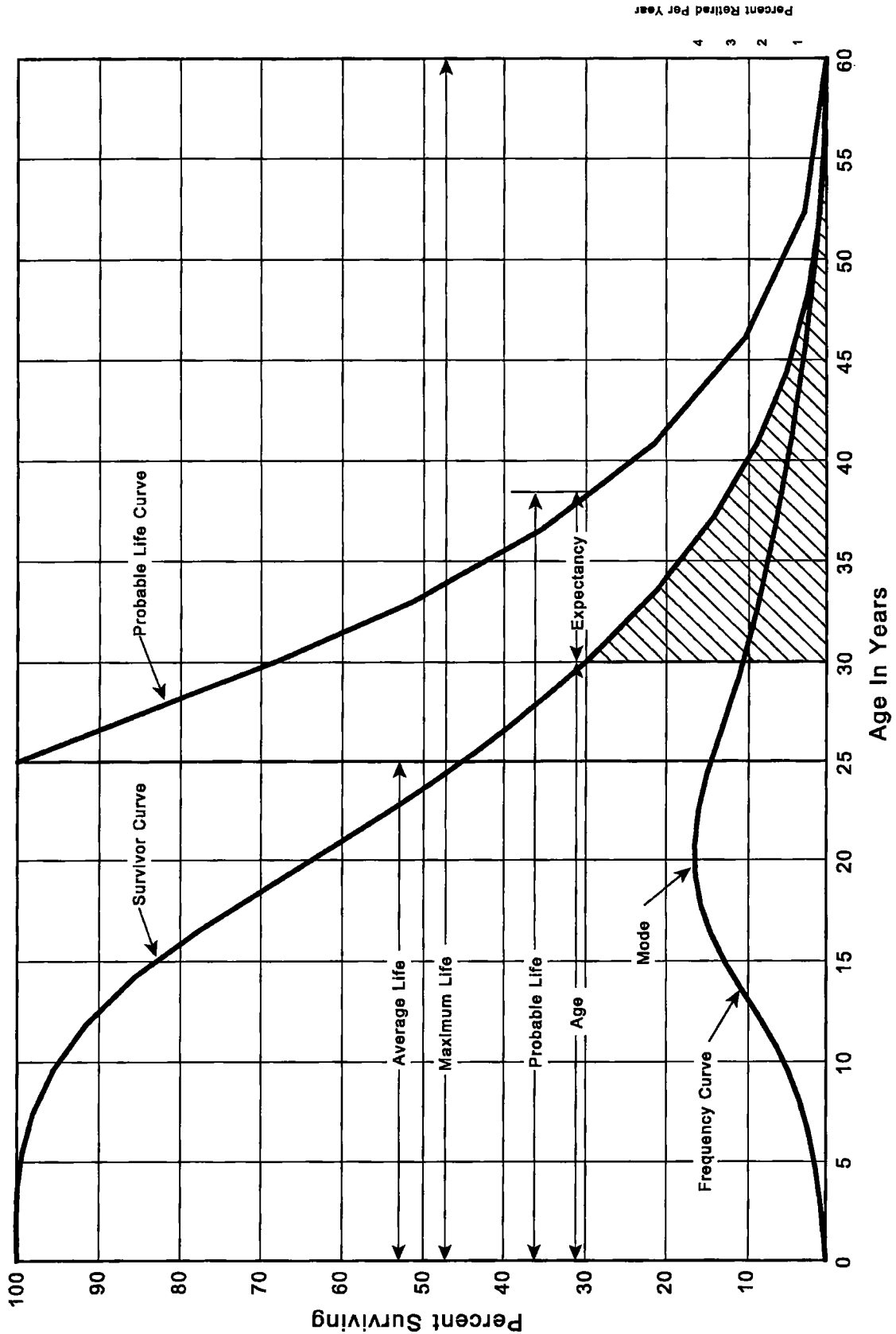


Figure 1. A Typical Survivor Curve and Derived Curves

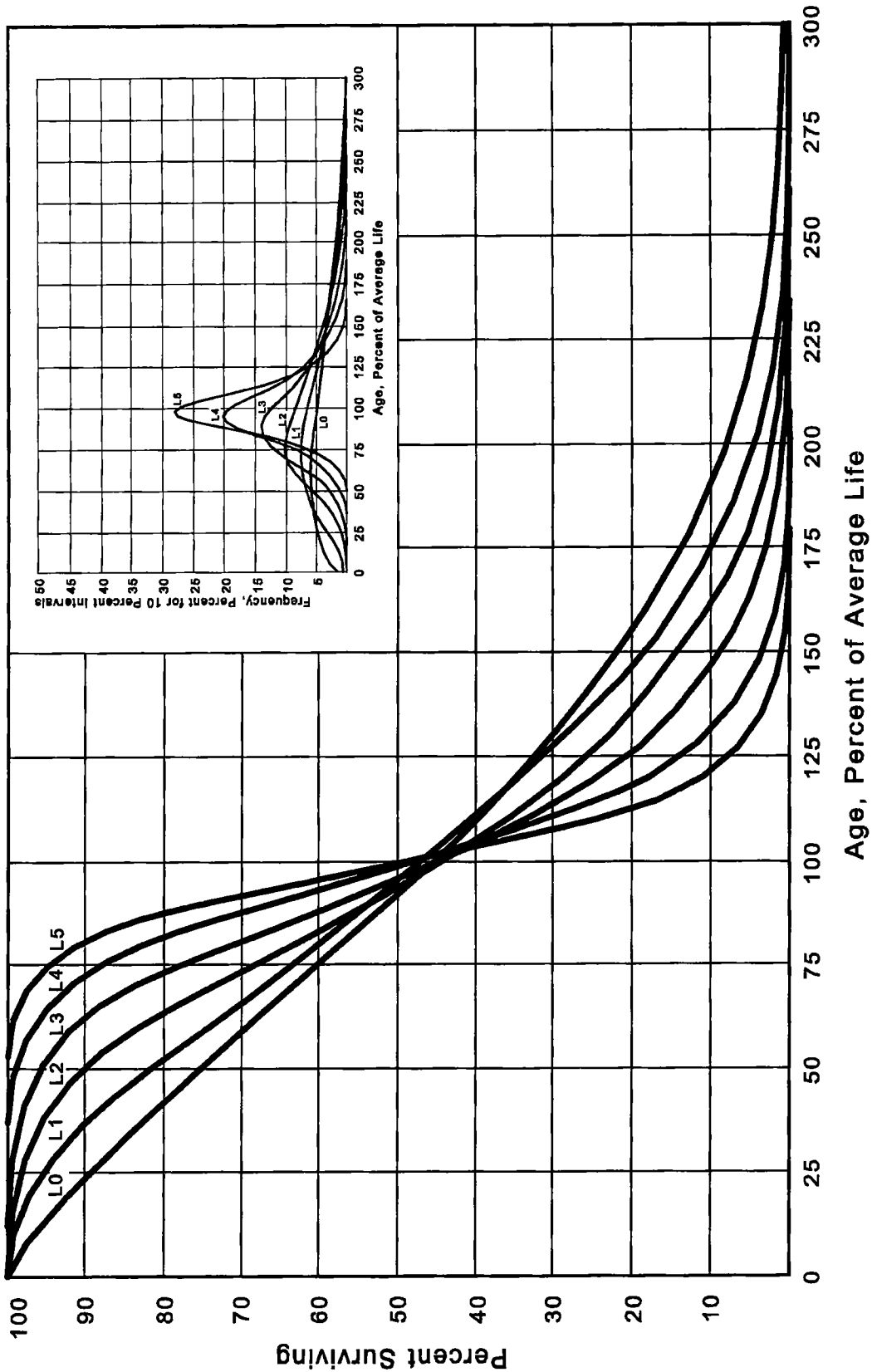


Figure 2. Left Modal or "L" Iowa Type Survivor Curves

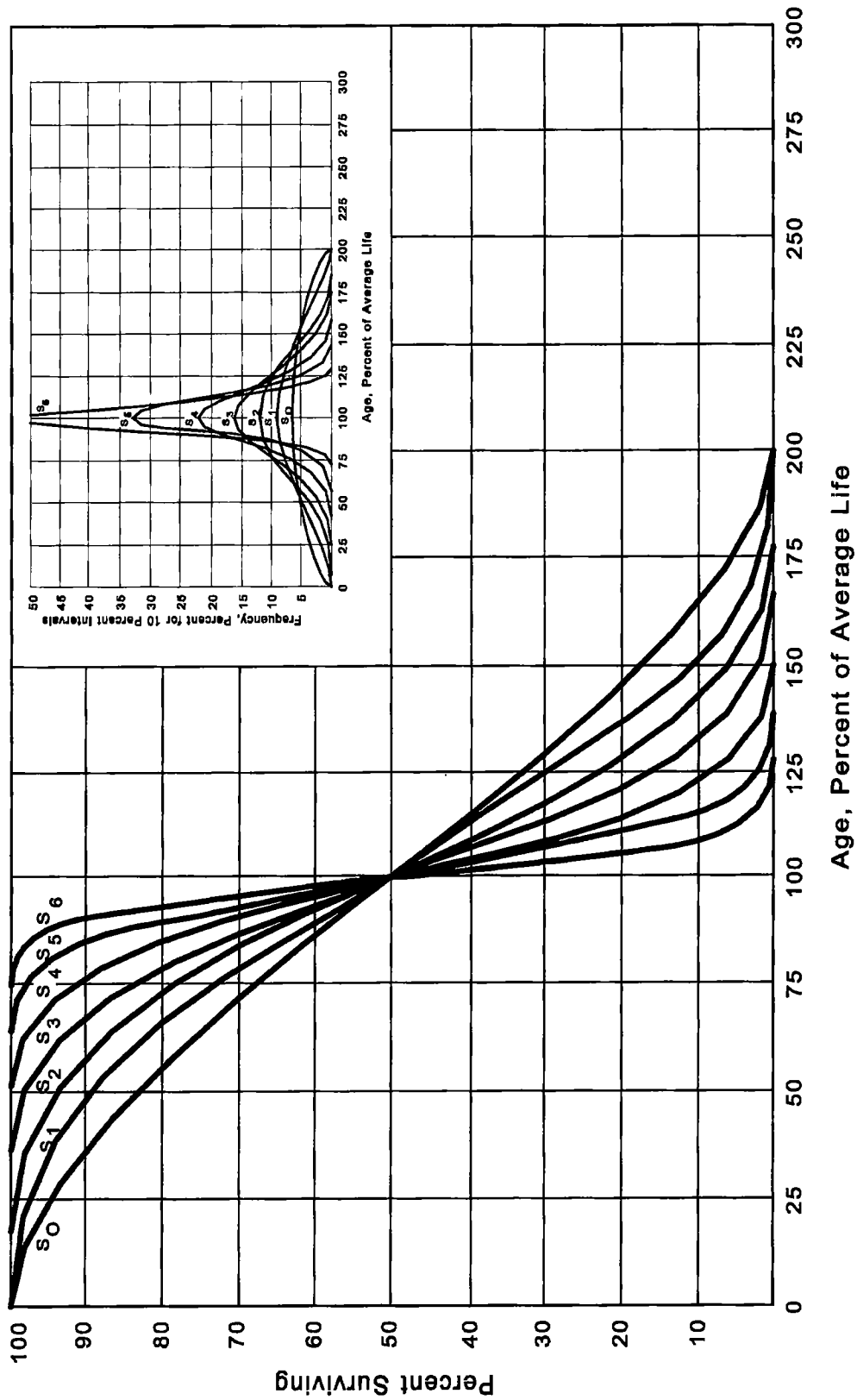


Figure 3. Symmetrical or "S" Iowa Type Survivor Curves

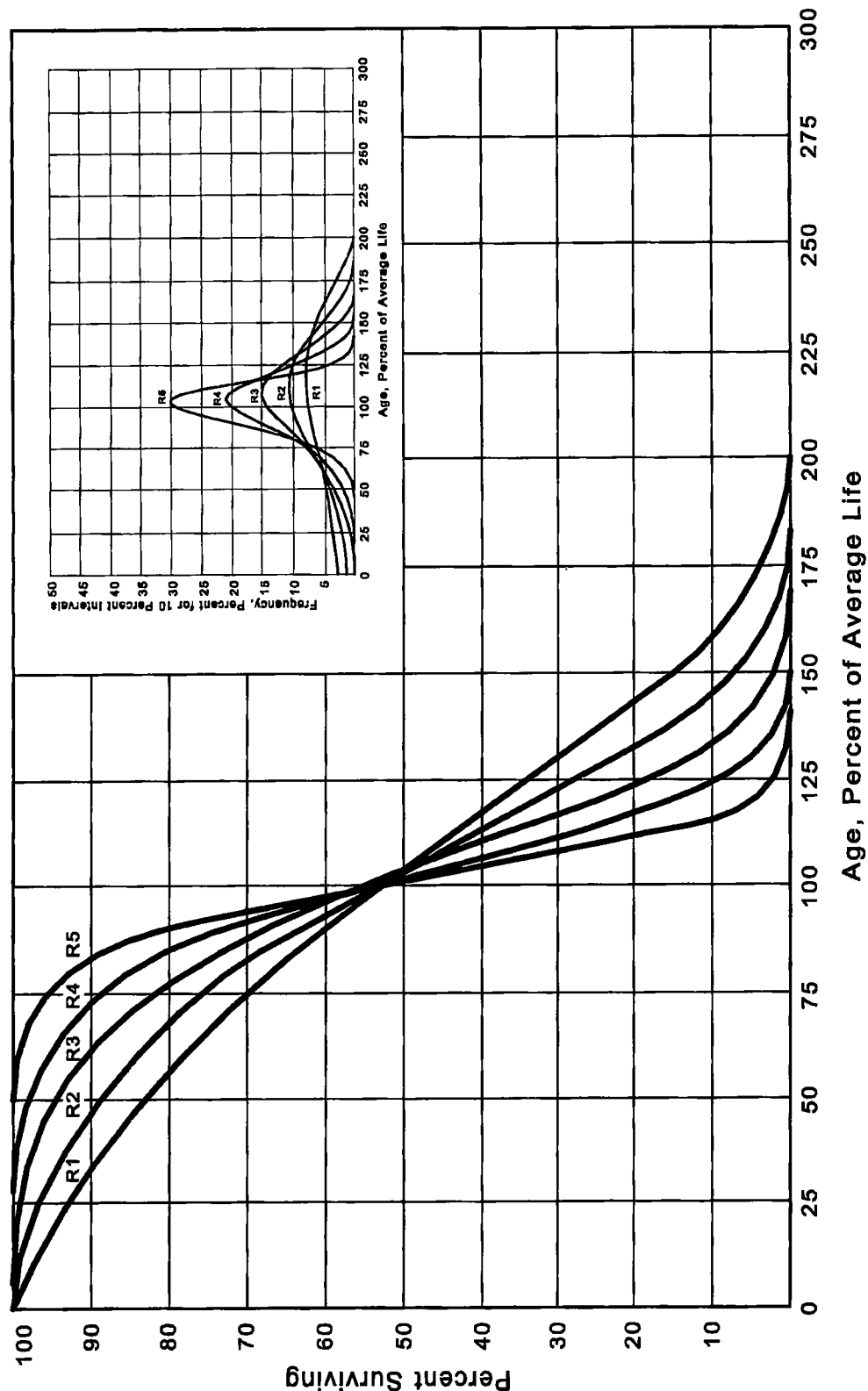


Figure 4. Right Modal or "R" Iowa Type Survivor Curves



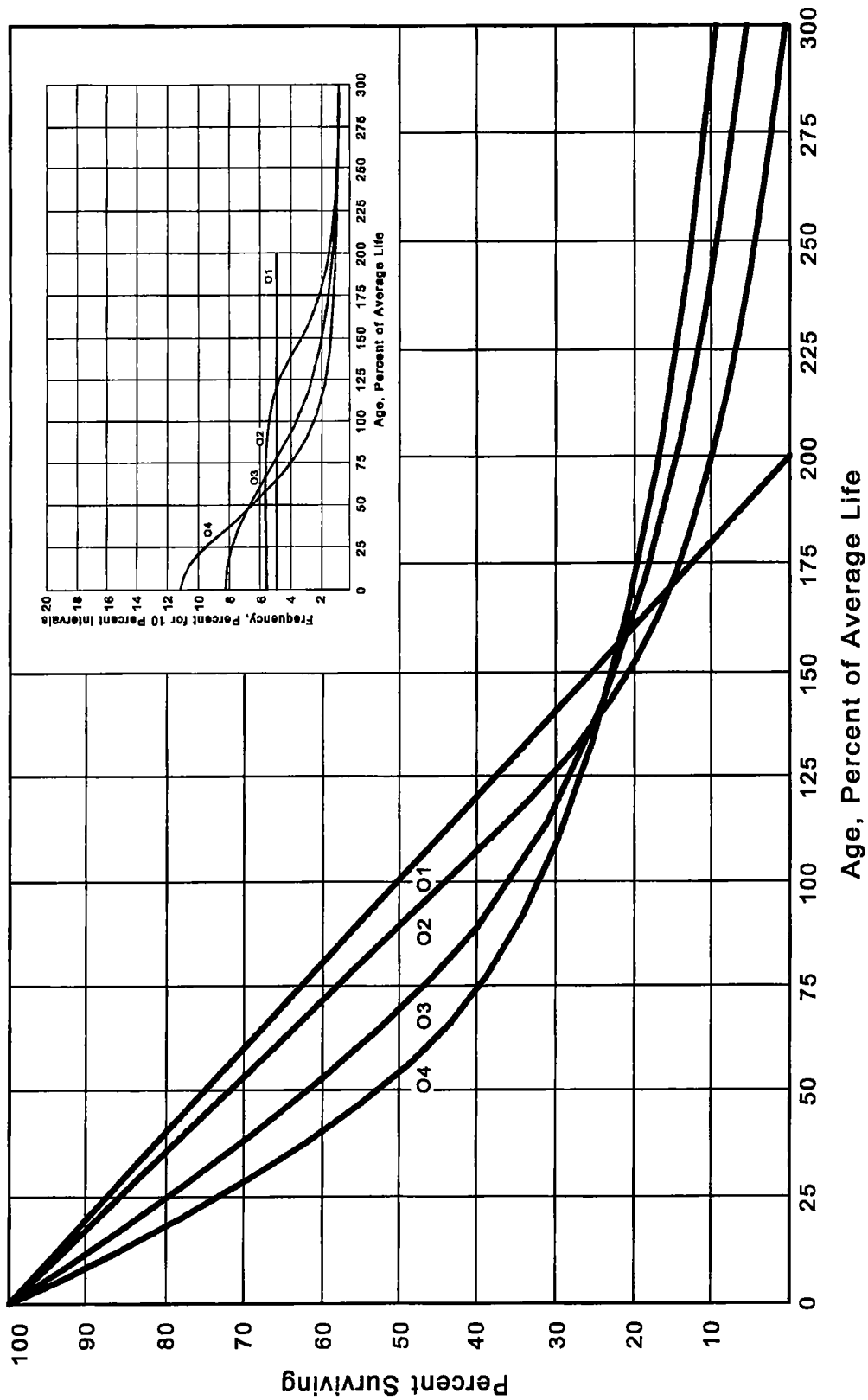


Figure 5. Origin Modal or "O" Iowa Type Survivor Curves

Experiment Station's Bulletin 125.<sup>1</sup> These curve types have also been presented in subsequent Experiment Station bulletins and in the text, "Engineering Valuation and Depreciation."<sup>2</sup> In 1957, Frank V. B. Couch, Jr., an Iowa State College graduate student submitted a thesis presenting his development of the fourth family consisting of the four O type survivor curves.

Survivor curves for groups in which all property is expected to be retired concurrently, such as power plants, are obtained by truncating smooth survivor curves at an age before zero percent surviving is reached. Such groups to which truncated survivor curves are applicable are designated as life span groups. In life span groups of one or more vintages, future retirements of all property included in the group are anticipated to occur at a specific date or over a restricted range of future dates which are represented by an estimated probable retirement date. Survivor curves for life span groups can be developed using both available historical experience and known or forecasted retirement dates. The life span of both the original installation and a subsequent addition is the number of years which elapse between its installation and the final retirement of the group. During the life of the group as a whole, interim retirements normally occur between age zero and the maximum age to produce a survivor pattern which is referred to as an "interim survivor curve".

### **Retirement Rate Method of Analysis**

The retirement rate method is an actuarial method of deriving survivor curves using the average rates at which property of each age group is retired. The method relates to property groups for which aged accounting experience is available or for

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

<sup>2</sup>Marston, Anson, Robley Winfrey and Jean C. Hempstead. Engineering Valuation and Depreciation, 2nd Edition. New York, McGraw-Hill Book Company. 1953.

which aged accounting experience is developed by statistically aging unaged amounts and is the method used to develop the original stub survivor curves in this study. The method (also known as the annual rate method) is illustrated through the use of an example in the following text, and is also explained in several publications, including "Statistical Analyses of Industrial Property Retirements,"<sup>3</sup> "Engineering Valuation and Depreciation,"<sup>4</sup> and "Depreciation Systems."<sup>5</sup>

The average rate of retirement used in the calculation of the percent surviving for the survivor curve (life table) requires two sets of data: first, the property retired during a period of observation, identified by the property's age at retirement; and second, the property exposed to retirement at the beginning of the age intervals during the same period. The period of observation is referred to as the experience band, and the band of years which represent the installation dates of the property exposed to retirement during the experience band is referred to as the placement band. An example of the calculations used in the development of a life table follows. The example includes schedules of annual aged property transactions, a schedule of plant exposed to retirement, a life table and illustrations of smoothing the stub survivor curve.

### **Schedules of Annual Transactions in Plant Records.**

The property group used to illustrate the retirement rate method is observed for the experience band 2005-2014 during which there were placements during the years 2000-2014. In order to illustrate the summation of the aged data by age interval, the data were compiled in the manner presented in Schedules 1 and 2 on pages II-12 and II-13. In Schedule 1, the year of installation (year placed) and the year of retirement

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

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

<sup>5</sup>Wolf, Frank K. and W. Chester Fitch. Depreciation Systems. Iowa State University Press. 1994.

are shown. The age interval during which a retirement occurred is determined from this information. In the example which follows, \$10,000 of the dollars invested in 2000 were retired in 2005. 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 staircase line drawn on the table beginning with the 2005 retirements of 2000 installations and ending with the 2014 retirements of the 2009 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 2005-2014  
SUMMARIZED BY AGE INTERVAL

| Placement Band 2000-2014  |                                   |      |      |      |      |      |      |      |      |      |              |       |          |
|---------------------------|-----------------------------------|------|------|------|------|------|------|------|------|------|--------------|-------|----------|
| Experience Band 2005-2014 |                                   |      |      |      |      |      |      |      |      |      |              |       |          |
| Year                      | Retirements, Thousands of Dollars |      |      |      |      |      |      |      |      |      |              |       |          |
|                           | During Year                       |      |      |      |      |      |      |      |      |      |              |       |          |
|                           | 2005                              | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | Total During |       | Age      |
| Placed                    | (1)                               | (2)  | (3)  | (4)  | (5)  | (6)  | (7)  | (8)  | (9)  | (10) | (11)         | (12)  | Interval |
| (1)                       | (2)                               | (3)  | (4)  | (5)  | (6)  | (7)  | (8)  | (9)  | (10) | (11) | (12)         | (13)  | (13)     |
| 2000                      | 10                                | 11   | 12   | 13   | 14   | 16   | 23   | 24   | 25   | 26   | 26           | 26    | 13½-14½  |
| 2001                      | 11                                | 12   | 13   | 15   | 16   | 18   | 20   | 21   | 22   | 19   | 19           | 44    | 12½-13½  |
| 2002                      | 11                                | 12   | 13   | 14   | 16   | 17   | 19   | 21   | 22   | 18   | 18           | 64    | 11½-12½  |
| 2003                      | 8                                 | 9    | 10   | 11   | 11   | 13   | 14   | 15   | 16   | 17   | 17           | 83    | 10½-11½  |
| 2004                      | 9                                 | 10   | 11   | 12   | 13   | 14   | 16   | 17   | 19   | 20   | 20           | 93    | 9½-10½   |
| 2005                      | 4                                 | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 20   | 20           | 105   | 8½-9½    |
| 2006                      |                                   | 5    | 11   | 12   | 13   | 14   | 15   | 16   | 18   | 20   | 20           | 113   | 7½-8½    |
| 2007                      |                                   |      | 6    | 12   | 13   | 15   | 16   | 17   | 19   | 19   | 19           | 124   | 6½-7½    |
| 2008                      |                                   |      |      | 6    | 13   | 15   | 16   | 17   | 19   | 19   | 19           | 131   | 5½-6½    |
| 2009                      |                                   |      |      |      | 7    | 14   | 16   | 17   | 19   | 20   | 20           | 143   | 4½-5½    |
| 2010                      |                                   |      |      |      |      | 8    | 18   | 20   | 22   | 23   | 23           | 146   | 3½-4½    |
| 2011                      |                                   |      |      |      |      |      | 9    | 20   | 22   | 25   | 25           | 150   | 2½-3½    |
| 2012                      |                                   |      |      |      |      |      |      | 11   | 23   | 25   | 25           | 151   | 1½-2½    |
| 2013                      |                                   |      |      |      |      |      |      |      | 11   | 24   | 24           | 153   | ½-1½     |
| 2014                      |                                   |      |      |      |      |      |      |      |      | 13   | 13           | 80    | 0-½      |
| Total                     | 53                                | 68   | 86   | 106  | 128  | 157  | 196  | 231  | 273  | 308  | 308          | 1,606 |          |

SCHEDULE 2. OTHER TRANSACTIONS FOR EACH YEAR 2005-2014  
SUMMARIZED BY AGE INTERVAL

Experience Band 2005-2014 Placement Band 2000-2014

Acquisitions, Transfers and Sales, Thousands of Dollars

| Year<br>Placed<br>(1) | During Year |             |             |             |             |             |                 |                   |                 |                    | Total During<br>Age Interval<br>(12) | Age<br>Interval<br>(13) |
|-----------------------|-------------|-------------|-------------|-------------|-------------|-------------|-----------------|-------------------|-----------------|--------------------|--------------------------------------|-------------------------|
|                       | 2005<br>(2) | 2006<br>(3) | 2007<br>(4) | 2008<br>(5) | 2009<br>(6) | 2010<br>(7) | 2011<br>(8)     | 2012<br>(9)       | 2013<br>(10)    | 2014<br>(11)       |                                      |                         |
| 2000                  | -           | -           | -           | -           | -           | -           | 60 <sup>a</sup> | -                 | -               | -                  | -                                    | 13½-14½                 |
| 2001                  | -           | -           | -           | -           | -           | -           | -               | -                 | -               | -                  | -                                    | 12½-13½                 |
| 2002                  | -           | -           | -           | -           | -           | -           | -               | -                 | -               | -                  | -                                    | 11½-12½                 |
| 2003                  | -           | -           | -           | -           | -           | -           | -               | (5) <sup>b</sup>  | -               | -                  | 60                                   | 10½-11½                 |
| 2004                  | -           | -           | -           | -           | -           | -           | -               | 6 <sup>a</sup>    | -               | -                  | -                                    | 9½-10½                  |
| 2005                  | -           | -           | -           | -           | -           | -           | -               | -                 | -               | -                  | (5)                                  | 8½-9½                   |
| 2006                  | -           | -           | -           | -           | -           | -           | -               | -                 | -               | -                  | 6                                    | 7½-8½                   |
| 2007                  | -           | -           | -           | -           | -           | -           | -               | -                 | -               | -                  | -                                    | 6½-7½                   |
| 2008                  | -           | -           | -           | -           | -           | -           | -               | (12) <sup>b</sup> | -               | -                  | -                                    | 5½-6½                   |
| 2009                  | -           | -           | -           | -           | -           | -           | -               | -                 | 22 <sup>a</sup> | -                  | -                                    | 4½-5½                   |
| 2010                  | -           | -           | -           | -           | -           | -           | -               | (19) <sup>b</sup> | -               | -                  | 10                                   | 3½-4½                   |
| 2011                  | -           | -           | -           | -           | -           | -           | -               | -                 | -               | -                  | -                                    | 2½-3½                   |
| 2012                  | -           | -           | -           | -           | -           | -           | -               | -                 | -               | (102) <sup>c</sup> | (121)                                | 1½-2½                   |
| 2013                  | -           | -           | -           | -           | -           | -           | -               | -                 | -               | -                  | -                                    | ½-1½                    |
| 2014                  | -           | -           | -           | -           | -           | -           | -               | -                 | -               | -                  | -                                    | 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 2005 through 2014 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 2010 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 2005-2014 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 2005-2014  
SUMMARIZED BY AGE INTERVAL**

| Experience Band 2005-2014 |                                               |                  |                  |                  |                  |                  |                  |                  |                    |                    |                     | Placement Band 2000-2014 |  |  |
|---------------------------|-----------------------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|--------------------|--------------------|---------------------|--------------------------|--|--|
| Year                      | Exposures, Thousands of Dollars               |                  |                  |                  |                  |                  |                  |                  |                    |                    |                     | Total at                 |  |  |
|                           | Annual Survivors at the Beginning of the Year |                  |                  |                  |                  |                  |                  |                  |                    |                    |                     | Beginning of             |  |  |
|                           | <u>2005</u>                                   | <u>2006</u>      | <u>2007</u>      | <u>2008</u>      | <u>2009</u>      | <u>2010</u>      | <u>2011</u>      | <u>2012</u>      | <u>2013</u>        | <u>2014</u>        | <u>Age Interval</u> | <u>Age Interval</u>      |  |  |
| <u>Placed</u>             | <u>2005</u>                                   | <u>2006</u>      | <u>2007</u>      | <u>2008</u>      | <u>2009</u>      | <u>2010</u>      | <u>2011</u>      | <u>2012</u>      | <u>2013</u>        | <u>2014</u>        | <u>(12)</u>         | <u>(13)</u>              |  |  |
| (1)                       | (2)                                           | (3)              | (4)              | (5)              | (6)              | (7)              | (8)              | (9)              | (10)               | (11)               |                     |                          |  |  |
| 2000                      | 255                                           | 245              | 234              | 222              | 209              | 195              | 239              | 216              | 192                | 167                | 167                 | 13½-14½                  |  |  |
| 2001                      | 279                                           | 268              | 256              | 243              | 228              | 212              | 194              | 174              | 153                | 131                | 323                 | 12½-13½                  |  |  |
| 2002                      | 307                                           | 296              | 284              | 271              | 257              | 241              | 224              | 205              | 184                | 162                | 531                 | 11½-12½                  |  |  |
| 2003                      | 338                                           | 330              | 321              | 311              | 300              | 289              | 276              | 262              | 242                | 226                | 823                 | 10½-11½                  |  |  |
| 2004                      | 376                                           | 367              | 357              | 346              | 334              | 321              | 307              | 297              | 280                | 261                | 1,097               | 9½-10½                   |  |  |
| 2005                      | 420 <sup>a</sup>                              | 416              | 407              | 397              | 386              | 374              | 361              | 347              | 332                | 316                | 1,503               | 8½-9½                    |  |  |
| 2006                      |                                               | 460 <sup>a</sup> | 455              | 444              | 432              | 419              | 405              | 390              | 374                | 356                | 1,952               | 7½-8½                    |  |  |
| 2007                      |                                               |                  | 510 <sup>a</sup> | 504              | 492              | 479              | 464              | 448              | 431                | 412                | 2,463               | 6½-7½                    |  |  |
| 2008                      |                                               |                  |                  | 580 <sup>a</sup> | 574              | 561              | 546              | 530              | 501                | 482                | 3,057               | 5½-6½                    |  |  |
| 2009                      |                                               |                  |                  |                  | 660 <sup>a</sup> | 653              | 639              | 623              | 628                | 609                | 3,789               | 4½-5½                    |  |  |
| 2010                      |                                               |                  |                  |                  |                  | 750 <sup>a</sup> | 742              | 724              | 685                | 663                | 4,332               | 3½-4½                    |  |  |
| 2011                      |                                               |                  |                  |                  |                  |                  | 850 <sup>a</sup> | 841              | 821                | 799                | 4,955               | 2½-3½                    |  |  |
| 2012                      |                                               |                  |                  |                  |                  |                  |                  | 960 <sup>a</sup> | 949                | 926                | 5,719               | 1½-2½                    |  |  |
| 2013                      |                                               |                  |                  |                  |                  |                  |                  |                  | 1,080 <sup>a</sup> | 1,069              | 6,579               | ½-1½                     |  |  |
| 2014                      |                                               |                  |                  |                  |                  |                  |                  |                  |                    | 1,220 <sup>a</sup> | 7,490               | 0-½                      |  |  |
| Total                     | 1,975                                         | 2,382            | 2,824            | 3,318            | 3,872            | 4,494            | 5,247            | 6,017            | 6,852              | 7,799              | 44,780              |                          |  |  |

<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 2005-2014

Placement Band 2000-2014

(Exposure and Retirement Amounts are in Thousands of Dollars)

| <u>Age at<br/>Beginning of<br/>Interval</u><br>(1) | <u>Exposures at<br/>Beginning of<br/>Age Interval</u><br>(2) | <u>Retirements<br/>During Age<br/>Interval</u><br>(3) | <u>Retirement<br/>Ratio</u><br>(4) | <u>Survivor<br/>Ratio</u><br>(5) | <u>Percent<br/>Surviving at<br/>Beginning of<br/>Age Interval</u><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                                               | <u>167</u>                                                   | <u>26</u>                                             | 0.1557                             | 0.8443                           | 42.24                                                                    |
|                                                    |                                                              |                                                       |                                    |                                  | 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

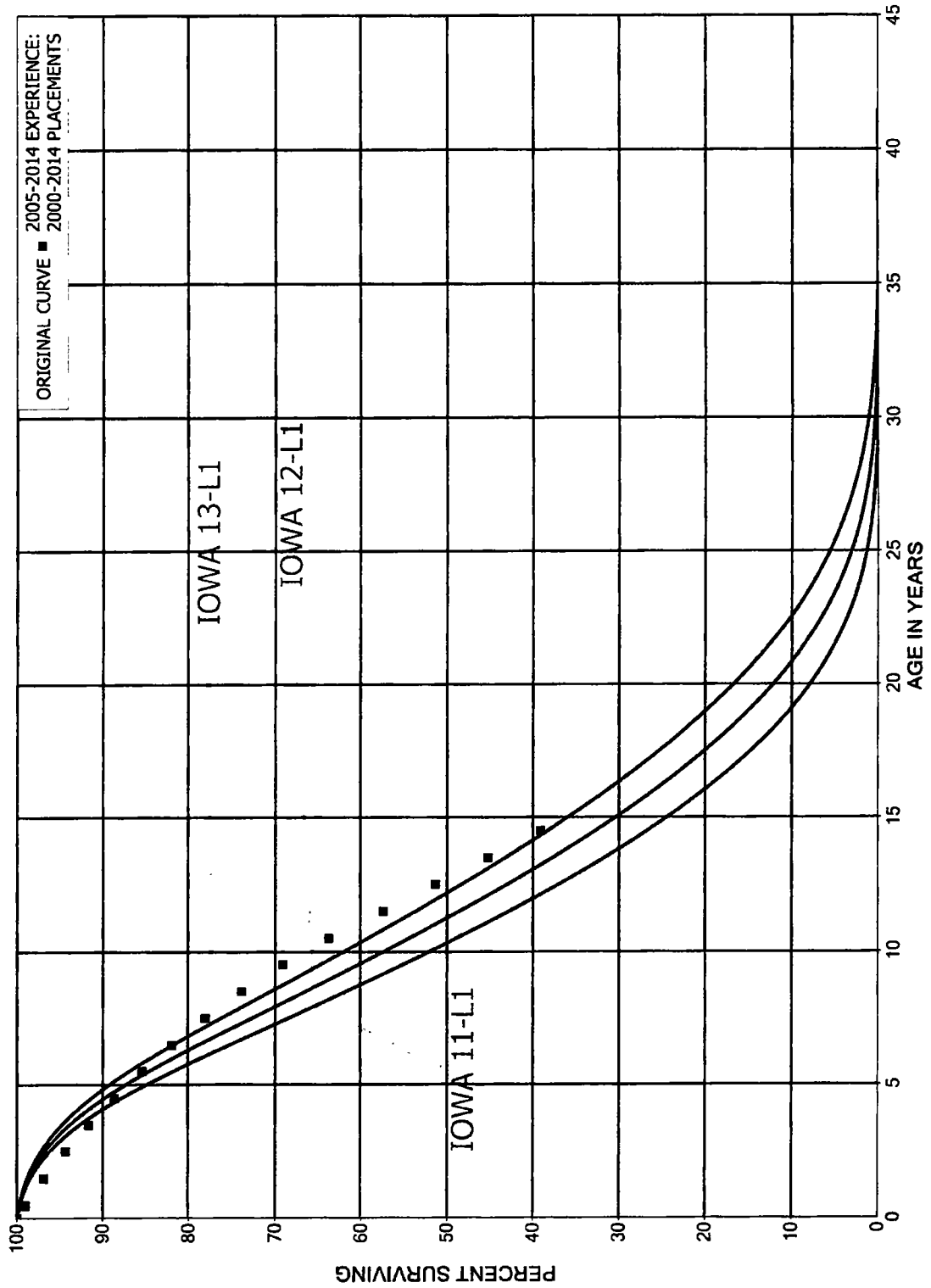


FIGURE 7. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN S0 IOWA TYPE CURVE  
ORIGINAL AND SMOOTH SURVIVOR CURVES

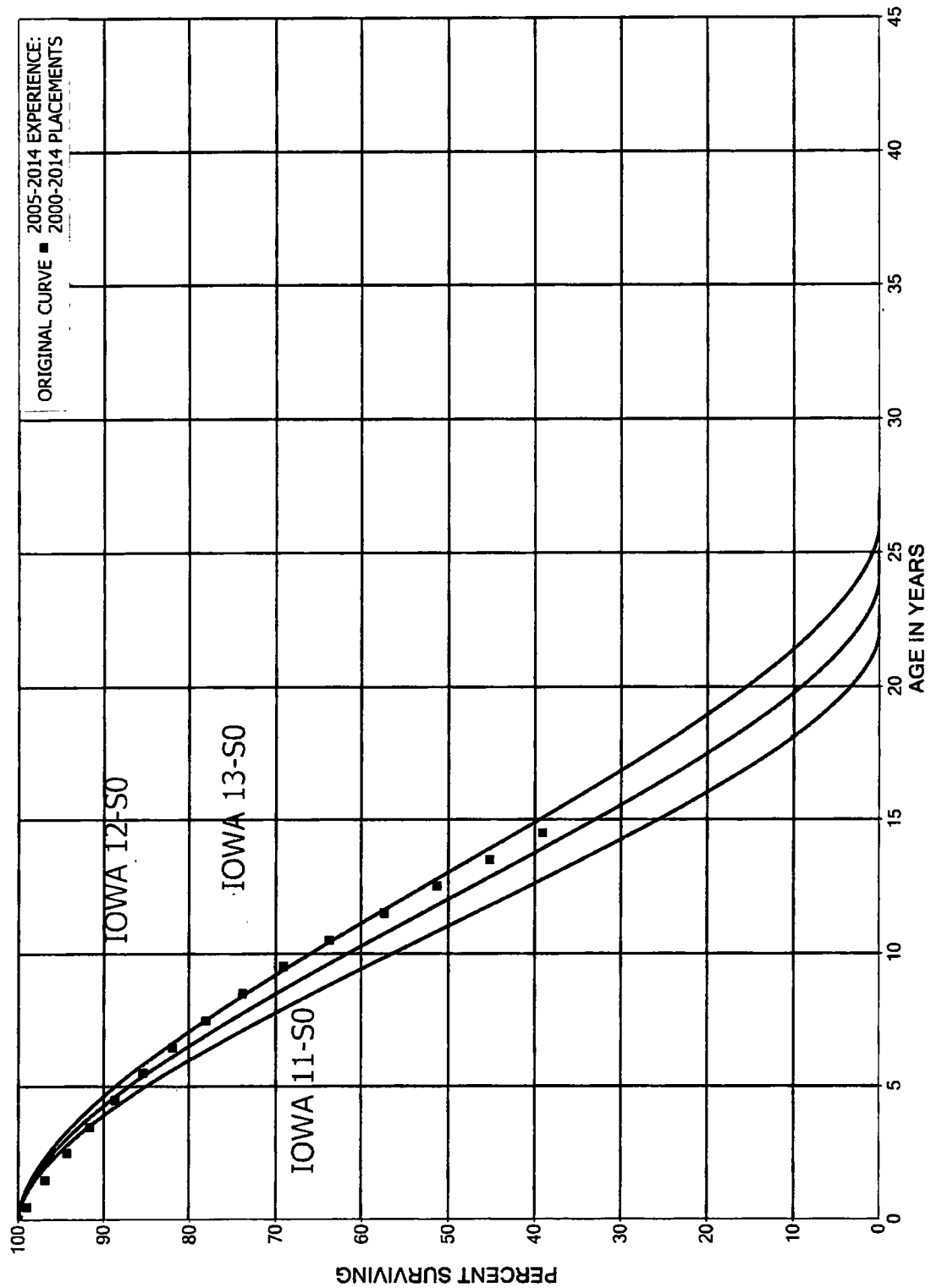


FIGURE 8. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN R1 IOWA TYPE CURVE  
ORIGINAL AND SMOOTH SURVIVOR CURVES

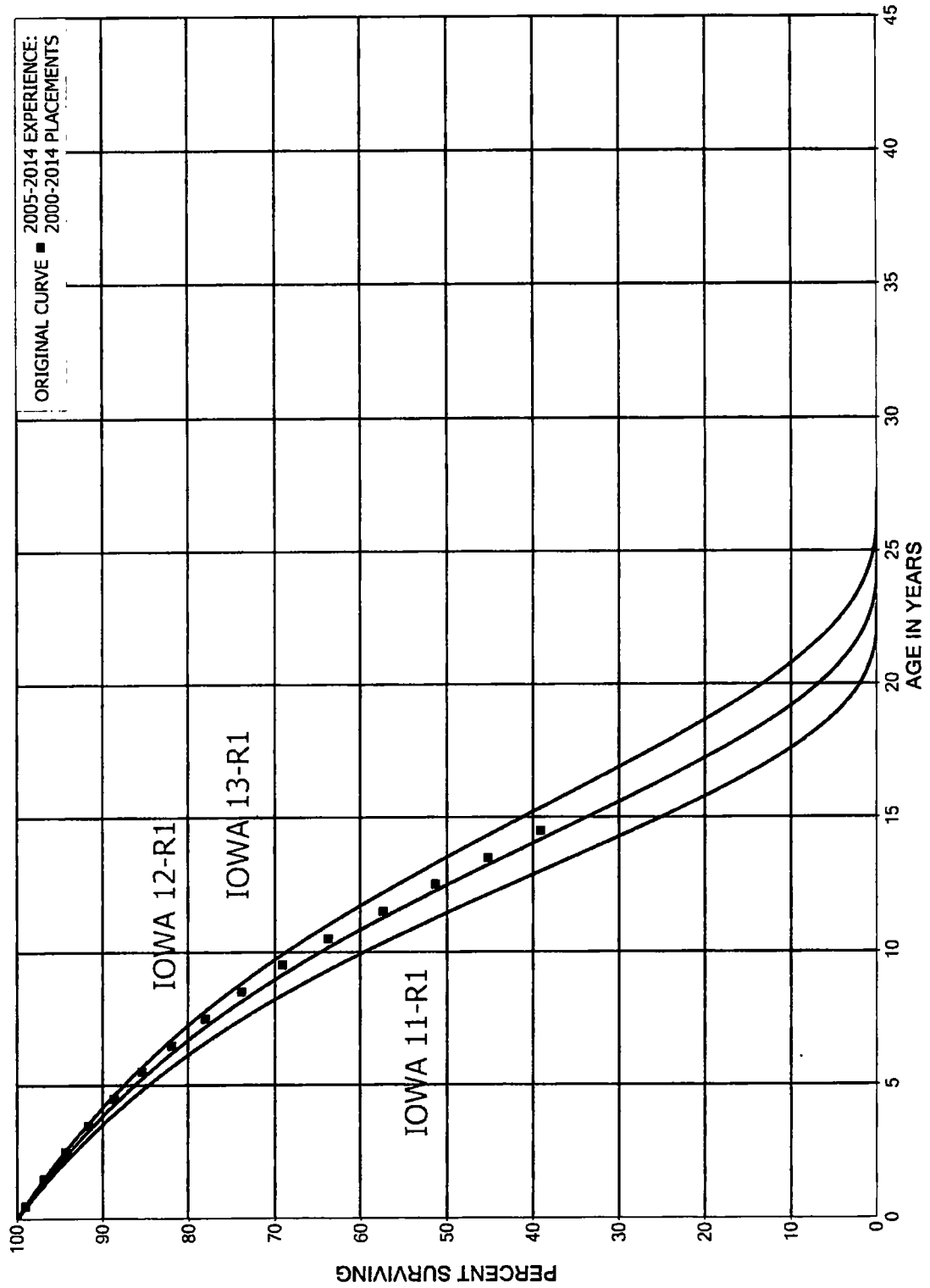
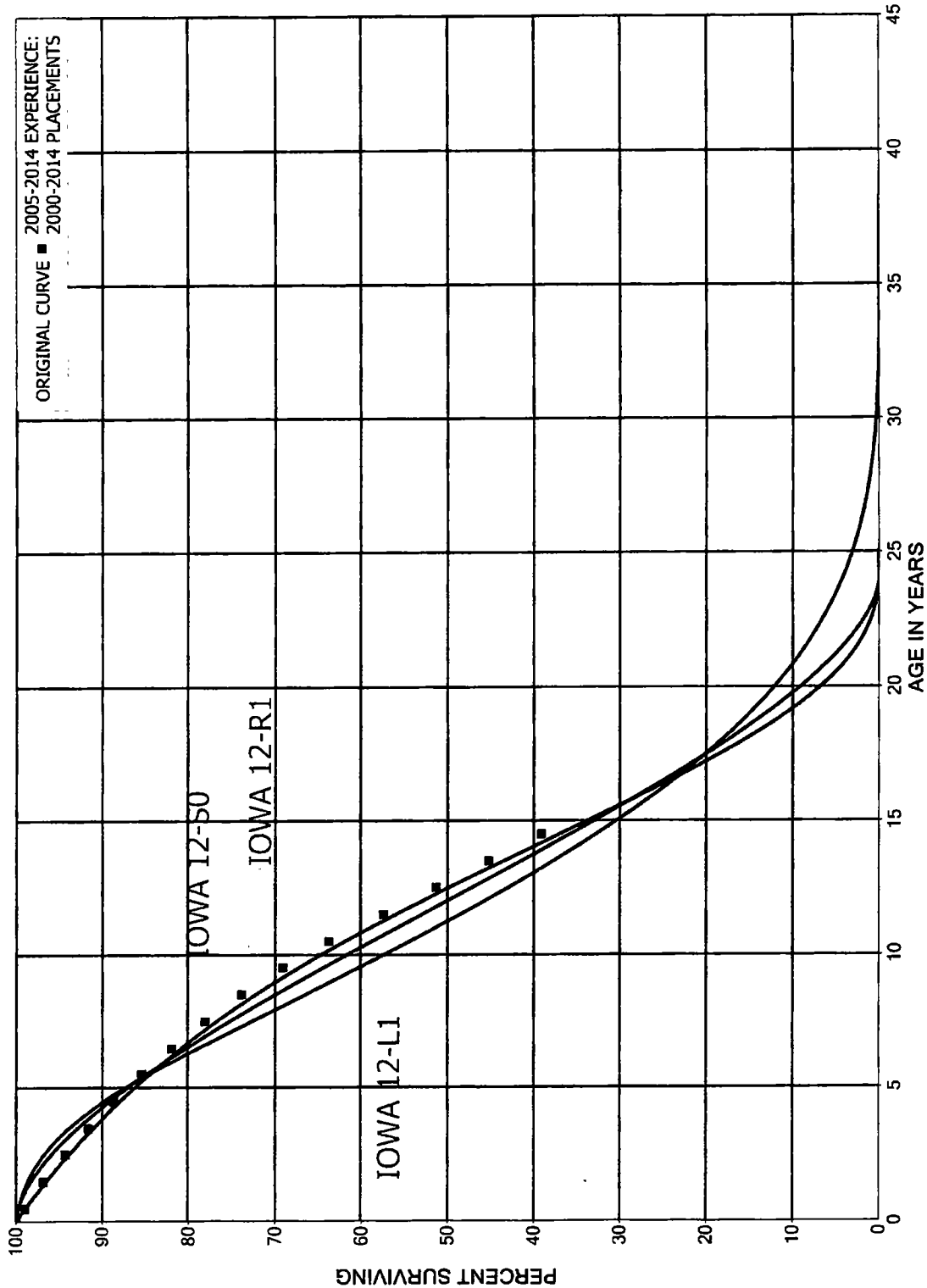


FIGURE 9. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN L1, S0 AND R1 IOWA TYPE CURVE  
ORIGINAL AND SMOOTH SURVIVOR CURVES





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## PART III. SERVICE LIFE CONSIDERATIONS

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

#### **Field Trips**

In order to be familiar with the operation of the Company and observe representative portions of the plant, field trips have been conducted periodically. A general understanding of the function of the plant and information with respect to the reasons for past retirements and the expected future causes of retirements are obtained during these field trips. This knowledge and information were incorporated in the interpretation and extrapolation of the statistical analyses.

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

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

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

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

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

July 23 and 24, 2002, cont.

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

August 4, 1997

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

July 22, 1997

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

November 3, 1992

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

November 2, 1992

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

October 27, 1992

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

**Judgment**

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

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

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

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

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

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

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

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

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

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

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

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

Similar studies were performed for the remaining significant mass plant accounts. The results of the statistical analyses are presented in account sequence in the report, beginning on page VI-1.

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

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

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

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

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



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## **PART IV. CALCULATION OF ANNUAL AND ACCRUED DEPRECIATION**

## **PART IV. CALCULATION OF ANNUAL AND ACCRUED DEPRECIATION**

### **Group Depreciation Procedures**

A group procedure for depreciation is appropriate when considering more than a single item of property. Normally, the items within a group do not have identical service lives, but have lives that are dispersed over a range of time. There are two primary group procedures, namely, average service life and equal life group.

In the average service life procedure, the rate of annual depreciation is based on the average life or average remaining life of the group, and this rate is applied to the surviving balances of the group's cost. A characteristic of this procedure is that the cost of plant retired prior to average life is not fully recouped at the time of retirement, whereas the cost of plant retired subsequent to average life is more than fully recouped. Over the entire life cycle, the portion of cost not recouped prior to average life is balanced by the cost recouped subsequent to average life.

In the equal life group procedure, the property group is subdivided according to service life. That is, each equal life group includes that portion of the property which experiences the life of that specific group. The relative size of each equal life group is determined from the property's life dispersion curve. This procedure eliminates the need to base depreciation on average lives, inasmuch as each group is equivalent to a unit having a single life. The full costs of short-lived units are accrued during their lives, leaving no deferral of accruals required to be added to the annual costs associated with long-lived units. The calculated depreciation for the property group is the summation of the calculated depreciation based on the service life of each equal life group.

### **Remaining Life Annual Accruals**

For the purpose of calculating remaining life accrual rates as of November 30, 2015, 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:

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

Inasmuch as service life minus remaining life equals age, when averages are not employed, the foregoing equation reduces to:

$$Ratio = \frac{Age}{Service\ Life}.$$

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, 2015 calculation date.

In the table, each equal life group is defined by the age interval shown in columns 1 and 2, which identify the ages at which the first and last retirement of each group occur. The group's designated life, shown in column 3, is the midpoint of the interval. In the calculation, the equal life groups of each vintage are arranged such that the midpoint of each one-year age interval coincides with the calculation date, e.g., November 30 in this case. This enables the calculation of annual accruals which are centered on, or as of, the same date as the calculation of accrued depreciation.

The retirement during each age interval, shown in column 4, is the size of each equal life group. It is derived from the Iowa 12-S1.5 survivor curve and is the difference between the percents surviving (not shown) at the beginning and end of the age interval.

DETAILED COMPUTATION OF ANNUAL AND ACCRUED FACTORS USING THE EQUAL LIFE GROUP PROCEDURE

INPUT PARAMETERS:

CALCULATION DATE... 11-30-2015  
SURVIVOR CURVE.... 12-S1.5

| AGE INTERVAL |        | RETIREMENTS DURING |           | GROUP ANNUAL    | YEAR INST | SUMMATION OF ANNUAL ACCRUALS | AVERAGE PERCENT SURVIVING | ANNUAL FACTOR | ACCRUED FACTOR |
|--------------|--------|--------------------|-----------|-----------------|-----------|------------------------------|---------------------------|---------------|----------------|
| BEG          | END    | LIFE               | INTERVAL  | ACCUAL          |           |                              |                           |               |                |
| (1)          | (2)    | (3)                | (4)       | (5) = (4) / (3) | (6)       | (7)                          | (8)                       | (9)           | (10)           |
| 0.000        | 0.917  | 0.458              | 0.03874   | 0.03874000000   | 2015      | 9.60407092849                | 95.820491                 | 0.1002        | 0.0459         |
| 0.917        | 1.917  | 1.417              | 0.26936   | 0.19009174312   | 2014      | 9.88964194524                | 99.826578                 | 0.0991        | 0.1404         |
| 1.917        | 2.917  | 2.417              | 0.71693   | 0.29661977658   | 2013      | 9.64628618539                | 99.333431                 | 0.0971        | 0.2347         |
| 2.917        | 3.917  | 3.417              | 1.38010   | 0.40389230319   | 2012      | 9.29603014550                | 98.284918                 | 0.0946        | 0.3232         |
| 3.917        | 4.917  | 4.417              | 2.24863   | 0.50908535205   | 2011      | 8.83954131788                | 96.470555                 | 0.0916        | 0.4046         |
| 4.917        | 5.917  | 5.417              | 3.29149   | 0.60762230017   | 2010      | 8.28118749177                | 93.700494                 | 0.0884        | 0.4789         |
| 5.917        | 6.917  | 6.417              | 4.43616   | 0.69131369799   | 2009      | 7.63171949269                | 89.836667                 | 0.0850        | 0.5454         |
| 6.917        | 7.917  | 7.417              | 5.60035   | 0.75506943508   | 2008      | 6.90852792616                | 84.818413                 | 0.0815        | 0.6045         |
| 7.917        | 8.917  | 8.417              | 6.69661   | 0.79560532256   | 2007      | 6.13319054734                | 78.669936                 | 0.0780        | 0.6565         |
| 8.917        | 9.917  | 9.417              | 7.62294   | 0.80948709780   | 2006      | 5.33064433716                | 71.510159                 | 0.0745        | 0.7016         |
| 9.917        | 10.917 | 10.417             | 8.30037   | 0.79681002208   | 2005      | 4.52749577722                | 63.548504                 | 0.0712        | 0.7417         |
| 10.917       | 11.917 | 11.417             | 8.67209   | 0.75957694666   | 2004      | 3.74930229285                | 55.062277                 | 0.0681        | 0.7775         |
| 11.917       | 12.917 | 12.417             | 8.70153   | 0.70077554965   | 2003      | 3.01912604469                | 46.375469                 | 0.0651        | 0.8083         |
| 12.917       | 13.917 | 13.417             | 8.38597   | 0.62502571365   | 2002      | 2.35622541304                | 37.831719                 | 0.0623        | 0.8359         |
| 13.917       | 14.917 | 14.417             | 7.75288   | 0.53775958937   | 2001      | 1.77483276153                | 29.762294                 | 0.0596        | 0.8593         |
| 14.917       | 15.917 | 15.417             | 6.86360   | 0.44519686061   | 2000      | 1.28335453654                | 22.454052                 | 0.0572        | 0.8819         |
| 15.917       | 16.917 | 16.417             | 5.79278   | 0.35285253091   | 1999      | 0.88432984078                | 16.125862                 | 0.0548        | 0.8997         |
| 16.917       | 17.917 | 17.417             | 4.62848   | 0.26574496182   | 1998      | 0.57503109442                | 10.915231                 | 0.0527        | 0.9179         |
| 17.917       | 18.917 | 18.417             | 3.47537   | 0.18870445784   | 1997      | 0.34780638459                | 6.863306                  | 0.0507        | 0.9337         |
| 18.917       | 19.917 | 19.417             | 2.41377   | 0.12431220065   | 1996      | 0.19129805534                | 3.918734                  | 0.0488        | 0.9475         |
| 19.917       | 20.917 | 20.417             | 1.50939   | 0.07392809913   | 1995      | 0.09217790545                | 1.957154                  | 0.0471        | 0.9616         |
| 20.917       | 21.917 | 21.417             | 0.81149   | 0.03788999393   | 1994      | 0.03626885892                | 0.796715                  | 0.0455        | 0.9745         |
| 21.917       | 22.917 | 22.417             | 0.32964   | 0.01470491145   | 1993      | 0.00997140623                | 0.226148                  | 0.0441        | 0.9886         |
| 22.917       | 23.917 | 23.417             | 0.06124   | 0.00261519409   | 1992      | 0.00131135346                | 0.030708                  | 0.0427        | 0.9999         |
| 23.917       | 24.000 | 23.959             | 0.00009   | 0.00000375642   | 1991      | 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 (2015), 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 2014 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 2015 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, 2015, the accrual for 2015 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 2015, equals the group annual accrual for 2015 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, 2015.

## **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                                        |
| 397,           | Communication Equipment             |                                           |
|                | Telephone                           | 10                                        |
|                | Radio                               | 15                                        |
| 398,           | Miscellaneous Equipment             | 15                                        |

For the purpose of calculating annual amortization amounts as of November 30, 2015, 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, 2010 through November 30, 2014. The data for the last month of 2014 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 2010 through 2014 net salvage accrual.

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## PART V. RESULTS OF STUDY

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

### **DESCRIPTION OF SUMMARY TABULATIONS**

Tables 1 through 4 presented on pages V-4 through V-11 summarize the results of the depreciation study as of November 30, 2015. Table 1 sets forth, by depreciable group, the estimated survivor curve, original cost, book depreciation reserve as of November 30, 2015, 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, 2015. Table 3 sets forth the calculation of the depreciation accruals for the twelve months ended November 30, 2015. Table 4 presents the annual amortization of experienced and estimated net salvage based on the period 2010 through 2014.

### **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 2010-2014 are presented in three sections.

The section beginning on page VI-1 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

year by account for the five-year period, 2010-2014, are presented in the section beginning on page VIII-1.

In the first section, the survivor curves estimated for the depreciable groups are shown as dark smooth curves on the charts. Each smooth survivor curve is denoted by a numeral followed by the type curve designation. The numeral used is the average life derived from the entire curve from 100 percent to zero percent surviving. In cases where only a segment of the estimated curve is used in the depreciation calculation, the numeral used for identification purposes is not a designation of the average life of the group. The titles of the charts indicate the group, the symbol used to plot the points of the original life table, and the experience and placement bands of the life tables which were plotted. The experience band indicates the range of years for which the retirements were used to develop the stub survivor curve. The placements indicate, for the related experience band, the range of years of installations which appear in the experience.

The tables of the calculated annual depreciation related to original cost are presented in the second section and indicate the estimated average survivor curves used in the calculations. The tables set forth, for each installation year, the original cost, calculated accrued depreciation, allocated book reserve, future book accruals, remaining life expectancy and the calculated annual accrual.

Detailed tabulations setting forth the cost of removal and salvage amounts, by plant account for each year, are presented beginning on page VIII-2. The total salvage and removal costs, by year, were used to calculate the five-year net salvage amortization presented in Table 4 on page V-11.

COLUMBIA GAS OF PENNSYLVANIA, INC.

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

| DEPRECIABLE GROUP<br>(1)               | SURVIVOR<br>CURVE<br>(2) | ORIGINAL COST<br>AS OF<br>NOVEMBER 30, 2015<br>(3) | BOOK<br>RESERVE<br>(4) | FUTURE<br>BOOK<br>ACCRUAL<br>(5) | CALCULATED<br>ANNUAL ACCRUAL<br>AMOUNT<br>(6) | RATE<br>(7)=(6)/(3) | COMPOSITE<br>REMAINING<br>LIFE<br>(8)=(6)/(7) |
|----------------------------------------|--------------------------|----------------------------------------------------|------------------------|----------------------------------|-----------------------------------------------|---------------------|-----------------------------------------------|
| <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      | 85-R2.5                  | 3,133,154.50                                       | 861,264                | 2,271,890                        | 121,392                                       | 3.87                | 18.7                                          |
| <b>WELLS</b>                           |                          |                                                    |                        |                                  |                                               |                     |                                               |
| 352.01 CONSTRUCTION                    | SQUARE                   | 799,133.73                                         | 799,118                | 16                               | 1                                             | 0.00                | 16.0                                          |
| 352.02 EQUIPMENT                       | 45-S2.5                  | 168,679.67                                         | 168,680                | 0                                | 0                                             | -                   | -                                             |
| TOTAL ACCOUNT 352                      |                          | 967,813.40                                         | 967,798                | 16                               | 1                                             | -                   | -                                             |
| 352.1 STORAGE LEASEHOLDS AND RIGHTS    | SQUARE                   | 206,940.78                                         | 206,932                | 9                                | 0                                             | 0.00                | 20.6                                          |
| 353 LINES                              | 50-S1.5                  | 405,287.78                                         | 405,288                | 0                                | 0                                             | -                   | -                                             |
| 354 COMPRESSOR STATION EQUIPMENT       | 50-R2.5                  | 1,097,851.66                                       | 569,716                | 528,136                          | 29,778                                        | 2.71                | 17.7                                          |
| 355 MEASURING AND REGULATING EQUIPMENT | 37-R1.5                  | 123,010.01                                         | 123,010                | 0                                | 0                                             | -                   | -                                             |
| TOTAL UNDERGROUND STORAGE PLANT        |                          | 5,935,990.21                                       | 3,135,939              | 2,800,062                        | 161,171                                       | 2.55                |                                               |
| <b>DISTRIBUTION PLANT</b>              |                          |                                                    |                        |                                  |                                               |                     |                                               |
| 374.4 LAND AND LAND RIGHTS             | 65-R3                    | 2,309,556.32                                       | 651,055                | 1,658,501                        | 39,419                                        | 1.71                | 42.1                                          |
| 374.5 RIGHTS-OF-WAY                    | 75-S4                    | 3,233,106.76                                       | 1,555,652              | 1,677,455                        | 42,583                                        | 1.32                | 39.4                                          |
| TOTAL ACCOUNT 374                      |                          | 5,542,663.08                                       | 2,206,707              | 3,335,956                        | 82,002                                        | 1.48                |                                               |
| 375.34 STRUCTURES AND IMPROVEMENTS     | 60-R1.5                  | 3,630,617.62                                       | 824,030                | 2,806,588                        | 80,960                                        | 2.23                | 34.7                                          |
| 375.6 MEASURING AND REGULATING         | 50-R1.5                  | 87,669.84                                          | 72,639                 | 15,031                           | 911                                           | 1.04                | 16.5                                          |
| 375.7 OTHER DISTRIBUTION SYSTEMS       | 90-R1                    | 5,007,832.59                                       | 938,647                | 4,069,185                        | 280,174                                       | 5.79                | 14.0                                          |
| DISTRIBUTION SYSTEM STRUCTURES         | 33-S1                    | 2,893,205.76                                       | 887,124                | 2,006,082                        | 102,921                                       | 3.56                | 19.5                                          |
| OTHER BUILDINGS                        |                          | 7,901,038.35                                       | 1,825,771              | 6,075,267                        | 393,095                                       | 4.98                | 15.5                                          |
| TOTAL ACCOUNT 375.70                   |                          | 16,515.17                                          | 6,177                  | 10,338                           | 335                                           | 2.03                | 30.9                                          |
| 375.8 COMMUNICATION STRUCTURES         | 50-R2                    | 11,635,840.98                                      | 2,728,617              | 8,907,224                        | 475,301                                       | 4.08                |                                               |
| TOTAL ACCOUNT 375                      |                          |                                                    |                        |                                  |                                               |                     |                                               |
| 376 MAINS                              | 72-R1.5                  | 519,939.43                                         | 397,531                | 122,408                          | 14,806                                        | 2.85                | 8.3                                           |
| CAST IRON                              | 72-R1.5                  | 63,922,267.80                                      | 46,055,992             | 17,866,276                       | 1,902,590                                     | 2.98                | 9.4                                           |
| BARE STEEL                             | 72-R1.5                  | 1,036,113,894.22                                   | 134,519,820            | 903,594,074                      | 20,597,782                                    | 1.98                | 43.9                                          |
| OTHER                                  |                          |                                                    |                        |                                  |                                               |                     |                                               |
| TOTAL ACCOUNT 376                      |                          | 1,102,556,101.45                                   | 180,973,343            | 921,582,758                      | 22,515,178                                    | 2.04                |                                               |

COLUMBIA GAS OF PENNSYLVANIA, INC.

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

|        | DEPRECIABLE GROUP<br>(1)                                             | SURVIVOR<br>CURVE<br>(2) | ORIGINAL COST<br>AS OF<br>NOVEMBER 30, 2015<br>(3) | BOOK<br>RESERVE<br>(4) | FUTURE<br>BOOK<br>ACCRUAL<br>(5) | CALCULATED                      |                     | COMPOSITE<br>REMAINING<br>LIFE<br>(8)=(5)/(6) |
|--------|----------------------------------------------------------------------|--------------------------|----------------------------------------------------|------------------------|----------------------------------|---------------------------------|---------------------|-----------------------------------------------|
|        |                                                                      |                          |                                                    |                        |                                  | ANNUAL ACCRUAL<br>AMOUNT<br>(6) | RATE<br>(7)=(6)/(3) |                                               |
| 378    | MEASURING AND REGULATING EQUIPMENT - GENERAL                         | 45-R0.5                  | 39,027,385.03                                      | 8,503,313              | 30,524,072                       | 1,300,124                       | 3.33                | 23.5                                          |
| 378.1  | MEASURING AND REGULATING EQUIPMENT - CITY GATE                       | 35-S2.5                  | 141,117.10                                         | 89,069                 | 52,048                           | 4,643                           | 3.29                | 11.2                                          |
| 380    | SERVICES                                                             | 50-R0.5                  | 867,919.41                                         | 744,647                | 123,272                          | 15,590                          | 1.80                | 7.9                                           |
|        | BARE STEEL                                                           | 50-R0.5                  | 419,556,629.39                                     | 102,911,461            | 316,645,168                      | 12,079,478                      | 2.88                | 26.2                                          |
|        | OTHER                                                                |                          |                                                    |                        |                                  |                                 |                     |                                               |
|        | TOTAL ACCOUNT 380                                                    |                          | 420,424,548.80                                     | 103,656,108            | 316,768,440                      | 12,095,068                      | 2.88                |                                               |
| 381    | METERS                                                               | 43-S1.5                  | 35,175,284.44                                      | 15,173,270             | 20,002,014                       | 865,426                         | 2.46                | 23.1                                          |
| 381.1  | METERS - AMR                                                         | 15-S2.5                  | 23,509,038.80                                      | 6,817,382              | 16,691,657                       | 1,762,970                       | 7.50                | 9.5                                           |
| 382    | METER INSTALLATIONS                                                  | 55-R2.5                  | 35,334,789.60                                      | 11,320,688             | 24,014,102                       | 687,434                         | 1.95                | 34.9                                          |
| 383    | HOUSE REGULATORS                                                     | 40-S2                    | 10,998,752.48                                      | 3,318,441              | 7,680,311                        | 282,400                         | 2.57                | 27.2                                          |
| 384    | HOUSE REGULATOR INSTALLATIONS                                        | 35-S3                    | 3,864,772.07                                       | 2,904,820              | 959,952                          | 68,583                          | 1.77                | 14.0                                          |
| 385    | INDUSTRIAL MEASURING AND REGULATING EQUIPMENT -<br>OTHER THAN METERS | 30-R0.5                  | 6,856,405.61                                       | 3,015,332              | 3,841,074                        | 266,819                         | 3.89                | 14.4                                          |
|        | OTHER EQUIPMENT                                                      |                          |                                                    |                        |                                  |                                 |                     |                                               |
| 387    | GENERAL                                                              | 30-R0.5                  | 133,851.06                                         | 68,826                 | 65,025                           | 5,011                           | 3.74                | 13.0                                          |
| 387.4  | CUSTOMER INFORMATION SERVICES                                        | 25-R2.5                  | 3,113,728.21                                       | 689,626                | 2,424,102                        | 148,679                         | 4.77                | 16.3                                          |
|        | TOTAL ACCOUNT 387                                                    |                          | 3,247,579.27                                       | 758,452                | 2,489,127                        | 153,690                         | 4.73                |                                               |
|        | TOTAL DISTRIBUTION PLANT                                             |                          | 1,698,314,278.71                                   | 341,465,542            | 1,356,848,736                    | 40,659,638                      | 2.39                |                                               |
|        | GENERAL PLANT                                                        |                          |                                                    |                        |                                  |                                 |                     |                                               |
| 390.1  | STRUCTURES AND IMPROVEMENTS - COMMUNICATIONS                         | 40-R2.5                  | 49,821.42                                          | 48,089                 | 1,732                            | 118                             | 0.24                | 14.7                                          |
|        | OFFICE FURNITURE AND EQUIPMENT                                       |                          |                                                    |                        |                                  |                                 |                     |                                               |
| 391.1  | FURNITURE                                                            | 20-SQ                    | 2,056,730.04                                       | 1,742,734              | 313,996                          | 39,906                          | 1.94                | 7.9                                           |
| 391.11 | EQUIPMENT                                                            | 15-SQ                    | 24,427.00                                          | 11,382                 | 13,045                           | 1,233                           | 5.05                | 10.6                                          |
| 391.12 | INFORMATION SYSTEMS                                                  | 5-SQ                     | 2,550,893.35                                       | 1,900,062              | 650,831                          | 372,052                         | 14.59               | 1.7                                           |
|        | TOTAL ACCOUNT 391                                                    |                          | 4,632,050.39                                       | 3,654,178              | 977,872                          | 413,191                         | 8.92                |                                               |
| 392    | TRANSPORTATION EQUIPMENT - TRAILERS                                  | 15-SQ                    | 97,532.51                                          | 53,871                 | 43,662                           | 9,323                           | 9.56                | 4.7                                           |
| 393    | STORES EQUIPMENT                                                     | 20-SQ                    | 16,674.52                                          | 16,436                 | 239                              | 92                              | 0.55                | 2.6                                           |
|        | TOOLS, SHOP AND GARAGE EQUIPMENT                                     |                          |                                                    |                        |                                  |                                 |                     |                                               |
| 394    | EQUIPMENT                                                            | 25-SQ                    | 12,665,829.34                                      | 5,473,958              | 7,211,871                        | 466,833                         | 3.68                | 15.4                                          |
| 394.12 | CNG FACILITIES                                                       | 12-S1.5                  | 1,953,497.84                                       | 1,953,286              | 212                              | 90                              | 0.00                | 2.4                                           |
| 394.5  | GPS                                                                  | 10-SQ                    | 2,195,621.00                                       | 109,781                | 2,085,840                        | 227,410                         | 10.36               | 9.2                                           |
|        | TOTAL ACCOUNT 394                                                    |                          | 16,834,948.18                                      | 7,537,025              | 9,297,923                        | 694,333                         | 4.12                |                                               |
| 395    | LABORATORY EQUIPMENT                                                 | 20-SQ                    | 50,660.92                                          | 31,717                 | 18,944                           | 3,080                           | 6.08                | 6.2                                           |
| 396    | POWER OPERATED EQUIPMENT                                             | 12-L3                    | 1,435,492.74                                       | 1,367,201              | 68,292                           | 19,926                          | 1.39                | 3.4                                           |

COLUMBIA GAS OF PENNSYLVANIA, INC.

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

| DEPRECIABLE GROUP<br>(1)                    | SURVIVOR<br>CURVE<br>(2) | ORIGINAL COST<br>AS OF<br>NOVEMBER 30, 2015<br>(3) | BOOK<br>RESERVE<br>(4) | FUTURE<br>BOOK<br>ACCRUAL<br>(5) | CALCULATED<br>ANNUAL ACCRUAL<br>AMOUNT<br>(6) | CALCULATED<br>RATE<br>(7)=(6)/(3) | COMPOSITE<br>REMAINING<br>LIFE<br>(8)=(5)/(6) |
|---------------------------------------------|--------------------------|----------------------------------------------------|------------------------|----------------------------------|-----------------------------------------------|-----------------------------------|-----------------------------------------------|
| <b>COMMUNICATION EQUIPMENT</b>              |                          |                                                    |                        |                                  |                                               |                                   |                                               |
| 397.1 TELEPHONE                             | 10-SQ                    | 738,852.74                                         | 344,072                | 394,781                          | 69,567                                        | 9.42                              | 5.7                                           |
| 397.24 RADIO                                | 15-SQ                    | 2,444,474.22                                       | 1,729,110              | 715,364                          | 58,089                                        | 2.38                              | 12.3                                          |
| 397.5 TELEMETERING                          | 17-R3                    | 1,070,029.25                                       | 676,536                | 393,493                          | 52,082                                        | 4.87                              | 7.6                                           |
| TOTAL ACCOUNT 397                           |                          | 4,253,356.21                                       | 2,749,718              | 1,503,638                        | 179,748                                       | 4.23                              |                                               |
| <b>MISCELLANEOUS EQUIPMENT</b>              |                          |                                                    |                        |                                  |                                               |                                   |                                               |
| 398                                         | 15-SQ                    | 633,488.80                                         | 169,968                | 463,501                          | 43,992                                        | 6.94                              | 10.5                                          |
| <b>TOTAL GENERAL PLANT</b>                  |                          | <b>28,004,005.69</b>                               | <b>15,628,203</b>      | <b>12,375,803</b>                | <b>1,363,803</b>                              | <b>4.87</b>                       |                                               |
| <b>SUBTOTAL DEPRECIABLE PLANT</b>           |                          | <b>1,732,254,274.61</b>                            | <b>360,229,684</b>     | <b>1,372,024,590</b>             | <b>42,074,612</b>                             | <b>2.43</b>                       |                                               |
| <b>AMORTIZABLE PLANT</b>                    |                          |                                                    |                        |                                  |                                               |                                   |                                               |
| 303 MISCELLANEOUS INTANGIBLE PLANT          |                          | 22,334,949.03                                      | 7,112,928              | 15,222,021                       | 3,387,996                                     | **                                |                                               |
| 305 STRUCTURES AND IMPROVEMENTS             |                          |                                                    | (4,583)                |                                  |                                               |                                   |                                               |
| 362 GAS HOLDERS                             |                          |                                                    | (1,609)                |                                  |                                               |                                   |                                               |
| 362.1 ENVIRONMENTAL REMEDIATION             |                          |                                                    | (956,223)              |                                  |                                               |                                   |                                               |
| 374.2 LAND, OTHER DISTRIBUTION SYSTEMS      |                          | 479,275.40                                         | 222,752                | 26,961                           | 26,961                                        | **                                |                                               |
| 375.71 STRUCTURES AND IMPROVEMENTS - LEASED |                          | 1,125,910.63                                       | 1,098,950              |                                  |                                               |                                   |                                               |
| 389.2 LAND AND LAND RIGHTS - LAND RIGHTS    |                          |                                                    | 39                     |                                  |                                               |                                   |                                               |
| <b>SUBTOTAL AMORTIZABLE PLANT</b>           |                          | <b>23,940,135.06</b>                               | <b>7,472,264</b>       | <b>15,248,982</b>                | <b>3,414,957</b>                              |                                   |                                               |
| <b>NONDEPRECIABLE PLANT</b>                 |                          | <b>172,413.08</b>                                  |                        |                                  |                                               |                                   |                                               |
| <b>TOTAL GAS PLANT</b>                      |                          | <b>1,756,366,822.75</b>                            | <b>367,701,938</b>     | <b>1,387,273,572</b>             | <b>45,489,569</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, 2015, OF THE BOOK RESERVE AS OF NOVEMBER 30, 2014

| ACCOUNT<br>(1) | BOOK RESERVE<br>AS OF<br>NOVEMBER 30, 2014<br>(2) | DEPRECIATION<br>ACCURUALS<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) |
|----------------|---------------------------------------------------|----------------------------------|------------------------------------------|---------------------------------|--------------------------------------|----------------------------------------|---------------------|--------------------|----------------------------------------|----------------------------------------------------------|
| 350.20         | 1,931                                             | 123,133                          | 122                                      |                                 |                                      |                                        |                     |                    | 1,931                                  | 99.94                                                    |
| 351.20         | 736,009                                           |                                  |                                          |                                 |                                      |                                        |                     |                    | 861,264                                | 27.49                                                    |
| 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         | 405,288                                           |                                  |                                          |                                 |                                      |                                        |                     |                    | 405,288                                | 100.00                                                   |
| 354.00         | 583,845                                           |                                  |                                          |                                 |                                      |                                        |                     |                    | 589,716                                | 51.89                                                    |
| 355.00         | 123,010                                           |                                  |                                          | 31,400                          |                                      |                                        |                     |                    | 123,010                                | 100.00                                                   |
| 374.40         | 623,637                                           |                                  |                                          |                                 |                                      |                                        |                     |                    | 651,055                                | 28.19                                                    |
| 374.50         | 1,512,463                                         |                                  | 1,107                                    | 11,100                          |                                      | 1,352                                  |                     |                    | 1,555,652                              | 48.12                                                    |
| 375.34         | 778,409                                           |                                  | 26,345                                   | 28,800                          |                                      | 29,968                                 |                     |                    | 824,030                                | 22.70                                                    |
| 375.60         | 71,276                                            |                                  | 381                                      |                                 |                                      |                                        |                     |                    | 72,639                                 | 82.86                                                    |
| 375.70         | 2,114,220                                         |                                  | (41,208)                                 | 396,800                         |                                      | 60,859                                 |                     |                    | 1,825,771                              | 23.11                                                    |
| 375.80         | 5,837                                             |                                  | 340                                      |                                 |                                      |                                        |                     |                    | 6,177                                  | 37.40                                                    |
| 376.00         | 176,739,120                                       | 20,395,002                       | 1,015,215                                | 14,788,300                      |                                      | 2,377,894                              |                     |                    | 180,973,343                            | 16.41                                                    |
| 378.00         | 5,755,273                                         | 1,296,920                        | 101,173                                  | 995,700                         |                                      | 338,298                                |                     | (2,683,945)        | 8,503,313                              | 21.79                                                    |
| 379.10         | 83,765                                            | 4,911                            | 393                                      |                                 |                                      |                                        |                     |                    | 89,069                                 | 63.12                                                    |
| 380.00         | 96,223,371                                        | 11,732,112                       | 2,780,100                                | 4,558,400                       |                                      | 2,501,075                              |                     |                    | 103,656,108                            | 24.66                                                    |
| 381.00         | 14,454,637                                        | 882,024                          | (15,750)                                 | 130,700                         | 3,059                                |                                        |                     |                    | 15,173,270                             | 43.14                                                    |
| 381.10         | 5,119,111                                         | 1,761,171                        |                                          | 62,900                          |                                      |                                        |                     |                    | 6,817,382                              | 29.00                                                    |
| 382.00         | 10,793,435                                        | 676,265                          | (12)                                     | 149,000                         |                                      |                                        |                     |                    | 11,320,688                             | 32.04                                                    |
| 383.00         | 3,133,857                                         | 270,674                          | 164                                      | 85,400                          |                                      | 854                                    |                     |                    | 3,318,441                              | 30.17                                                    |
| 384.00         | 2,834,480                                         | 70,339                           | 1                                        |                                 |                                      |                                        |                     |                    | 2,904,820                              | 75.16                                                    |
| 385.00         | 2,699,886                                         | 296,645                          | 41,076                                   | 18,300                          |                                      | 3,975                                  |                     |                    | 3,015,332                              | 43.98                                                    |
| 387.00         | 54,006                                            | 8,955                            | 5,865                                    |                                 |                                      |                                        |                     |                    | 68,826                                 | 51.42                                                    |
| 387.40         | 529,158                                           | 158,600                          | 1,668                                    |                                 |                                      |                                        |                     |                    | 689,826                                | 22.15                                                    |
| 390.10         | 47,969                                            | 120                              |                                          |                                 |                                      |                                        |                     |                    | 48,089                                 | 96.52                                                    |
| 391.10         | 2,740,810                                         | 27,522                           |                                          | 1,025,598                       |                                      |                                        |                     |                    | 1,742,734                              | 84.73                                                    |
| 391.11         | 35,862                                            | 898                              |                                          | 25,378                          |                                      |                                        |                     |                    | 11,382                                 | 46.60                                                    |
| 391.12         | 1,505,675                                         | 394,387                          | (13,807)                                 | 23,449                          | 10,318                               |                                        |                     |                    | 1,900,062                              | 74.49                                                    |
| 392.00         | 73,533                                            | 7,277                            |                                          |                                 |                                      |                                        |                     |                    | 53,871                                 | 55.23                                                    |
| 393.00         | 16,344                                            | 92                               |                                          |                                 |                                      |                                        |                     |                    | 16,436                                 | 98.57                                                    |
| 394.00         | 5,587,288                                         | 437,473                          | (1,077)                                  | 549,726                         |                                      |                                        |                     |                    | 5,473,958                              | 43.15                                                    |
| 394.12         | 1,953,091                                         | 195                              |                                          |                                 |                                      |                                        |                     |                    | 1,953,286                              | 98.99                                                    |
| 394.50         | 0                                                 | 109,781                          |                                          |                                 |                                      |                                        |                     |                    | 109,781                                | 5.00                                                     |
| 395.00         | 50,595                                            | 2,679                            |                                          | 21,557                          |                                      |                                        |                     |                    | 31,717                                 | 62.61                                                    |
| 396.00         | 1,398,850                                         | 8,039                            | (39,668)                                 |                                 |                                      |                                        |                     |                    | 1,367,201                              | 95.24                                                    |
| 397.10         | 320,280                                           | 23,299                           | 493                                      |                                 |                                      |                                        |                     |                    | 344,072                                | 46.57                                                    |
| 397.24         | 2,224,097                                         | 111,476                          |                                          | 606,463                         |                                      |                                        |                     |                    | 1,728,110                              | 70.74                                                    |
| 397.50         | 652,964                                           | 41,572                           |                                          | 18,000                          |                                      |                                        |                     |                    | 676,536                                | 63.23                                                    |
| 398.00         | 352,737                                           | 20,833                           |                                          | 203,602                         |                                      |                                        |                     |                    | 169,968                                | 26.83                                                    |
|                | 343,512,849                                       | 36,239,412                       | 3,842,751                                | 23,740,574                      | 13,377                               | 5,322,075                              | 0                   | (2,683,945)        | 360,229,684                            |                                                          |



COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 2. BRINGFORWARD TO NOVEMBER 30, 2015, OF THE BOOK RESERVE AS OF NOVEMBER 30, 2014

| ACCOUNT<br>(1)              | BOOK RESERVE<br>AS OF<br>NOVEMBER 30, 2014<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) |
|-----------------------------|---------------------------------------------------|---------------------------------|------------------------------------------|---------------------------------|--------------------------------------|----------------------------------------|---------------------|--------------------|----------------------------------------|----------------------------------------------------------|
| <b>AMORTIZABLE PLANT</b>    |                                                   |                                 |                                          |                                 |                                      |                                        |                     |                    |                                        |                                                          |
| 303.00                      | 5,036,786                                         | 2,565,989                       |                                          | 489,847                         |                                      |                                        |                     |                    | 7,112,928                              | 31.85                                                    |
| 305.00                      | (4,583)                                           |                                 |                                          |                                 |                                      |                                        |                     |                    | (4,583)                                |                                                          |
| 362.00                      | (1,609)                                           |                                 |                                          |                                 |                                      |                                        |                     |                    | (1,609)                                |                                                          |
| 362.10                      | (1,025,586)                                       |                                 | 654,363                                  |                                 |                                      | 585,000                                |                     |                    | (956,223)                              |                                                          |
| 374.20                      | 211,225                                           |                                 | 11,527                                   |                                 |                                      |                                        |                     |                    | 222,752                                |                                                          |
| 375.71                      | 995,749                                           | 103,201                         |                                          |                                 |                                      |                                        |                     |                    | 1,098,950                              | 97.61                                                    |
| 389.20                      | 39                                                |                                 |                                          |                                 |                                      |                                        |                     |                    | 39                                     |                                                          |
|                             | 5,212,021                                         | 2,669,190                       | 665,890                                  | 489,847                         | 0                                    | 585,000                                | 0                   | 0                  | 7,472,254                              |                                                          |
| <b>NONDEPRECIABLE PLANT</b> |                                                   |                                 |                                          |                                 |                                      |                                        |                     |                    |                                        |                                                          |
|                             | 0                                                 |                                 |                                          |                                 |                                      |                                        |                     |                    | 0                                      |                                                          |
| <b>TOTAL</b>                | <b>348,724,870</b>                                | <b>41,908,602</b>               | <b>4,508,641</b>                         | <b>24,230,421</b>               | <b>13,377</b>                        | <b>5,907,075</b>                       | <b>0</b>            | <b>(2,683,945)</b> | <b>367,701,938</b>                     |                                                          |

COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 3. CALCULATION OF DEPRECIATION ACCRUALS FOR THE TWELVE MONTHS ENDED NOVEMBER 30, 2015

| DEPRECIABLE GROUP                  |                                                                   | ORIGINAL COST<br>AS OF<br>NOVEMBER 30, 2014 | ORIGINAL COST<br>AS OF<br>NOVEMBER 30, 2015 | COMPOSITE<br>ACCRUAL<br>RATE | ANNUAL<br>ACCRUAL<br>AMOUNT |
|------------------------------------|-------------------------------------------------------------------|---------------------------------------------|---------------------------------------------|------------------------------|-----------------------------|
| (1)                                |                                                                   | (2)                                         | (3)                                         | (4)                          | (5)                         |
| <b>DEPRECIABLE PLANT</b>           |                                                                   |                                             |                                             |                              |                             |
| <b>UNDERGROUND STORAGE PLANT</b>   |                                                                   |                                             |                                             |                              |                             |
| 350.2                              | RIGHTS-OF-WAY                                                     | 1,932                                       | 1,932                                       | 0.00                         | 0                           |
| 351                                | COMPRESSOR STATION STRUCTURES                                     | 3,133,155                                   | 3,133,155                                   | 3.93                         | 123,133                     |
| <b>WELLS</b>                       |                                                                   |                                             |                                             |                              |                             |
| 352.01                             | CONSTRUCTION                                                      | 799,134                                     | 799,134                                     | 0.00                         | 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                                     | 0.00                         | 0                           |
| 353                                | LINES                                                             | 405,288                                     | 405,288                                     | -                            | 0                           |
| 354                                | COMPRESSOR STATION EQUIPMENT                                      | 864,752                                     | 1,097,852                                   | 1.76                         | 17,271                      |
| 355                                | MEASURING AND REGULATING EQUIPMENT                                | 123,010                                     | 123,010                                     | -                            | 0                           |
|                                    | <b>TOTAL UNDERGROUND STORAGE PLANT</b>                            | <b>5,702,890</b>                            | <b>5,935,990</b>                            | <b>2.42</b>                  | <b>140,404</b>              |
| <b>DISTRIBUTION PLANT</b>          |                                                                   |                                             |                                             |                              |                             |
| <b>LAND AND LAND RIGHTS</b>        |                                                                   |                                             |                                             |                              |                             |
| 374.4                              | LAND RIGHTS                                                       | 2,224,156                                   | 2,309,556                                   | 1.71                         | 38,763                      |
| 374.5                              | RIGHTS-OF-WAY                                                     | 3,233,107                                   | 3,233,107                                   | 1.33                         | 43,000                      |
|                                    | <b>TOTAL ACCOUNT 374</b>                                          | <b>5,457,263</b>                            | <b>5,542,663</b>                            | <b>1.48</b>                  | <b>81,764</b>               |
| <b>STRUCTURES AND IMPROVEMENTS</b> |                                                                   |                                             |                                             |                              |                             |
| 375.34                             | MEASURING AND REGULATING                                          | 3,368,818                                   | 3,630,618                                   | 2.23                         | 78,044                      |
| 375.6                              | INDUSTRIAL MEASURING AND REGULATING                               | 87,670                                      | 87,670                                      | 1.12                         | 982                         |
| 375.7                              | OTHER DISTRIBUTION SYSTEMS                                        |                                             |                                             |                              |                             |
|                                    | DISTRIBUTION SYSTEM STRUCTURES                                    | 2,631,673                                   | 5,007,833                                   | 3.70                         | 141,331                     |
|                                    | OTHER BUILDINGS                                                   | 2,423,166                                   | 2,893,206                                   | 2.90                         | 77,087                      |
|                                    | <b>TOTAL ACCOUNT 375.70</b>                                       | <b>5,054,838</b>                            | <b>7,901,038</b>                            | <b>3.32</b>                  | <b>218,418</b>              |
| 375.8                              | COMMUNICATION STRUCTURES                                          | 16,515                                      | 16,515                                      | 2.06                         | 340                         |
|                                    | <b>TOTAL ACCOUNT 375</b>                                          | <b>8,527,841</b>                            | <b>11,635,841</b>                           | <b>2.86</b>                  | <b>297,784</b>              |
| <b>MAINS</b>                       |                                                                   |                                             |                                             |                              |                             |
| 376                                | CAST IRON                                                         | 569,217                                     | 519,939                                     | 1.05                         | 5,718                       |
|                                    | BARE STEEL                                                        | 70,581,503                                  | 63,922,268                                  | 1.44                         | 968,427                     |
|                                    | OTHER                                                             | 913,730,981                                 | 1,038,113,894                               | 1.99                         | 19,420,857                  |
|                                    | <b>TOTAL ACCOUNT 376</b>                                          | <b>984,881,701</b>                          | <b>1,102,556,101</b>                        | <b>1.95</b>                  | <b>20,395,002</b>           |
| 378                                | MEASURING AND REGULATING EQUIPMENT - GENERAL                      | 29,774,756                                  | 39,027,385                                  | 3.77                         | 1,296,920                   |
| 379.1                              | MEASURING AND REGULATING EQUIPMENT - CITY GATE                    | 141,117                                     | 141,117                                     | 3.48                         | 4,911                       |
| <b>SERVICES</b>                    |                                                                   |                                             |                                             |                              |                             |
| 380                                | BARE STEEL                                                        | 959,087                                     | 867,919                                     | 1.18                         | 10,779                      |
|                                    | OTHER                                                             | 386,033,261                                 | 419,556,629                                 | 2.91                         | 11,721,333                  |
|                                    | <b>TOTAL ACCOUNT 380</b>                                          | <b>386,992,349</b>                          | <b>420,424,549</b>                          | <b>2.91</b>                  | <b>11,732,112</b>           |
| 381                                | METERS                                                            | 34,063,584                                  | 35,175,284                                  | 2.49                         | 862,024                     |
| 381.1                              | METERS - AMR                                                      | 22,898,639                                  | 23,509,039                                  | 7.59                         | 1,761,171                   |
| 382                                | METER INSTALLATIONS                                               | 34,025,690                                  | 35,334,790                                  | 1.95                         | 676,265                     |
| 383                                | HOUSE REGULATORS                                                  | 10,314,152                                  | 10,998,752                                  | 2.54                         | 270,674                     |
| 384                                | HOUSE REGULATOR INSTALLATIONS                                     | 3,864,772                                   | 3,864,772                                   | 1.82                         | 70,339                      |
| 385                                | INDUSTRIAL MEASURING AND REGULATING EQUIPMENT - OTHER THAN METERS | 6,720,006                                   | 6,856,406                                   | 4.37                         | 296,645                     |
| <b>OTHER EQUIPMENT</b>             |                                                                   |                                             |                                             |                              |                             |
| 387                                | GENERAL                                                           | 133,851                                     | 133,851                                     | 6.69                         | 8,955                       |
| 387.4                              | CUSTOMER INFORMATION SERVICES                                     | 3,113,728                                   | 3,113,728                                   | 5.10                         | 158,800                     |
|                                    | <b>TOTAL ACCOUNT 387</b>                                          | <b>3,247,579</b>                            | <b>3,247,579</b>                            | <b>5.17</b>                  | <b>167,755</b>              |
|                                    | <b>TOTAL DISTRIBUTION PLANT</b>                                   | <b>1,530,909,450</b>                        | <b>1,698,314,279</b>                        | <b>2.35</b>                  | <b>37,913,365</b>           |

COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 3. CALCULATION OF DEPRECIATION ACCRUALS FOR THE TWELVE MONTHS ENDED NOVEMBER 30, 2015

| DEPRECIABLE GROUP           |                                              | ORIGINAL COST<br>AS OF<br>NOVEMBER 30, 2014 | ORIGINAL COST<br>AS OF<br>NOVEMBER 30, 2015 | 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 | 49,821                                      | 49,821                                      | 0.24                         | 120                         |
|                             | OFFICE FURNITURE AND EQUIPMENT               |                                             |                                             |                              |                             |
| 391.1                       | FURNITURE                                    | 2,947,328                                   | 2,056,730                                   | 1.10                         | 27,522                      |
| 391.11                      | EQUIPMENT                                    | 49,805                                      | 24,427                                      | 2.42                         | 898                         |
| 391.12                      | INFORMATION SYSTEMS                          | 2,197,893                                   | 2,550,893                                   | 16.61                        | 394,387                     |
|                             | TOTAL ACCOUNT 391                            | 5,195,027                                   | 4,632,050                                   | 7.67                         | 422,807                     |
| 392                         | TRANSPORTATION EQUIPMENT - TRAILERS          | 120,982                                     | 97,533                                      | 6.66                         | 7,277                       |
| 393                         | STORES EQUIPMENT                             | 16,675                                      | 16,675                                      | 0.55                         | 92                          |
|                             | TOOLS, SHOP AND GARAGE EQUIPMENT             |                                             |                                             |                              |                             |
| 394                         | EQUIPMENT                                    | 12,384,277                                  | 12,685,829                                  | 3.49                         | 437,473                     |
| 394.12                      | CNG FACILITIES                               | 1,953,498                                   | 1,953,498                                   | 0.01                         | 195                         |
| 394.5                       | GPS                                          |                                             | 2,195,621                                   | 10.00                        | 109,781                     |
|                             | TOTAL ACCOUNT 394                            | 14,337,774                                  | 16,834,948                                  | 3.01                         | 547,450                     |
| 395                         | LABORATORY EQUIPMENT                         | 72,218                                      | 50,661                                      | 4.36                         | 2,679                       |
| 396                         | POWER OPERATED EQUIPMENT                     | 1,435,493                                   | 1,435,493                                   | 0.56                         | 8,039                       |
|                             | COMMUNICATION EQUIPMENT                      |                                             |                                             |                              |                             |
| 397.1                       | TELEPHONE                                    | 342,307                                     | 738,853                                     | 4.31                         | 23,299                      |
| 397.24                      | RADIO                                        | 2,339,889                                   | 2,444,474                                   | 4.66                         | 111,476                     |
| 397.5                       | TELEMETERING                                 | 828,223                                     | 1,070,029                                   | 4.38                         | 41,572                      |
|                             | TOTAL ACCOUNT 397                            | 3,510,419                                   | 4,253,356                                   | 4.56                         | 176,346                     |
| 398                         | MISCELLANEOUS EQUIPMENT                      | 570,771                                     | 633,469                                     | 3.46                         | 20,833                      |
|                             | TOTAL GENERAL PLANT                          | 25,309,180                                  | 28,004,006                                  | 4.07                         | 1,185,642                   |
|                             | SUBTOTAL DEPRECIABLE PLANT                   | 1,561,921,520                               | 1,732,254,275                               | 2.38                         | 39,239,411                  |
| <b>AMORTIZABLE PLANT</b>    |                                              |                                             |                                             |                              |                             |
| 303                         | MISCELLANEOUS INTANGIBLE PLANT               | 18,307,267                                  | 22,334,949                                  | *                            | 2,565,989                   |
| 305                         | STRUCTURES AND IMPROVEMENTS                  |                                             |                                             |                              |                             |
| 362                         | GAS HOLDERS                                  |                                             |                                             |                              |                             |
| 362.1                       | ENVIRONMENTAL REMEDIATION                    |                                             |                                             |                              |                             |
| 374.2                       | LAND, OTHER DISTRIBUTION SYSTEMS             | 479,275                                     | 479,275                                     |                              |                             |
| 375.71                      | STRUCTURES AND IMPROVEMENTS - LEASED         | 1,125,911                                   | 1,125,911                                   | *                            | 103,201                     |
| 389.2                       | LAND AND LAND RIGHTS - LAND RIGHTS           |                                             |                                             |                              |                             |
|                             | SUBTOTAL AMORTIZABLE PLANT                   | 19,912,453                                  | 23,940,135                                  |                              | 2,669,190                   |
| <b>NONDEPRECIABLE PLANT</b> |                                              | 172,413                                     | 172,413                                     |                              |                             |
|                             | TOTAL GAS PLANT                              | 1,582,006,386                               | 1,756,366,823                               |                              | 41,908,601                  |

\* Prorated accruals based on individual asset amortization

COLUMBIA GAS OF PENNSYLVANIA, INC.

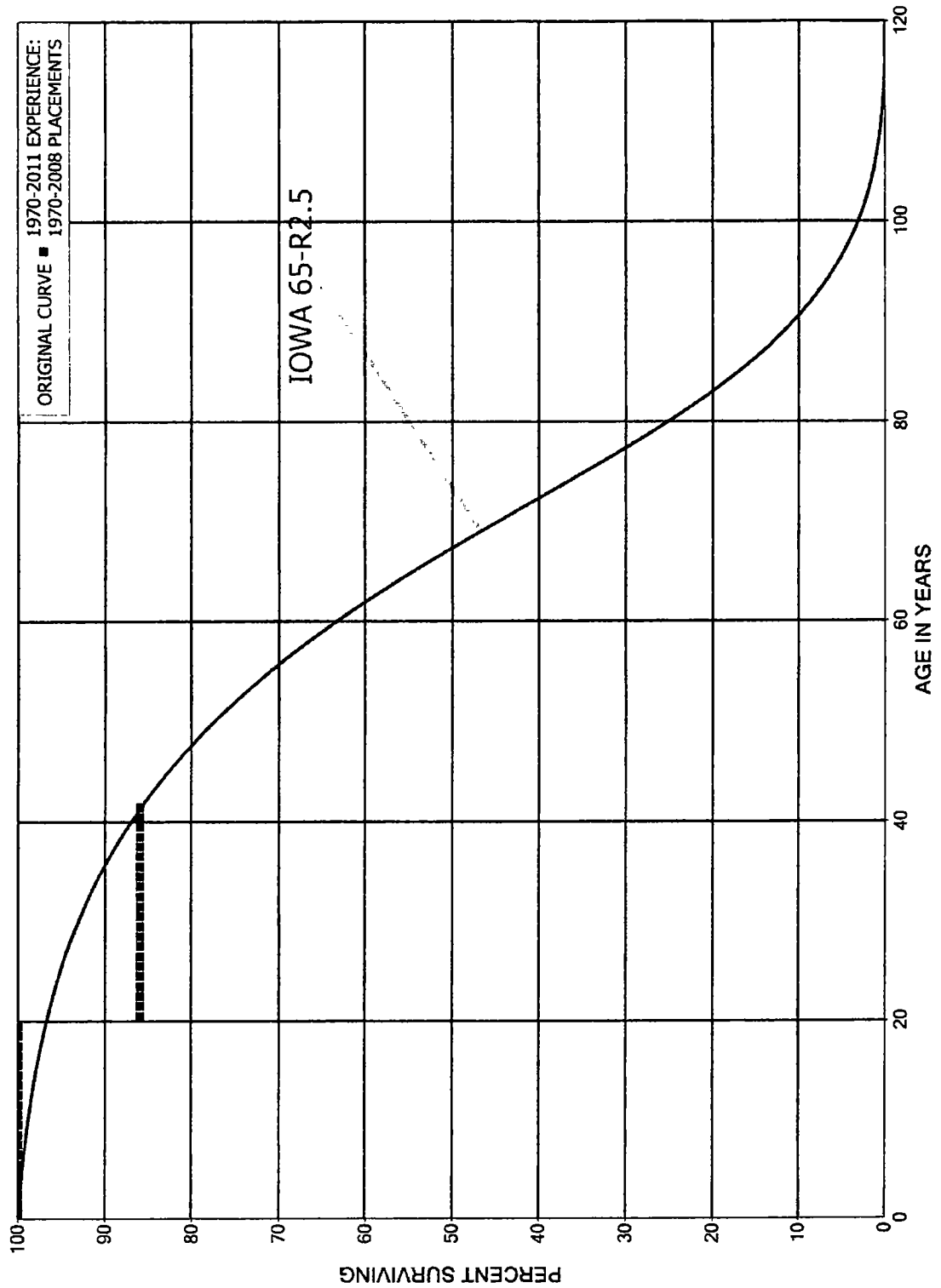
TABLE 4. AMORTIZATION OF EXPERIENCED AND ESTIMATED NET SALVAGE

| ACCOUNT<br>(1) | 2011                      |                         | 2012                      |                         | 2013                      |                         | 2014                      |                         | 2015                       |                          | NET<br>SALVAGE<br>(12) | SALVAGE<br>ACCRUAL<br>(13)=(12)x6 |
|----------------|---------------------------|-------------------------|---------------------------|-------------------------|---------------------------|-------------------------|---------------------------|-------------------------|----------------------------|--------------------------|------------------------|-----------------------------------|
|                | 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         |                           |                         |                           |                         | 808.46                    |                         |                           |                         |                            |                          | (608.46)               | (122)                             |
| 362.10         | 11,780.05                 |                         | 6,457.05                  |                         | 40,496.88                 |                         | 180,000.00                |                         | 395,000.00                 |                          | (843,733.99)           | (128,747)                         |
| 374.20         |                           |                         |                           |                         | 57,633.75                 |                         |                           |                         |                            |                          | (57,633.75)            | (11,527)                          |
| 374.40         |                           |                         | 280.16                    |                         | 4,911.96                  |                         | 65.91                     |                         | 1,368.00                   |                          | (6,606.03)             | (1,321)                           |
| 375.34         | 12,279.55                 |                         | 17,416.11                 |                         | 22,427.70                 |                         | 21,436.63                 |                         | 28,987.00                  |                          | (102,546.99)           | (20,509)                          |
| 375.60         |                           |                         |                           |                         | 1,091.39                  |                         |                           |                         |                            |                          | (1,091.39)             | (218)                             |
| 375.70         |                           |                         | 5,103.09                  |                         |                           |                         | 12,825.00                 |                         | 60,246.00                  |                          | (78,174.09)            | (15,635)                          |
| 376.00         | 1,289,063.41              | 1,541.00                |                           |                         | 691,743.41                | 2,051.59                | 1,246,578.85              |                         | 2,418,656.00               |                          | (6,509,445.20)         | (1,301,889)                       |
| 376.00         | 59,829.10                 |                         | 18,887.95                 |                         | 216,785.76                |                         | 183,240.21                |                         | 342,142.00                 |                          | (820,895.02)           | (164,179)                         |
| 379.10         |                           |                         |                           |                         |                           |                         | 81.84                     |                         |                            |                          | (91.84)                | (18)                              |
| 380.00         | 4,313,652.88              |                         | 2,192,533.99              | 25,333.32               | 1,750,826.78              | 6,554.08                | 4,297,939.86              | 623.00                  | 2,446,620.00               | 2,536.00                 | (15,001,573.51)        | (3,000,315)                       |
| 381.00         |                           | 759.60                  | 305.85                    |                         | 23.20                     |                         | 139.00                    |                         | 749.00                     |                          | 35,476.95              | 7,095                             |
| 383.00         |                           |                         |                           |                         |                           |                         | 60,963.56                 |                         | 3,808.00                   |                          | (888.00)               | (178)                             |
| 385.00         | 31,592.63                 |                         | 23,198.35                 |                         | 51,158.61                 |                         |                           |                         |                            |                          | (170,719.15)           | (34,144)                          |
| 387.00         | 26,983.46                 |                         |                           |                         |                           |                         |                           |                         |                            |                          | (26,983.46)            | (5,397)                           |
| 387.40         | 208.04                    |                         | 55.60                     |                         | 392.50                    | 44,482.18               | 933.57                    | 10,317.71               |                            |                          | (1,588.71)             | (318)                             |
| 392.00         |                           | 7,201.42                |                           |                         |                           | 104,869.48              |                           |                         |                            |                          | 62,001.31              | 12,400                            |
| 395.00         |                           | 43,731.96               |                           |                         |                           |                         |                           |                         |                            |                          | 148,401.44             | 29,680                            |
| <b>TOTAL</b>   | <b>5,725,389.12</b>       | <b>53,233.98</b>        | <b>3,151,214.27</b>       | <b>25,333.32</b>        | <b>2,838,110.41</b>       | <b>167,757.33</b>       | <b>6,014,214.43</b>       | <b>10,940.71</b>        | <b>5,697,574.00</b>        | <b>2,536.00</b>          | <b>(23,176,700.89)</b> | <b>(4,836,342)</b>                |

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## PART VI. SERVICE LIFE STATISTICS

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



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 351 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

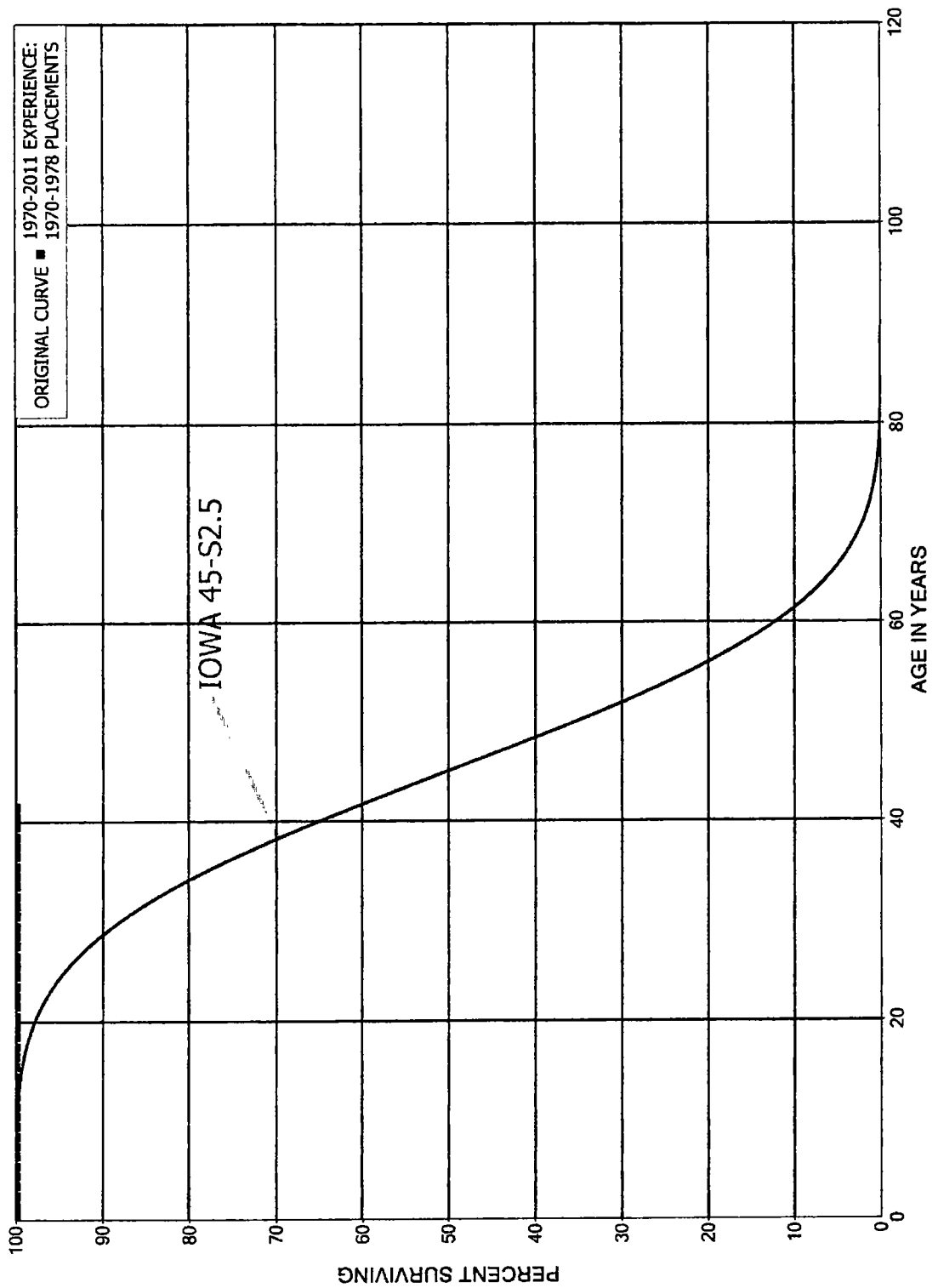
ACCOUNT 351 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE, CONT.

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



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



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 352 WELLS - EQUIPMENT

ORIGINAL LIFE TABLE

| PLACEMENT BAND 1970-1978       |                                              |                                       | EXPERIENCE BAND 1970-2011 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<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                           | 166,398                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 34.5                           | 166,398                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 35.5                           | 166,398                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 36.5                           | 166,398                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 37.5                           | 166,398                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 38.5                           | 166,398                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |

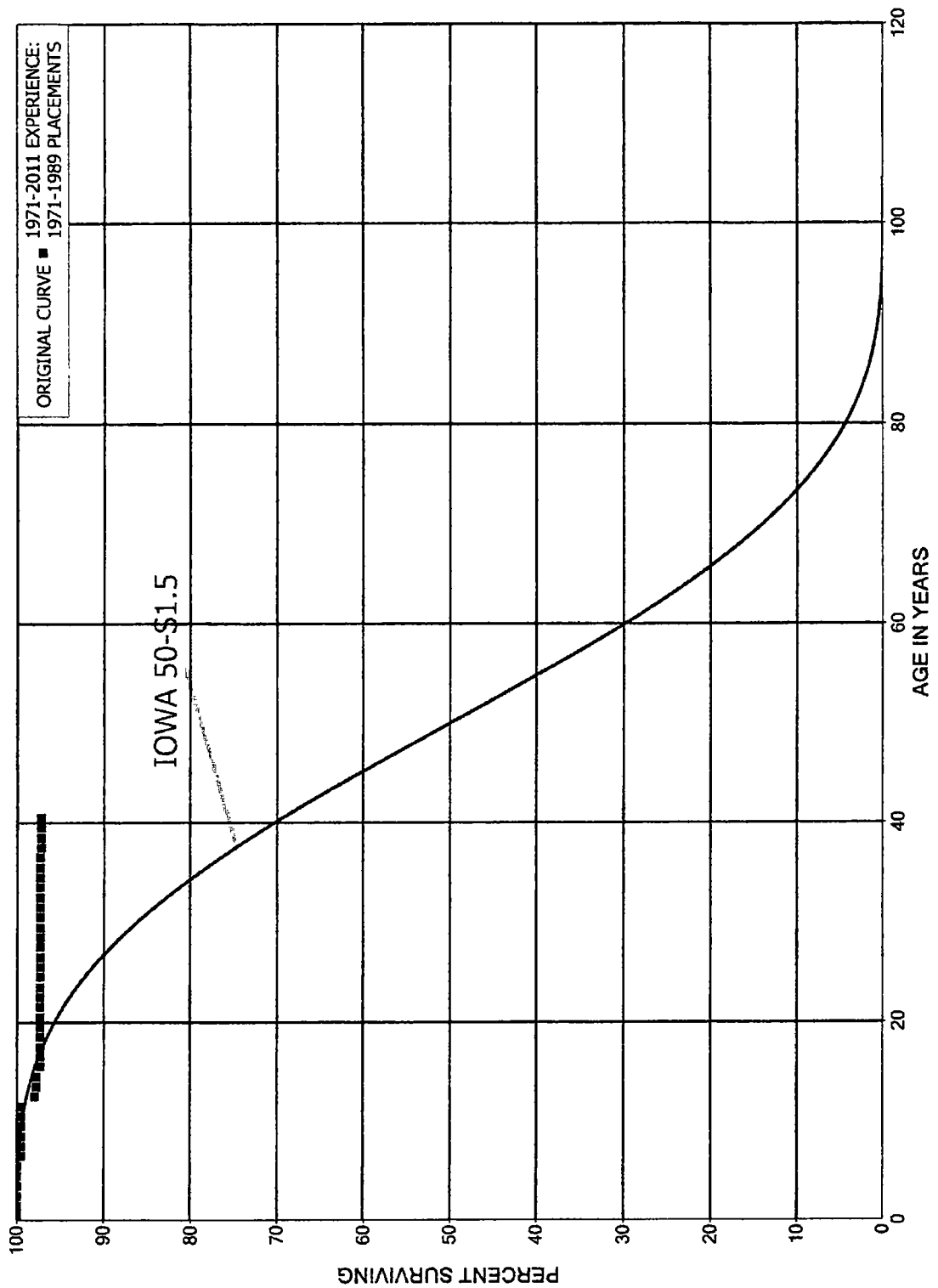
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 352 WELLS - EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

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

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



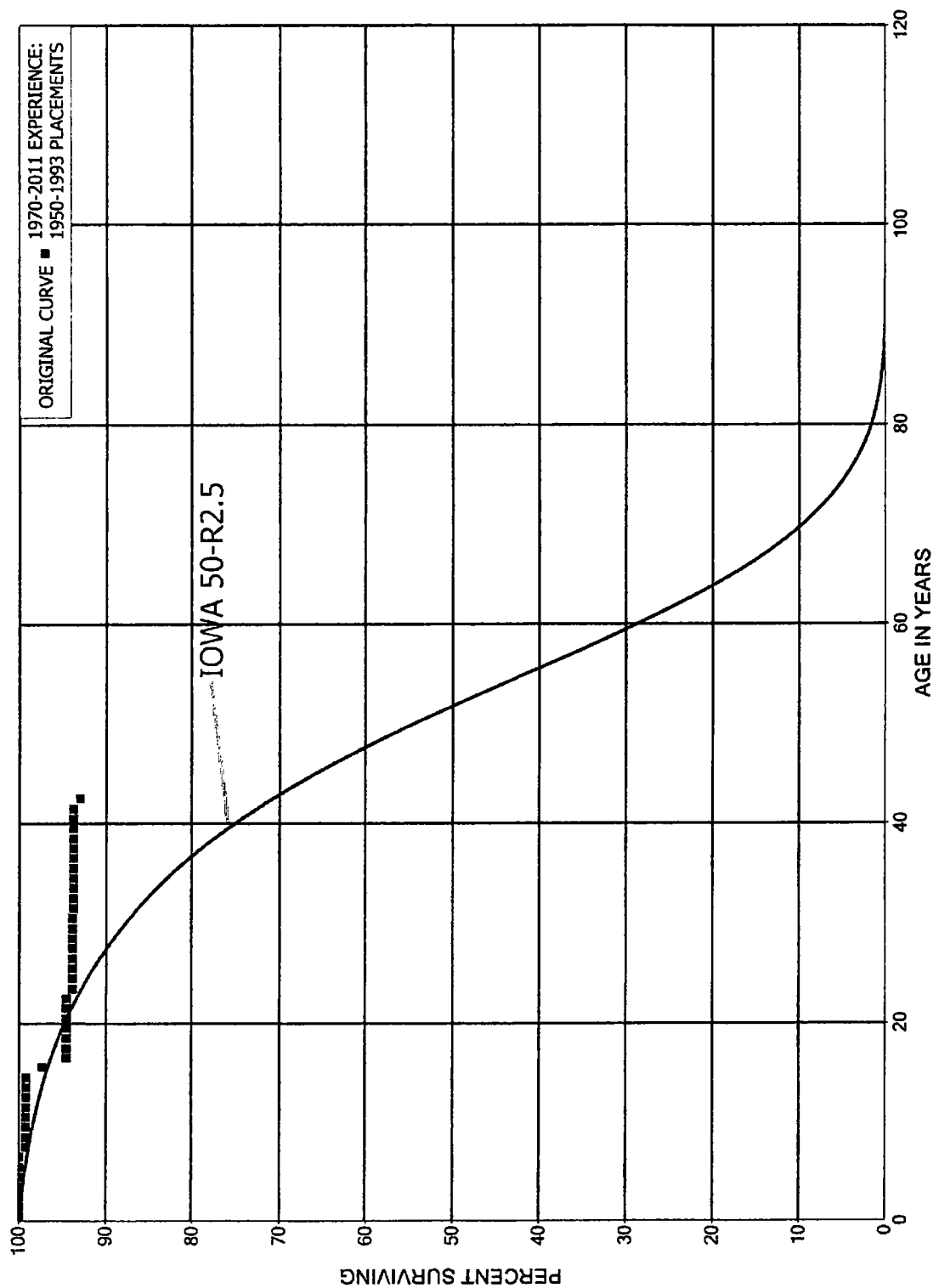
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 353 LINES

ORIGINAL LIFE TABLE

| PLACEMENT BAND 1971-1989       |                                              |                                       | EXPERIENCE BAND 1971-2011 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<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                           | 391,929                                      |                                       | 0.0000                    | 1.0000        | 97.24                            |
| 23.5                           | 391,929                                      |                                       | 0.0000                    | 1.0000        | 97.24                            |
| 24.5                           | 391,929                                      |                                       | 0.0000                    | 1.0000        | 97.24                            |
| 25.5                           | 391,929                                      |                                       | 0.0000                    | 1.0000        | 97.24                            |
| 26.5                           | 391,929                                      |                                       | 0.0000                    | 1.0000        | 97.24                            |
| 27.5                           | 378,044                                      |                                       | 0.0000                    | 1.0000        | 97.24                            |
| 28.5                           | 378,044                                      |                                       | 0.0000                    | 1.0000        | 97.24                            |
| 29.5                           | 378,044                                      |                                       | 0.0000                    | 1.0000        | 97.24                            |
| 30.5                           | 378,044                                      |                                       | 0.0000                    | 1.0000        | 97.24                            |
| 31.5                           | 378,044                                      |                                       | 0.0000                    | 1.0000        | 97.24                            |
| 32.5                           | 378,044                                      |                                       | 0.0000                    | 1.0000        | 97.24                            |
| 33.5                           | 378,044                                      |                                       | 0.0000                    | 1.0000        | 97.24                            |
| 34.5                           | 378,044                                      |                                       | 0.0000                    | 1.0000        | 97.24                            |
| 35.5                           | 378,044                                      |                                       | 0.0000                    | 1.0000        | 97.24                            |
| 36.5                           | 378,044                                      | 261                                   | 0.0007                    | 0.9993        | 97.24                            |
| 37.5                           | 377,783                                      |                                       | 0.0000                    | 1.0000        | 97.18                            |
| 38.5                           | 322,952                                      |                                       | 0.0000                    | 1.0000        | 97.18                            |
| 39.5                           | 260,327                                      |                                       | 0.0000                    | 1.0000        | 97.18                            |
| 40.5                           |                                              |                                       |                           |               | 97.18                            |

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



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 354 COMPRESSOR STATION EQUIPMENT

ORIGINAL LIFE TABLE

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

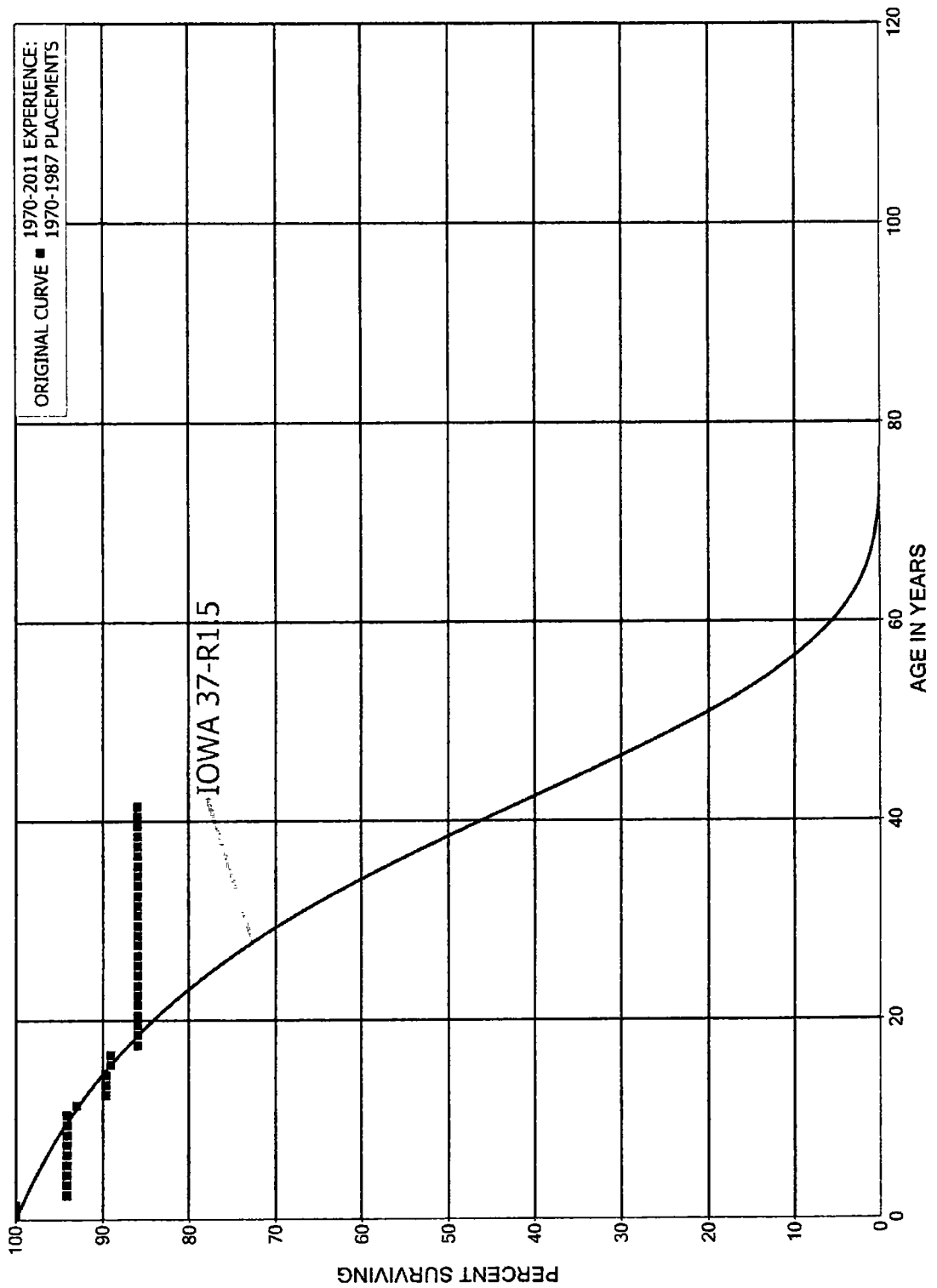
ACCOUNT 354 COMPRESSOR STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

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



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



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 355 MEASURING AND REGULATING EQUIPMENT

ORIGINAL LIFE TABLE

| PLACEMENT BAND 1970-1987       |                                              |                                       | EXPERIENCE BAND 1970-2011 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<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                           | 120,675                                      |                                       | 0.0000                    | 1.0000        | 85.97                            |
| 25.5                           | 91,185                                       |                                       | 0.0000                    | 1.0000        | 85.97                            |
| 26.5                           | 91,185                                       |                                       | 0.0000                    | 1.0000        | 85.97                            |
| 27.5                           | 91,185                                       |                                       | 0.0000                    | 1.0000        | 85.97                            |
| 28.5                           | 91,185                                       |                                       | 0.0000                    | 1.0000        | 85.97                            |
| 29.5                           | 91,185                                       |                                       | 0.0000                    | 1.0000        | 85.97                            |
| 30.5                           | 77,447                                       |                                       | 0.0000                    | 1.0000        | 85.97                            |
| 31.5                           | 77,447                                       |                                       | 0.0000                    | 1.0000        | 85.97                            |
| 32.5                           | 77,447                                       |                                       | 0.0000                    | 1.0000        | 85.97                            |
| 33.5                           | 77,447                                       |                                       | 0.0000                    | 1.0000        | 85.97                            |
| 34.5                           | 77,447                                       |                                       | 0.0000                    | 1.0000        | 85.97                            |
| 35.5                           | 77,447                                       |                                       | 0.0000                    | 1.0000        | 85.97                            |
| 36.5                           | 74,762                                       |                                       | 0.0000                    | 1.0000        | 85.97                            |
| 37.5                           | 74,762                                       |                                       | 0.0000                    | 1.0000        | 85.97                            |
| 38.5                           | 74,762                                       |                                       | 0.0000                    | 1.0000        | 85.97                            |

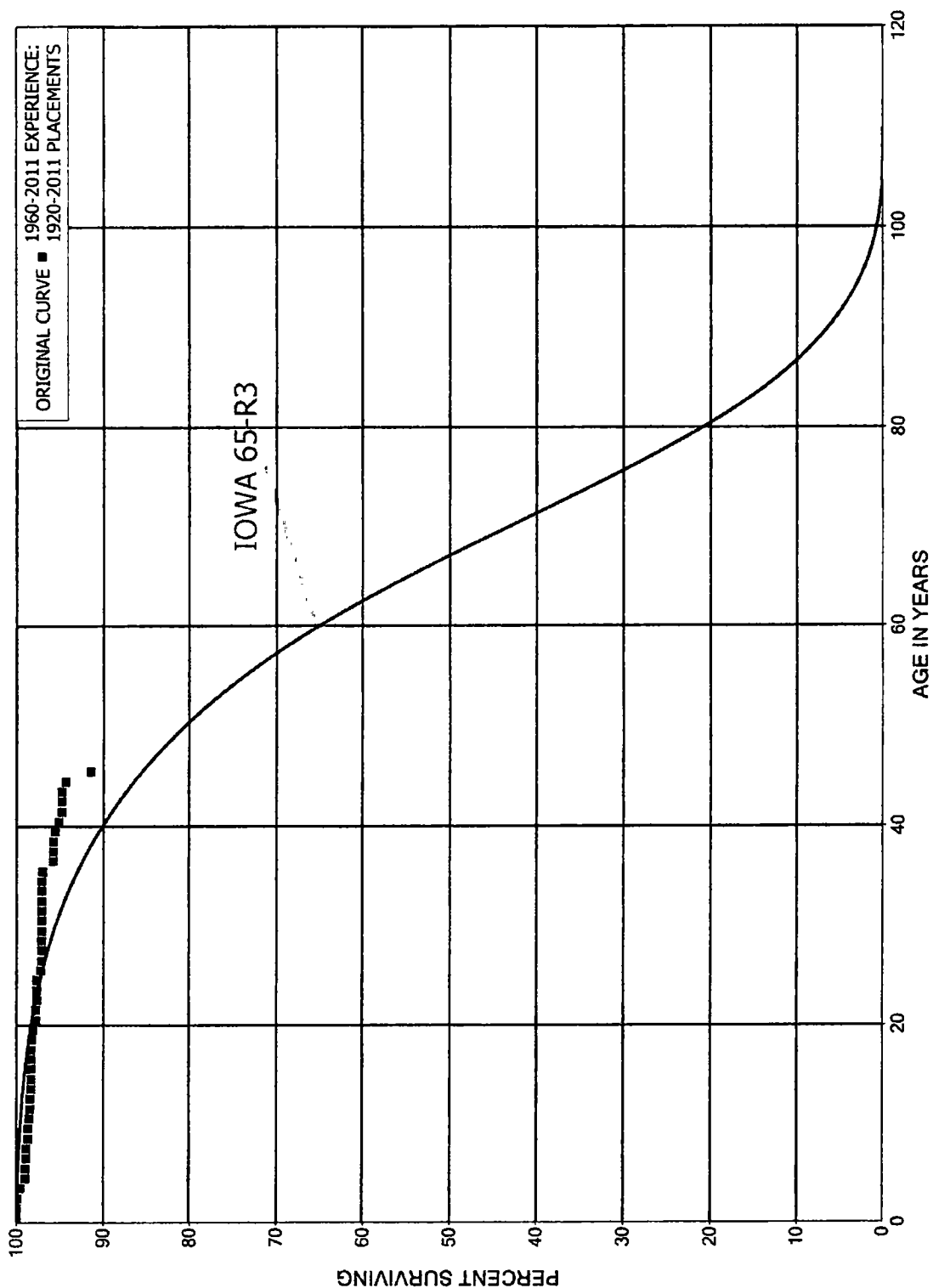
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 355 MEASURING AND REGULATING EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1970-1987       |                                              |                                       | EXPERIENCE BAND 1970-2011 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<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                           | 74,762                                       |                                       | 0.0000                    | 1.0000        | 85.97                            |
| 40.5                           | 74,762                                       |                                       | 0.0000                    | 1.0000        | 85.97                            |
| 41.5                           |                                              |                                       |                           |               | 85.97                            |

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



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 374.4 LAND AND LAND RIGHTS - LAND RIGHTS

ORIGINAL LIFE TABLE

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 374.4 LAND AND LAND RIGHTS - LAND RIGHTS

ORIGINAL LIFE TABLE, CONT.

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

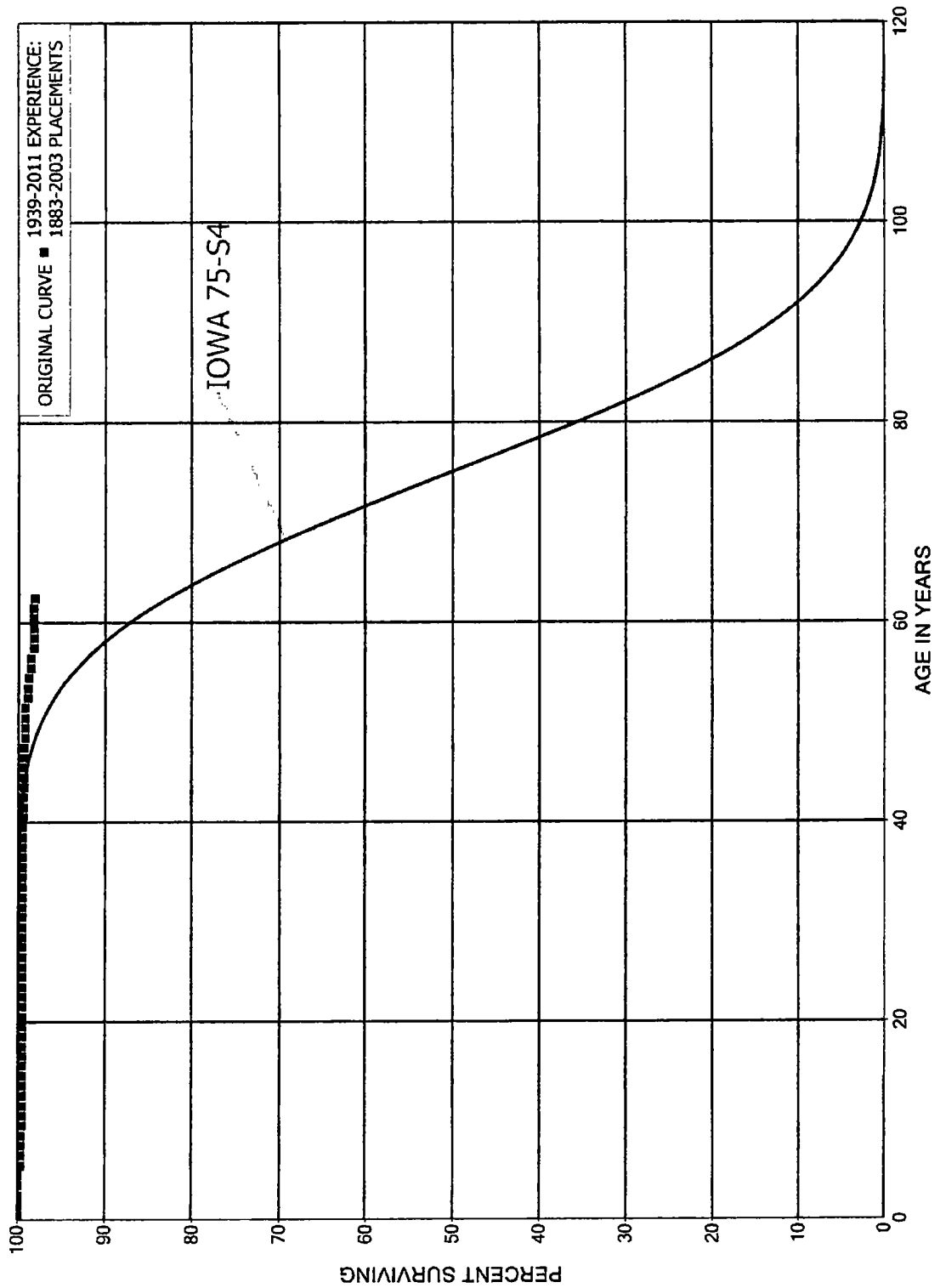
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 374.4 LAND AND LAND RIGHTS - LAND RIGHTS

ORIGINAL LIFE TABLE, CONT.

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

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





COLUMBIA GAS OF PENNSYLVANIA, INC.

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

ORIGINAL LIFE TABLE

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

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

ORIGINAL LIFE TABLE, CONT.

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

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

ORIGINAL LIFE TABLE, CONT.

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

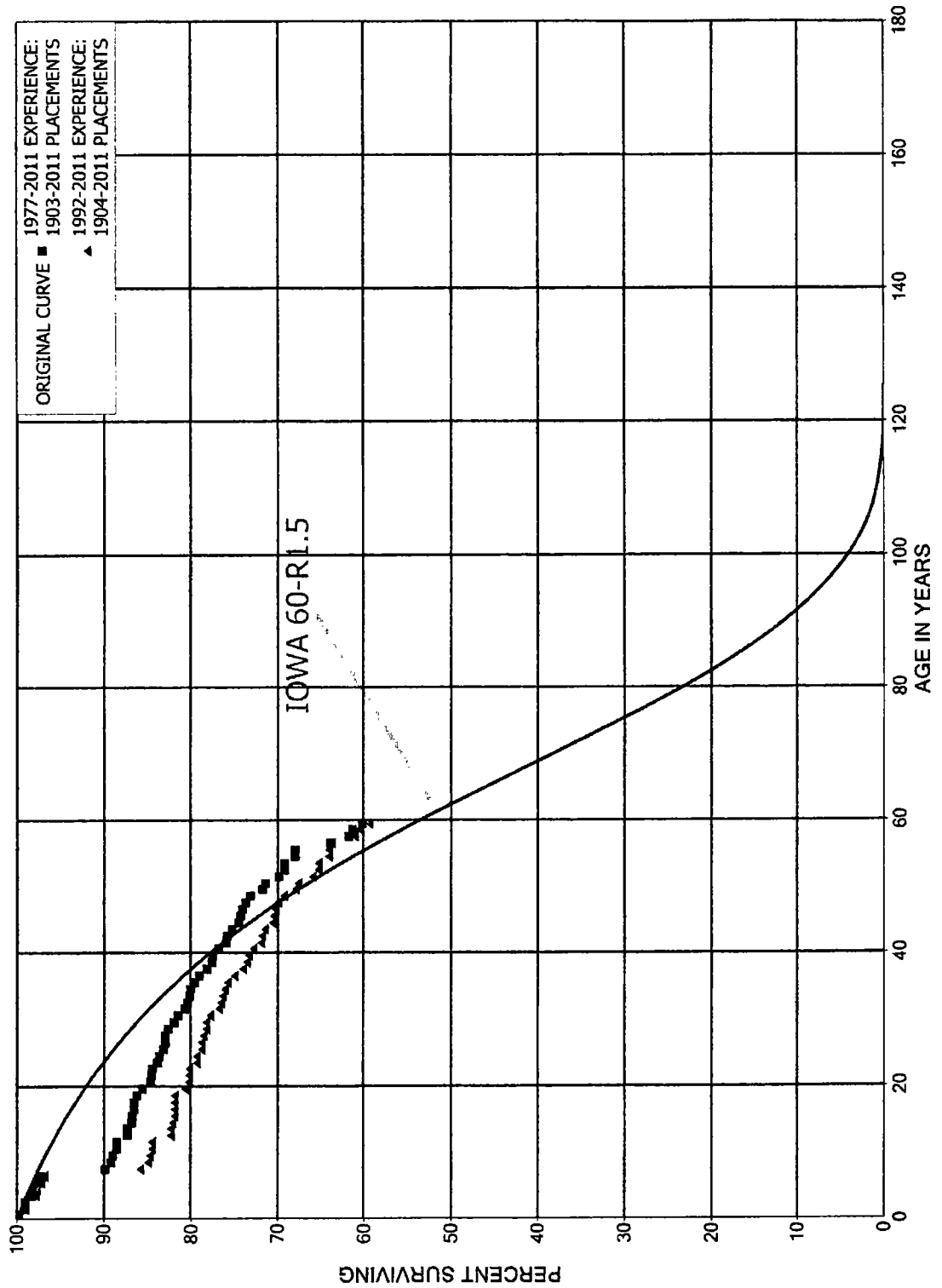
COLUMBIA GAS OF PENNSYLVANIA, INC.

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

ORIGINAL LIFE TABLE, CONT.

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

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



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.34 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

ORIGINAL LIFE TABLE

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.34 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

ORIGINAL LIFE TABLE, CONT.

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.34 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

ORIGINAL LIFE TABLE, CONT.

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



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.34 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

ORIGINAL LIFE TABLE

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.34 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1904-2011

EXPERIENCE BAND 1992-2011

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

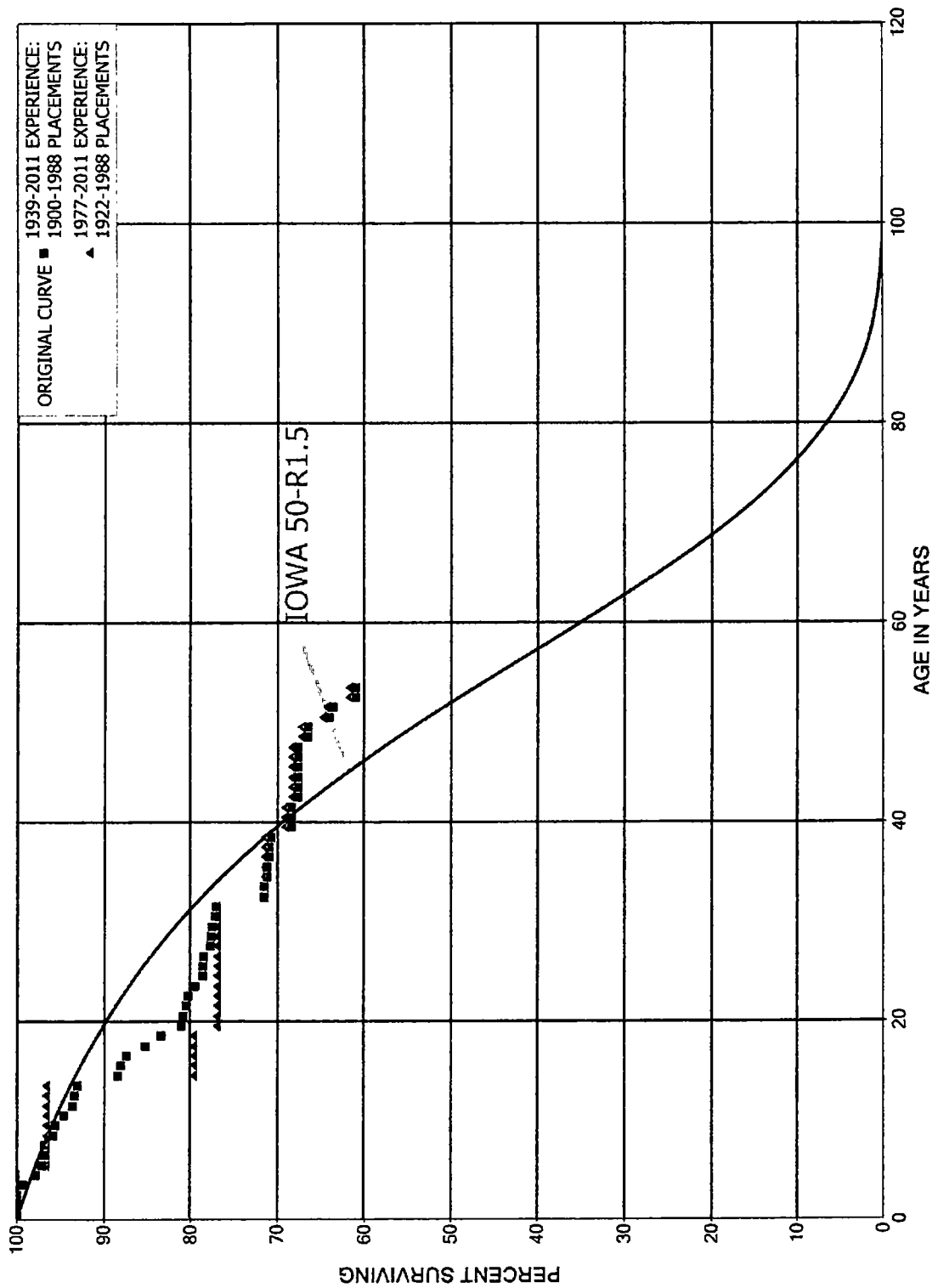
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.34 STRUCTURES AND IMPROVEMENTS - MEASURING AND REGULATING

ORIGINAL LIFE TABLE, CONT.

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

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



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.6 STRUCTURES AND IMPROVEMENTS - INDUSTRIAL MEASURING AND  
REGULATING

ORIGINAL LIFE TABLE

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.6 STRUCTURES AND IMPROVEMENTS - INDUSTRIAL MEASURING AND  
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ORIGINAL LIFE TABLE, CONT.

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.6 STRUCTURES AND IMPROVEMENTS - INDUSTRIAL MEASURING AND  
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ORIGINAL LIFE TABLE, CONT.

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.6 STRUCTURES AND IMPROVEMENTS - INDUSTRIAL MEASURING AND  
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ORIGINAL LIFE TABLE

| PLACEMENT BAND 1922-1988       |                                              |                                       | EXPERIENCE BAND 1977-2011 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| 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                           | 65,732                                       |                                       | 0.0000                    | 1.0000        | 76.78                            |
| 24.5                           | 70,427                                       |                                       | 0.0000                    | 1.0000        | 76.78                            |
| 25.5                           | 78,070                                       |                                       | 0.0000                    | 1.0000        | 76.78                            |
| 26.5                           | 79,928                                       |                                       | 0.0000                    | 1.0000        | 76.78                            |
| 27.5                           | 79,928                                       |                                       | 0.0000                    | 1.0000        | 76.78                            |
| 28.5                           | 80,411                                       |                                       | 0.0000                    | 1.0000        | 76.78                            |
| 29.5                           | 80,979                                       |                                       | 0.0000                    | 1.0000        | 76.78                            |
| 30.5                           | 81,356                                       |                                       | 0.0000                    | 1.0000        | 76.78                            |
| 31.5                           | 77,471                                       | 5,591                                 | 0.0722                    | 0.9278        | 76.78                            |
| 32.5                           | 76,462                                       |                                       | 0.0000                    | 1.0000        | 71.24                            |
| 33.5                           | 76,462                                       |                                       | 0.0000                    | 1.0000        | 71.24                            |
| 34.5                           | 79,244                                       |                                       | 0.0000                    | 1.0000        | 71.24                            |
| 35.5                           | 79,244                                       |                                       | 0.0000                    | 1.0000        | 71.24                            |
| 36.5                           | 78,843                                       |                                       | 0.0000                    | 1.0000        | 71.24                            |
| 37.5                           | 78,843                                       |                                       | 0.0000                    | 1.0000        | 71.24                            |
| 38.5                           | 80,348                                       | 2,533                                 | 0.0315                    | 0.9685        | 71.24                            |



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.6 STRUCTURES AND IMPROVEMENTS - INDUSTRIAL MEASURING AND  
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ORIGINAL LIFE TABLE, CONT.

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

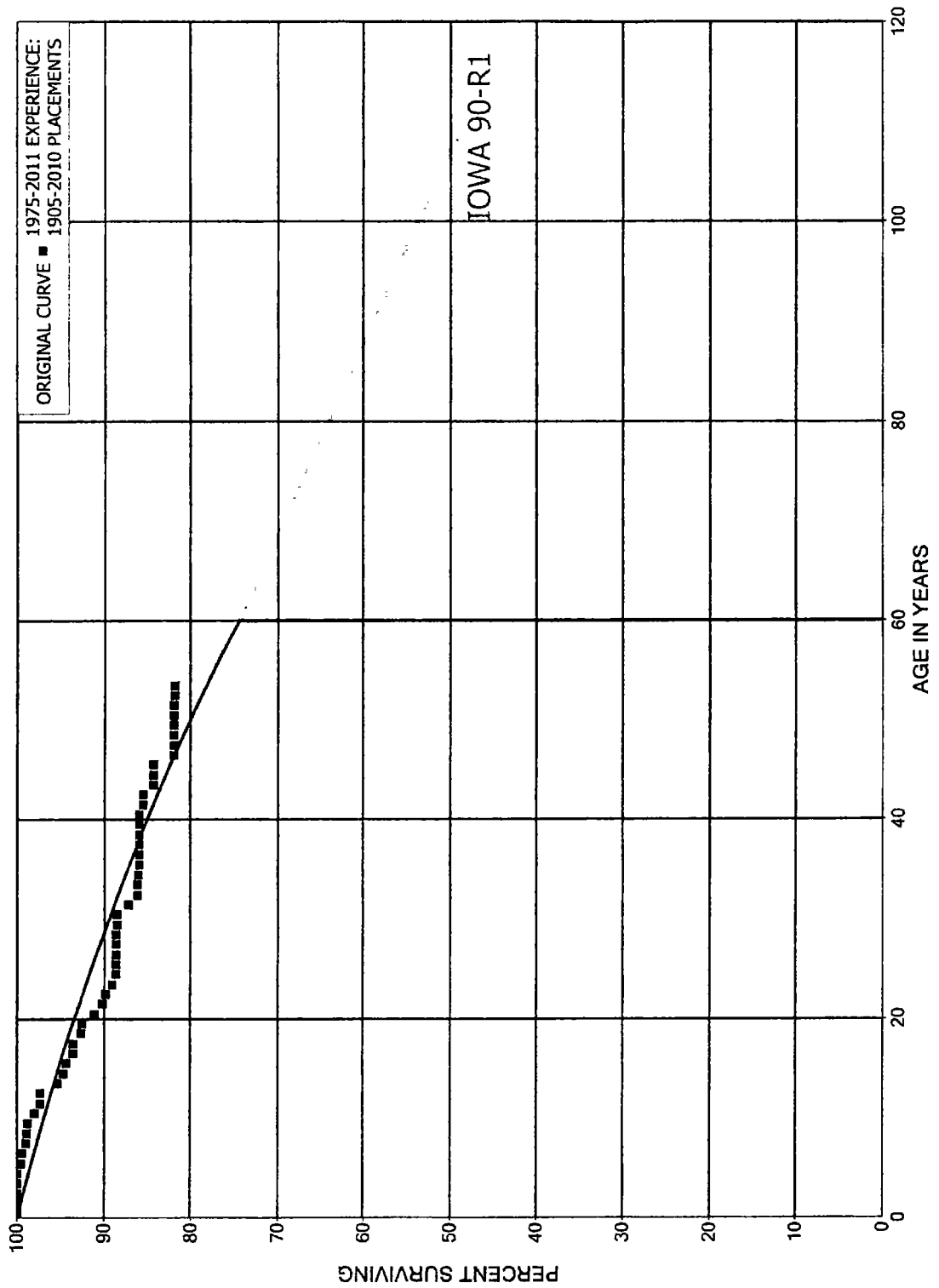
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.6 STRUCTURES AND IMPROVEMENTS - INDUSTRIAL MEASURING AND  
REGULATING

ORIGINAL LIFE TABLE, CONT.

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

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



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.7 STRUCTURES AND IMPROVEMENTS - LIFE SPAN GROUP

ORIGINAL LIFE TABLE

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.7 STRUCTURES AND IMPROVEMENTS - LIFE SPAN GROUP

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1905-2010       |                                              |                                       | EXPERIENCE BAND 1975-2011 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<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 |
| 39.5                           | 1,148,546                                    |                                       | 0.0000                    | 1.0000        | 85.91                            |
| 40.5                           | 1,038,969                                    | 4,275                                 | 0.0041                    | 0.9959        | 85.91                            |
| 41.5                           | 878,590                                      |                                       | 0.0000                    | 1.0000        | 85.56                            |
| 42.5                           | 844,392                                      | 12,186                                | 0.0144                    | 0.9856        | 85.56                            |
| 43.5                           | 818,941                                      |                                       | 0.0000                    | 1.0000        | 84.32                            |
| 44.5                           | 837,888                                      |                                       | 0.0000                    | 1.0000        | 84.32                            |
| 45.5                           | 816,392                                      | 22,581                                | 0.0277                    | 0.9723        | 84.32                            |
| 46.5                           | 767,582                                      |                                       | 0.0000                    | 1.0000        | 81.99                            |
| 47.5                           | 683,388                                      |                                       | 0.0000                    | 1.0000        | 81.99                            |
| 48.5                           | 662,936                                      | 683                                   | 0.0010                    | 0.9990        | 81.99                            |
| 49.5                           | 657,990                                      |                                       | 0.0000                    | 1.0000        | 81.91                            |
| 50.5                           | 664,999                                      |                                       | 0.0000                    | 1.0000        | 81.91                            |
| 51.5                           | 658,890                                      | 959                                   | 0.0015                    | 0.9985        | 81.91                            |
| 52.5                           | 558,162                                      |                                       | 0.0000                    | 1.0000        | 81.79                            |
| 53.5                           | 482,200                                      | 112                                   | 0.0002                    | 0.9998        | 81.79                            |
| 54.5                           | 61,655                                       |                                       | 0.0000                    | 1.0000        | 81.77                            |
| 55.5                           | 61,031                                       |                                       | 0.0000                    | 1.0000        | 81.77                            |
| 56.5                           | 52,105                                       |                                       | 0.0000                    | 1.0000        | 81.77                            |
| 57.5                           | 55,870                                       |                                       | 0.0000                    | 1.0000        | 81.77                            |
| 58.5                           | 54,752                                       |                                       | 0.0000                    | 1.0000        | 81.77                            |
| 59.5                           | 45,905                                       |                                       | 0.0000                    | 1.0000        | 81.77                            |
| 60.5                           | 45,905                                       |                                       | 0.0000                    | 1.0000        | 81.77                            |
| 61.5                           | 61,812                                       |                                       | 0.0000                    | 1.0000        | 81.77                            |
| 62.5                           | 61,474                                       |                                       | 0.0000                    | 1.0000        | 81.77                            |
| 63.5                           | 62,707                                       |                                       | 0.0000                    | 1.0000        | 81.77                            |
| 64.5                           | 62,707                                       |                                       | 0.0000                    | 1.0000        | 81.77                            |
| 65.5                           | 62,707                                       |                                       | 0.0000                    | 1.0000        | 81.77                            |
| 66.5                           | 63,048                                       |                                       | 0.0000                    | 1.0000        | 81.77                            |
| 67.5                           | 55,797                                       |                                       | 0.0000                    | 1.0000        | 81.77                            |
| 68.5                           | 51,886                                       |                                       | 0.0000                    | 1.0000        | 81.77                            |
| 69.5                           | 84,305                                       |                                       | 0.0000                    | 1.0000        | 81.77                            |
| 70.5                           | 85,720                                       | 2                                     | 0.0000                    | 1.0000        | 81.77                            |
| 71.5                           | 85,719                                       |                                       | 0.0000                    | 1.0000        | 81.77                            |
| 72.5                           | 85,208                                       |                                       | 0.0000                    | 1.0000        | 81.77                            |
| 73.5                           | 85,208                                       |                                       | 0.0000                    | 1.0000        | 81.77                            |
| 74.5                           | 50,990                                       |                                       | 0.0000                    | 1.0000        | 81.77                            |
| 75.5                           | 50,607                                       |                                       | 0.0000                    | 1.0000        | 81.77                            |
| 76.5                           | 49,526                                       |                                       | 0.0000                    | 1.0000        | 81.77                            |
| 77.5                           | 49,011                                       |                                       | 0.0000                    | 1.0000        | 81.77                            |
| 78.5                           | 48,609                                       |                                       | 0.0000                    | 1.0000        | 81.77                            |

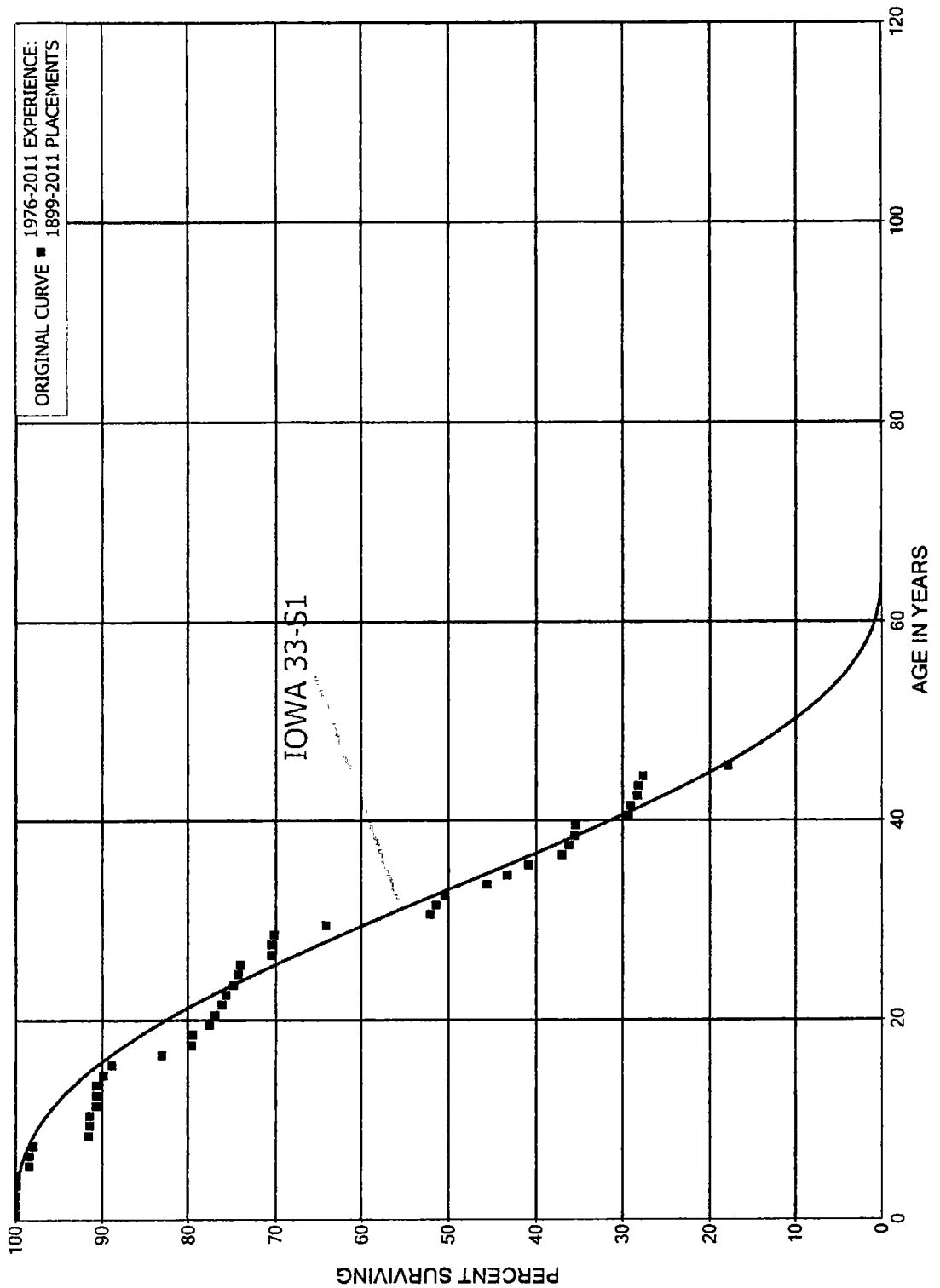
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.7 STRUCTURES AND IMPROVEMENTS - LIFE SPAN GROUP

ORIGINAL LIFE TABLE, CONT.

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

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



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.7 STRUCTURES AND IMPROVEMENTS - CONTINUOUS GROUP

ORIGINAL LIFE TABLE

| PLACEMENT BAND 1899-2011       |                                              |                                       | EXPERIENCE BAND 1976-2011 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<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                            | 2,688,722                                    |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 0.5                            | 2,661,197                                    | 2,800                                 | 0.0011                    | 0.9989        | 100.00                           |
| 1.5                            | 2,604,073                                    |                                       | 0.0000                    | 1.0000        | 99.89                            |
| 2.5                            | 1,873,227                                    | 1,015                                 | 0.0005                    | 0.9995        | 99.89                            |
| 3.5                            | 1,368,851                                    |                                       | 0.0000                    | 1.0000        | 99.84                            |
| 4.5                            | 1,234,100                                    | 18,024                                | 0.0146                    | 0.9854        | 99.84                            |
| 5.5                            | 375,889                                      |                                       | 0.0000                    | 1.0000        | 98.38                            |
| 6.5                            | 320,630                                      | 1,283                                 | 0.0040                    | 0.9960        | 98.38                            |
| 7.5                            | 310,713                                      | 20,678                                | 0.0665                    | 0.9335        | 97.99                            |
| 8.5                            | 313,806                                      | 199                                   | 0.0006                    | 0.9994        | 91.47                            |
| 9.5                            | 329,575                                      |                                       | 0.0000                    | 1.0000        | 91.41                            |
| 10.5                           | 336,896                                      | 2,879                                 | 0.0085                    | 0.9915        | 91.41                            |
| 11.5                           | 291,174                                      |                                       | 0.0000                    | 1.0000        | 90.63                            |
| 12.5                           | 273,635                                      | 138                                   | 0.0005                    | 0.9995        | 90.63                            |
| 13.5                           | 208,674                                      | 1,757                                 | 0.0084                    | 0.9916        | 90.58                            |
| 14.5                           | 230,589                                      | 2,529                                 | 0.0110                    | 0.9890        | 89.82                            |
| 15.5                           | 238,197                                      | 15,360                                | 0.0645                    | 0.9355        | 88.83                            |
| 16.5                           | 216,715                                      | 8,990                                 | 0.0415                    | 0.9585        | 83.11                            |
| 17.5                           | 224,483                                      | 384                                   | 0.0017                    | 0.9983        | 79.66                            |
| 18.5                           | 226,844                                      | 5,462                                 | 0.0241                    | 0.9759        | 79.52                            |
| 19.5                           | 229,168                                      | 2,117                                 | 0.0092                    | 0.9908        | 77.61                            |
| 20.5                           | 266,564                                      | 2,417                                 | 0.0091                    | 0.9909        | 76.89                            |
| 21.5                           | 217,360                                      | 1,334                                 | 0.0061                    | 0.9939        | 76.19                            |
| 22.5                           | 211,447                                      | 2,536                                 | 0.0120                    | 0.9880        | 75.73                            |
| 23.5                           | 195,195                                      | 1,343                                 | 0.0069                    | 0.9931        | 74.82                            |
| 24.5                           | 200,602                                      | 725                                   | 0.0036                    | 0.9964        | 74.30                            |
| 25.5                           | 191,404                                      | 9,144                                 | 0.0478                    | 0.9522        | 74.03                            |
| 26.5                           | 168,522                                      |                                       | 0.0000                    | 1.0000        | 70.50                            |
| 27.5                           | 174,406                                      | 871                                   | 0.0050                    | 0.9950        | 70.50                            |
| 28.5                           | 170,656                                      | 14,605                                | 0.0856                    | 0.9144        | 70.15                            |
| 29.5                           | 151,076                                      | 28,346                                | 0.1876                    | 0.8124        | 64.14                            |
| 30.5                           | 123,532                                      | 1,742                                 | 0.0141                    | 0.9859        | 52.11                            |
| 31.5                           | 113,264                                      | 2,147                                 | 0.0190                    | 0.9810        | 51.37                            |
| 32.5                           | 106,120                                      | 10,113                                | 0.0953                    | 0.9047        | 50.40                            |
| 33.5                           | 89,457                                       | 4,442                                 | 0.0497                    | 0.9503        | 45.60                            |
| 34.5                           | 82,295                                       | 4,759                                 | 0.0578                    | 0.9422        | 43.33                            |
| 35.5                           | 72,344                                       | 6,813                                 | 0.0942                    | 0.9058        | 40.83                            |
| 36.5                           | 78,187                                       | 1,590                                 | 0.0203                    | 0.9797        | 36.98                            |
| 37.5                           | 76,793                                       | 1,652                                 | 0.0215                    | 0.9785        | 36.23                            |
| 38.5                           | 73,957                                       | 37                                    | 0.0005                    | 0.9995        | 35.45                            |



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.7 STRUCTURES AND IMPROVEMENTS - CONTINUOUS GROUP

ORIGINAL LIFE TABLE, CONT.

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

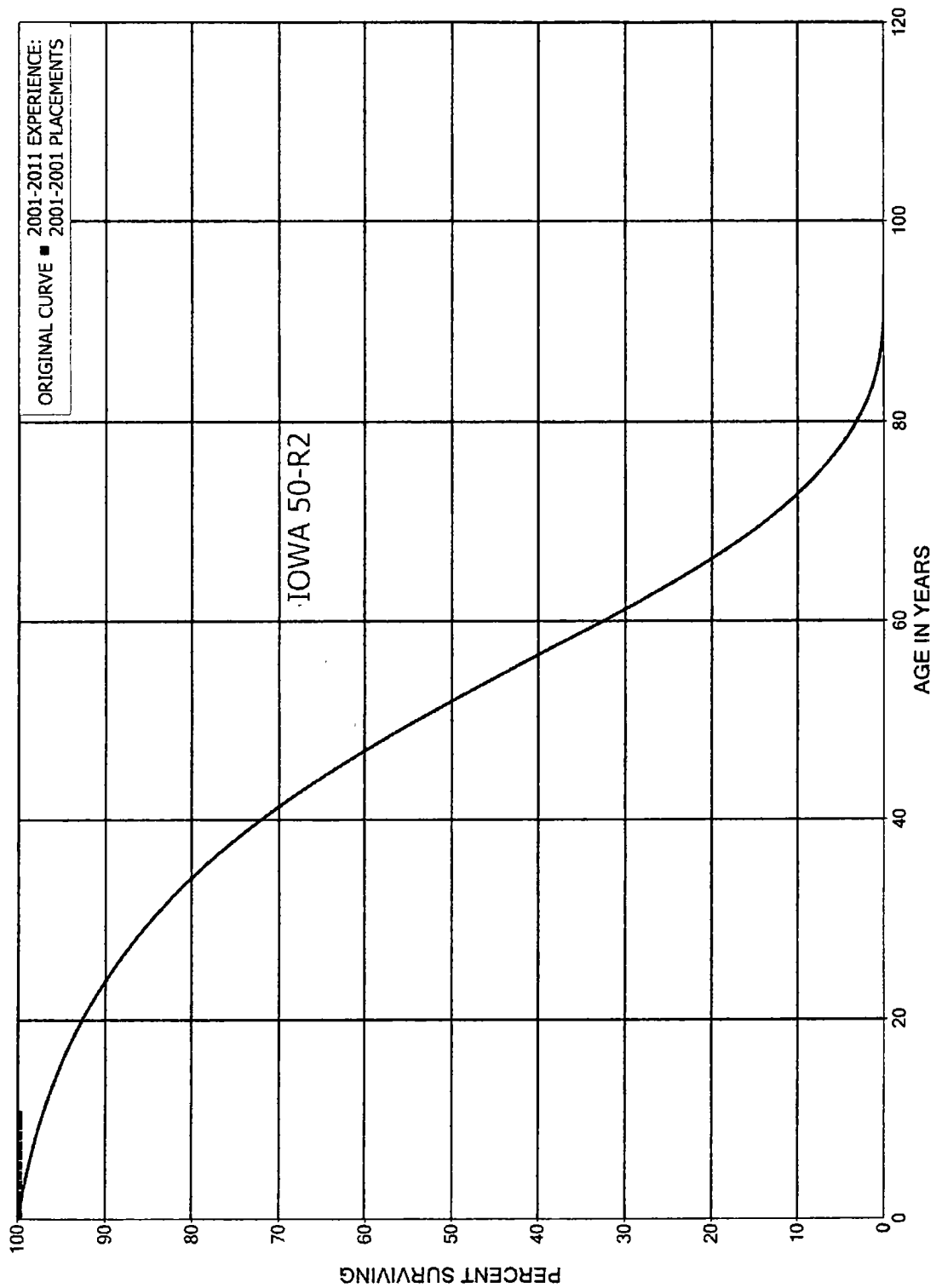
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.7 STRUCTURES AND IMPROVEMENTS - CONTINUOUS GROUP

ORIGINAL LIFE TABLE, CONT.

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

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



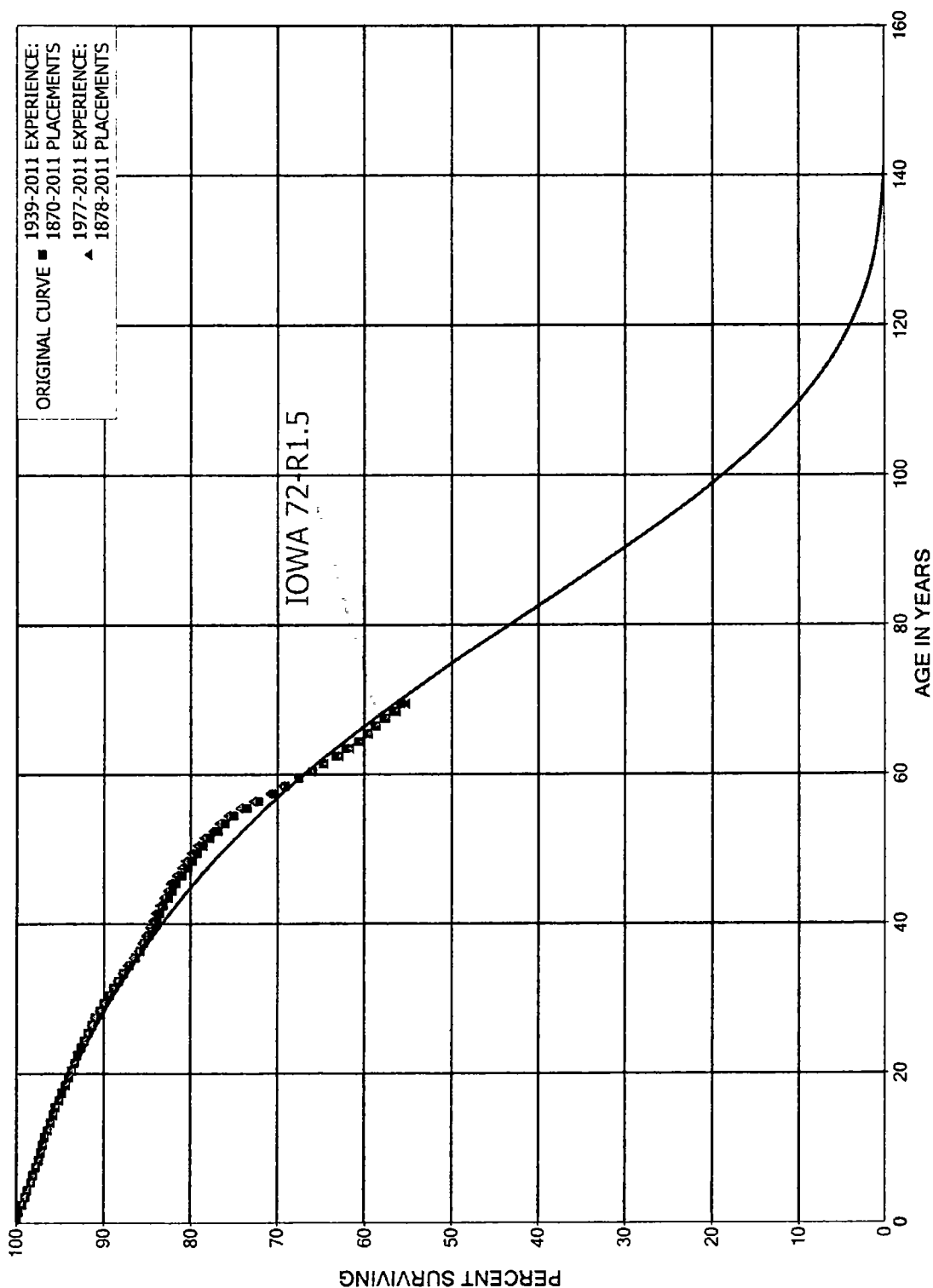
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 375.8 STRUCTURES AND IMPROVEMENTS - COMMUNICATION STRUCTURES

ORIGINAL LIFE TABLE

| PLACEMENT BAND 2001-2001       |                                              |                                       | EXPERIENCE BAND 2001-2011 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<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                           |                                              |                                       |                           |               | 100.00                           |

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



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 376.1, 376.3 AND 376.45 MAINS

ORIGINAL LIFE TABLE

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 376.1, 376.3 AND 376.45 MAINS

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1870-2011       |                                              |                                       | EXPERIENCE BAND 1939-2011 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<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 |
| 39.5                           | 87,332,438                                   | 415,458                               | 0.0048                    | 0.9952        | 84.40                            |
| 40.5                           | 82,760,009                                   | 393,583                               | 0.0048                    | 0.9952        | 84.00                            |
| 41.5                           | 80,567,053                                   | 409,180                               | 0.0051                    | 0.9949        | 83.60                            |
| 42.5                           | 77,069,508                                   | 488,245                               | 0.0063                    | 0.9937        | 83.18                            |
| 43.5                           | 73,112,764                                   | 381,385                               | 0.0052                    | 0.9948        | 82.65                            |
| 44.5                           | 68,712,201                                   | 409,396                               | 0.0060                    | 0.9940        | 82.22                            |
| 45.5                           | 63,950,007                                   | 551,310                               | 0.0086                    | 0.9914        | 81.73                            |
| 46.5                           | 60,250,909                                   | 452,332                               | 0.0075                    | 0.9925        | 81.02                            |
| 47.5                           | 55,690,520                                   | 372,607                               | 0.0067                    | 0.9933        | 80.42                            |
| 48.5                           | 51,305,835                                   | 378,138                               | 0.0074                    | 0.9926        | 79.88                            |
| 49.5                           | 47,777,236                                   | 406,388                               | 0.0085                    | 0.9915        | 79.29                            |
| 50.5                           | 43,700,054                                   | 452,143                               | 0.0103                    | 0.9897        | 78.61                            |
| 51.5                           | 39,969,228                                   | 493,213                               | 0.0123                    | 0.9877        | 77.80                            |
| 52.5                           | 36,307,573                                   | 391,966                               | 0.0108                    | 0.9892        | 76.84                            |
| 53.5                           | 31,951,017                                   | 407,503                               | 0.0128                    | 0.9872        | 76.01                            |
| 54.5                           | 28,225,231                                   | 568,575                               | 0.0201                    | 0.9799        | 75.04                            |
| 55.5                           | 25,320,932                                   | 475,188                               | 0.0188                    | 0.9812        | 73.53                            |
| 56.5                           | 20,258,075                                   | 483,835                               | 0.0239                    | 0.9761        | 72.15                            |
| 57.5                           | 17,961,609                                   | 340,817                               | 0.0190                    | 0.9810        | 70.43                            |
| 58.5                           | 16,252,926                                   | 363,853                               | 0.0224                    | 0.9776        | 69.09                            |
| 59.5                           | 13,555,455                                   | 311,167                               | 0.0230                    | 0.9770        | 67.54                            |
| 60.5                           | 12,280,227                                   | 240,000                               | 0.0195                    | 0.9805        | 65.99                            |
| 61.5                           | 10,541,503                                   | 225,703                               | 0.0214                    | 0.9786        | 64.70                            |
| 62.5                           | 9,289,932                                    | 161,855                               | 0.0174                    | 0.9826        | 63.32                            |
| 63.5                           | 8,823,702                                    | 217,562                               | 0.0247                    | 0.9753        | 62.22                            |
| 64.5                           | 8,579,374                                    | 128,973                               | 0.0150                    | 0.9850        | 60.68                            |
| 65.5                           | 8,410,239                                    | 123,773                               | 0.0147                    | 0.9853        | 59.77                            |
| 66.5                           | 8,271,593                                    | 145,577                               | 0.0176                    | 0.9824        | 58.89                            |
| 67.5                           | 8,100,570                                    | 153,210                               | 0.0189                    | 0.9811        | 57.85                            |
| 68.5                           | 8,025,333                                    | 133,101                               | 0.0166                    | 0.9834        | 56.76                            |
| 69.5                           | 7,852,399                                    | 212,912                               | 0.0271                    | 0.9729        | 55.82                            |
| 70.5                           | 7,460,475                                    | 118,647                               | 0.0159                    | 0.9841        | 54.30                            |
| 71.5                           | 7,270,509                                    | 132,120                               | 0.0182                    | 0.9818        | 53.44                            |
| 72.5                           | 6,901,179                                    | 147,847                               | 0.0214                    | 0.9786        | 52.47                            |
| 73.5                           | 6,906,204                                    | 111,230                               | 0.0161                    | 0.9839        | 51.35                            |
| 74.5                           | 6,879,669                                    | 117,877                               | 0.0171                    | 0.9829        | 50.52                            |
| 75.5                           | 6,731,660                                    | 114,778                               | 0.0171                    | 0.9829        | 49.65                            |
| 76.5                           | 6,606,263                                    | 146,500                               | 0.0222                    | 0.9778        | 48.81                            |
| 77.5                           | 6,407,090                                    | 114,823                               | 0.0179                    | 0.9821        | 47.72                            |
| 78.5                           | 6,258,535                                    | 161,720                               | 0.0258                    | 0.9742        | 46.87                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 376.1, 376.3 AND 376.45 MAINS

ORIGINAL LIFE TABLE, CONT.

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



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 376.1, 376.3 AND 376.45 MAINS

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1870-2011       |                                              |                                       | EXPERIENCE BAND 1939-2011 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<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                          | 485,673                                      | 23,607                                | 0.0486                    | 0.9514        | 16.46                            |
| 120.5                          | 451,671                                      | 34,274                                | 0.0759                    | 0.9241        | 15.66                            |
| 121.5                          | 394,978                                      | 17,962                                | 0.0455                    | 0.9545        | 14.47                            |
| 122.5                          | 372,529                                      | 23,866                                | 0.0641                    | 0.9359        | 13.82                            |
| 123.5                          | 309,241                                      | 39,601                                | 0.1281                    | 0.8719        | 12.93                            |
| 124.5                          | 206,060                                      | 9,622                                 | 0.0467                    | 0.9533        | 11.27                            |
| 125.5                          | 114,027                                      | 2,265                                 | 0.0199                    | 0.9801        | 10.75                            |
| 126.5                          | 70,369                                       |                                       | 0.0000                    | 1.0000        | 10.53                            |
| 127.5                          | 63,473                                       |                                       | 0.0000                    | 1.0000        | 10.53                            |
| 128.5                          | 4,652                                        |                                       | 0.0000                    | 1.0000        | 10.53                            |
| 129.5                          | 4,119                                        |                                       | 0.0000                    | 1.0000        | 10.53                            |
| 130.5                          | 4,075                                        |                                       | 0.0000                    | 1.0000        | 10.53                            |
| 131.5                          | 355                                          |                                       | 0.0000                    | 1.0000        | 10.53                            |
| 132.5                          | 130                                          |                                       | 0.0000                    | 1.0000        | 10.53                            |
| 133.5                          |                                              |                                       |                           |               | 10.53                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 376.1, 376.3 AND 376.45 MAINS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1878-2011

EXPERIENCE BAND 1977-2011

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 376.1, 376.3 AND 376.45 MAINS

ORIGINAL LIFE TABLE, CONT.

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 376.1, 376.3 AND 376.45 MAINS

ORIGINAL LIFE TABLE, CONT.

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

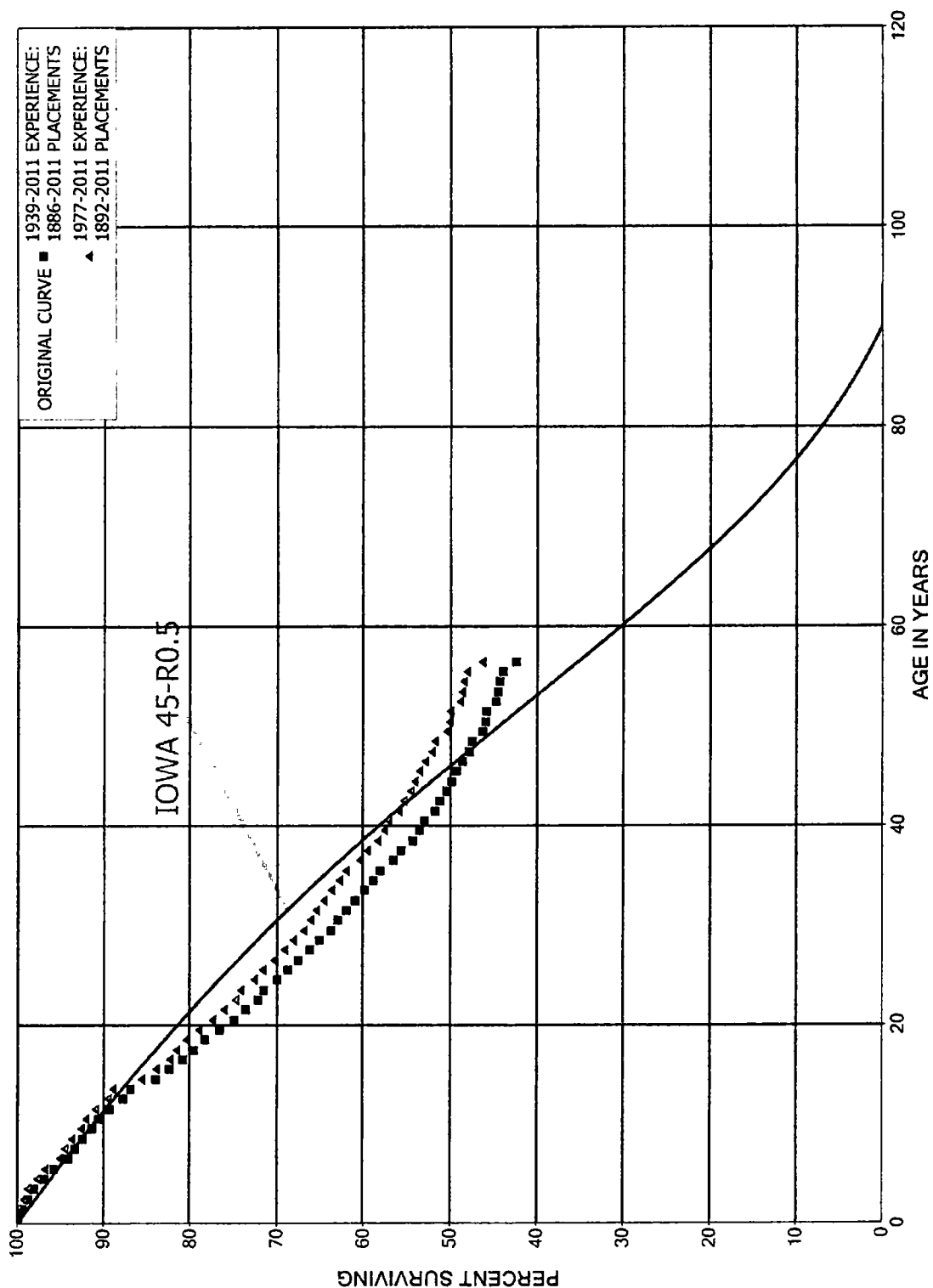
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 376.1, 376.3 AND 376.45 MAINS

ORIGINAL LIFE TABLE, CONT.

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

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



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

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



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

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

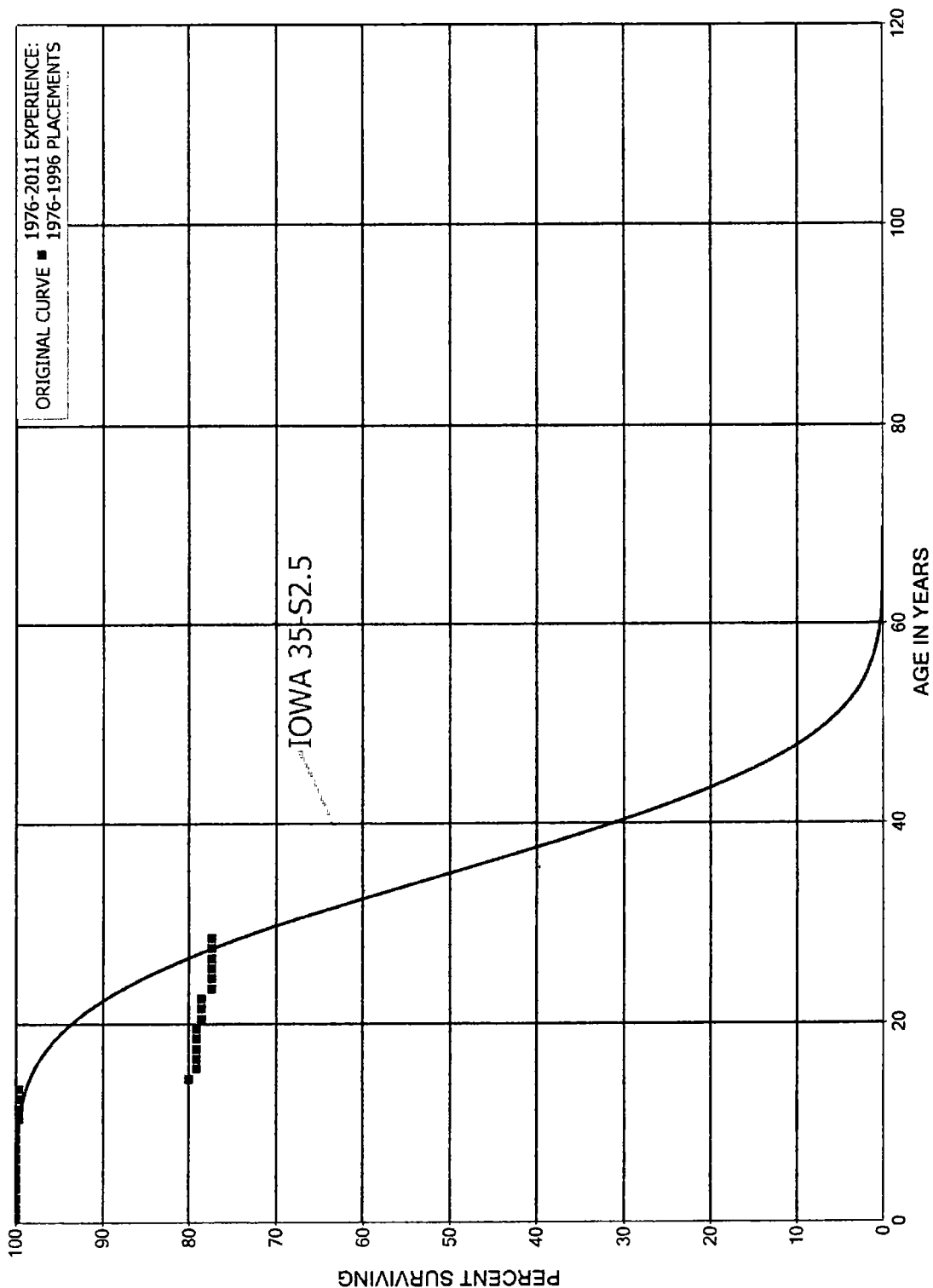
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

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

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



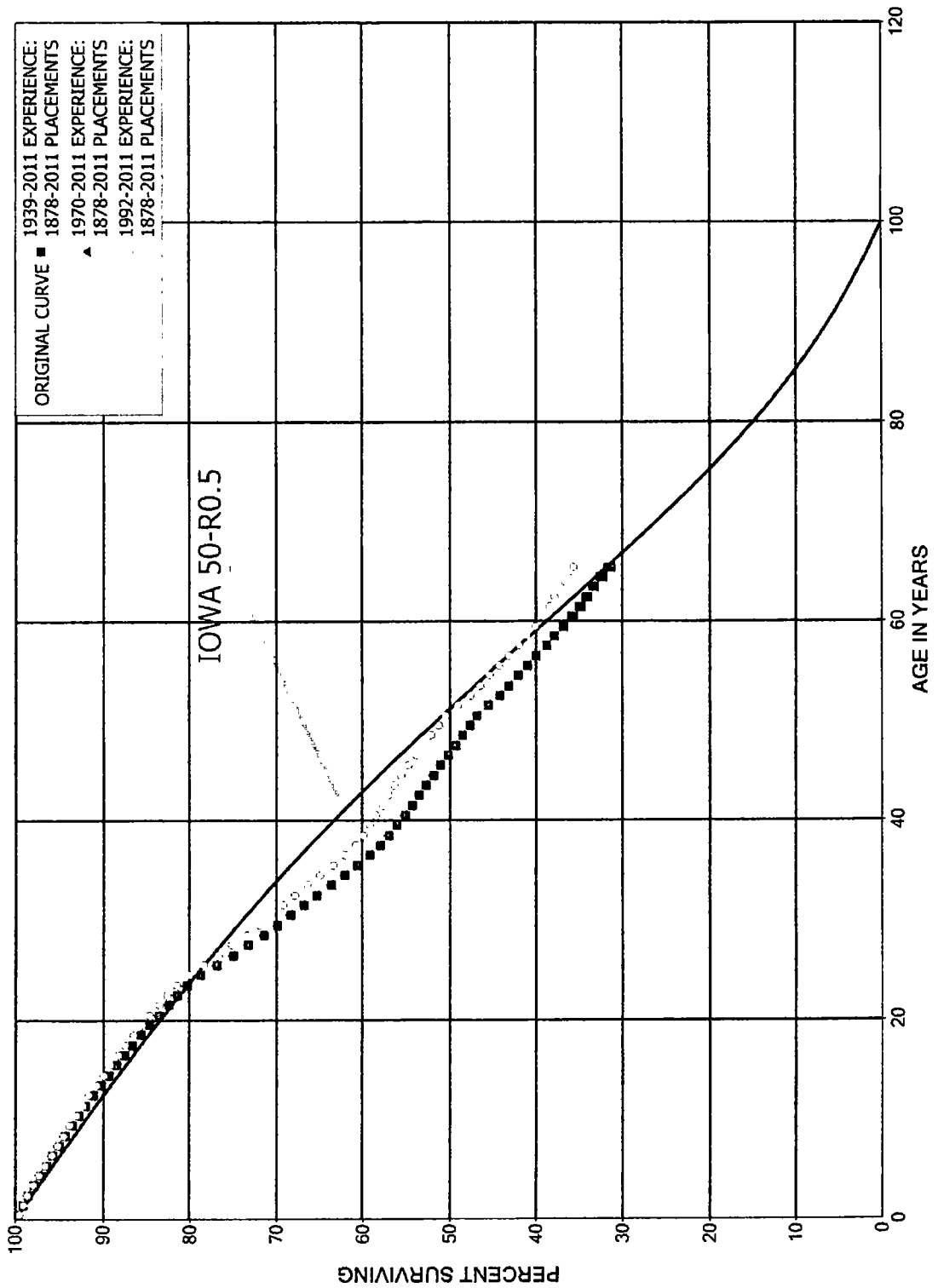
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 379.1 MEASURING AND REGULATING EQUIPMENT - CITY GATE

ORIGINAL LIFE TABLE

| PLACEMENT BAND 1976-1996       |                                              |                                       | EXPERIENCE BAND 1976-2011 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<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                           | 107,503                                      |                                       | 0.0000                    | 1.0000        | 79.13                            |
| 16.5                           | 107,503                                      |                                       | 0.0000                    | 1.0000        | 79.13                            |
| 17.5                           | 107,503                                      |                                       | 0.0000                    | 1.0000        | 79.13                            |
| 18.5                           | 107,503                                      |                                       | 0.0000                    | 1.0000        | 79.13                            |
| 19.5                           | 107,503                                      | 744                                   | 0.0069                    | 0.9931        | 79.13                            |
| 20.5                           | 106,758                                      |                                       | 0.0000                    | 1.0000        | 78.58                            |
| 21.5                           | 106,758                                      |                                       | 0.0000                    | 1.0000        | 78.58                            |
| 22.5                           | 71,734                                       | 1,041                                 | 0.0145                    | 0.9855        | 78.58                            |
| 23.5                           | 52,977                                       |                                       | 0.0000                    | 1.0000        | 77.44                            |
| 24.5                           | 39,077                                       |                                       | 0.0000                    | 1.0000        | 77.44                            |
| 25.5                           | 39,077                                       |                                       | 0.0000                    | 1.0000        | 77.44                            |
| 26.5                           | 39,077                                       |                                       | 0.0000                    | 1.0000        | 77.44                            |
| 27.5                           | 33,104                                       |                                       | 0.0000                    | 1.0000        | 77.44                            |
| 28.5                           | 591                                          |                                       | 0.0000                    | 1.0000        | 77.44                            |
| 29.5                           | 591                                          |                                       | 0.0000                    | 1.0000        | 77.44                            |
| 30.5                           | 591                                          |                                       | 0.0000                    | 1.0000        | 77.44                            |
| 31.5                           | 591                                          |                                       | 0.0000                    | 1.0000        | 77.44                            |
| 32.5                           | 591                                          |                                       | 0.0000                    | 1.0000        | 77.44                            |
| 33.5                           | 591                                          |                                       | 0.0000                    | 1.0000        | 77.44                            |
| 34.5                           | 591                                          |                                       | 0.0000                    | 1.0000        | 77.44                            |
| 35.5                           |                                              |                                       |                           |               | 77.44                            |

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



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 380.3 AND 380.45 SERVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1878-2011

EXPERIENCE BAND 1939-2011

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



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 380.3 AND 380.45 SERVICES

ORIGINAL LIFE TABLE, CONT.

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 380.3 AND 380.45 SERVICES

ORIGINAL LIFE TABLE, CONT.

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 380.3 AND 380.45 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1878-2011 EXPERIENCE BAND 1939-2011

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 380.3 AND 380.45 SERVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1878-2011

EXPERIENCE BAND 1970-2011

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 380.3 AND 380.45 SERVICES

ORIGINAL LIFE TABLE, CONT.

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 380.3 AND 380.45 SERVICES

ORIGINAL LIFE TABLE, CONT.

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 380.3 AND 380.45 SERVICES

ORIGINAL LIFE TABLE, CONT.

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 380.3 AND 380.45 SERVICES  
ORIGINAL LIFE TABLE

PLACEMENT BAND 1878-2011

EXPERIENCE BAND 1992-2011

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



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 380.3 AND 380.45 SERVICES

ORIGINAL LIFE TABLE, CONT.

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 380.3 AND 380.45 SERVICES

ORIGINAL LIFE TABLE, CONT.

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

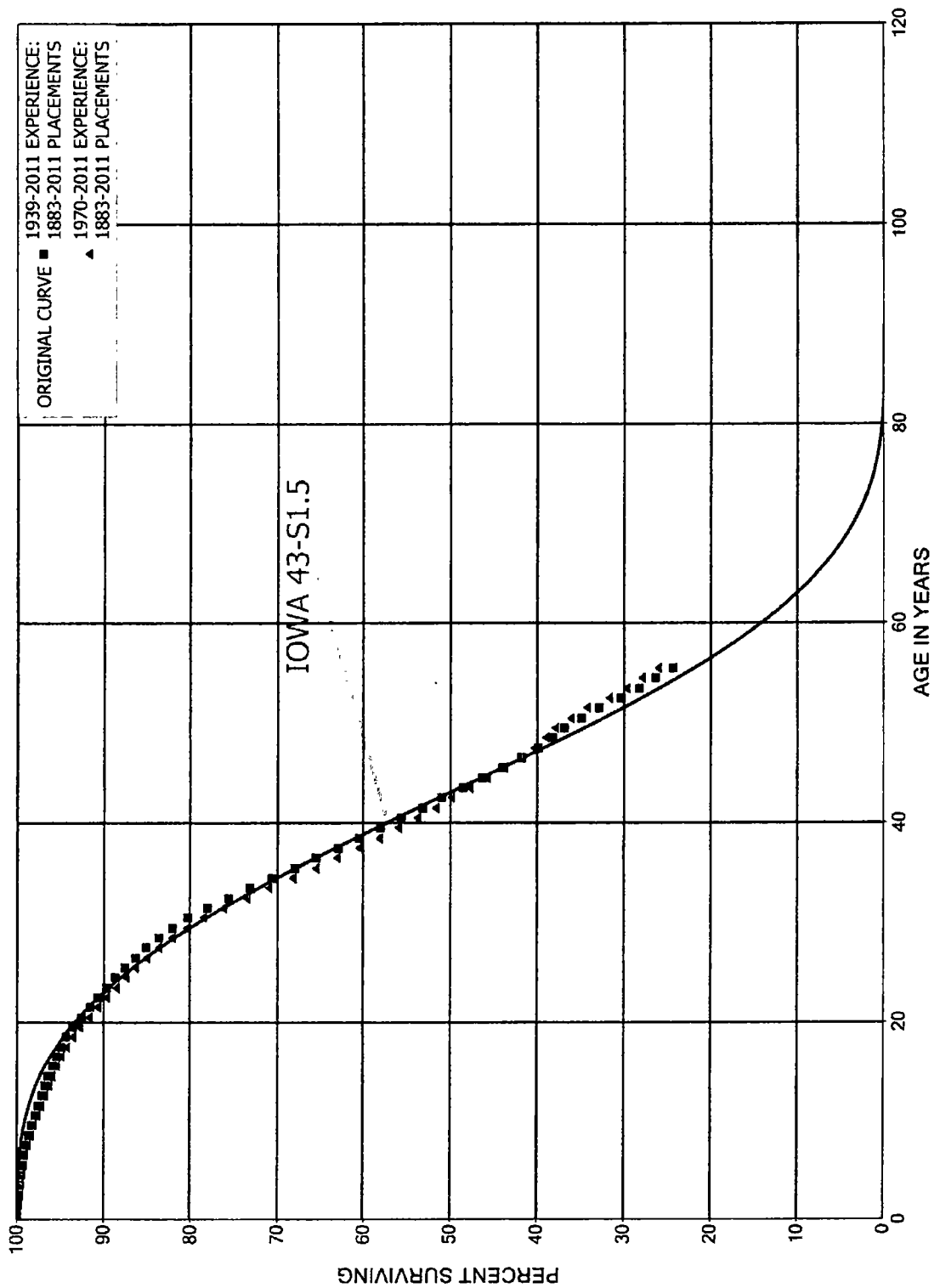
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNTS 380.3 AND 380.45 SERVICES

ORIGINAL LIFE TABLE, CONT.

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

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



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 381 METERS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1883-2011

EXPERIENCE BAND 1939-2011

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 381 METERS

ORIGINAL LIFE TABLE, CONT.

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 381 METERS

ORIGINAL LIFE TABLE, CONT.

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 381 METERS

ORIGINAL LIFE TABLE

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



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 381 METERS

ORIGINAL LIFE TABLE, CONT.

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

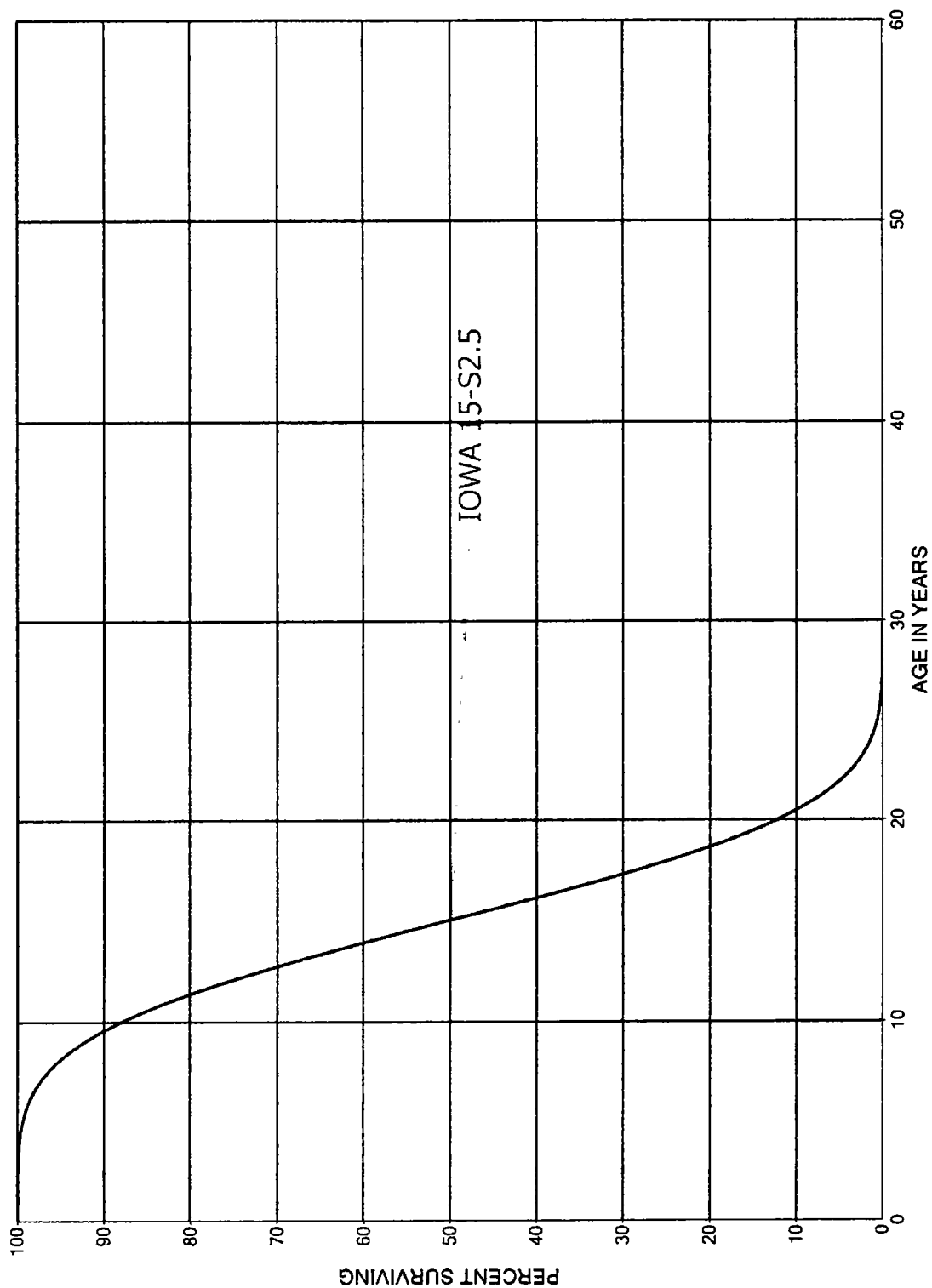
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 381 METERS

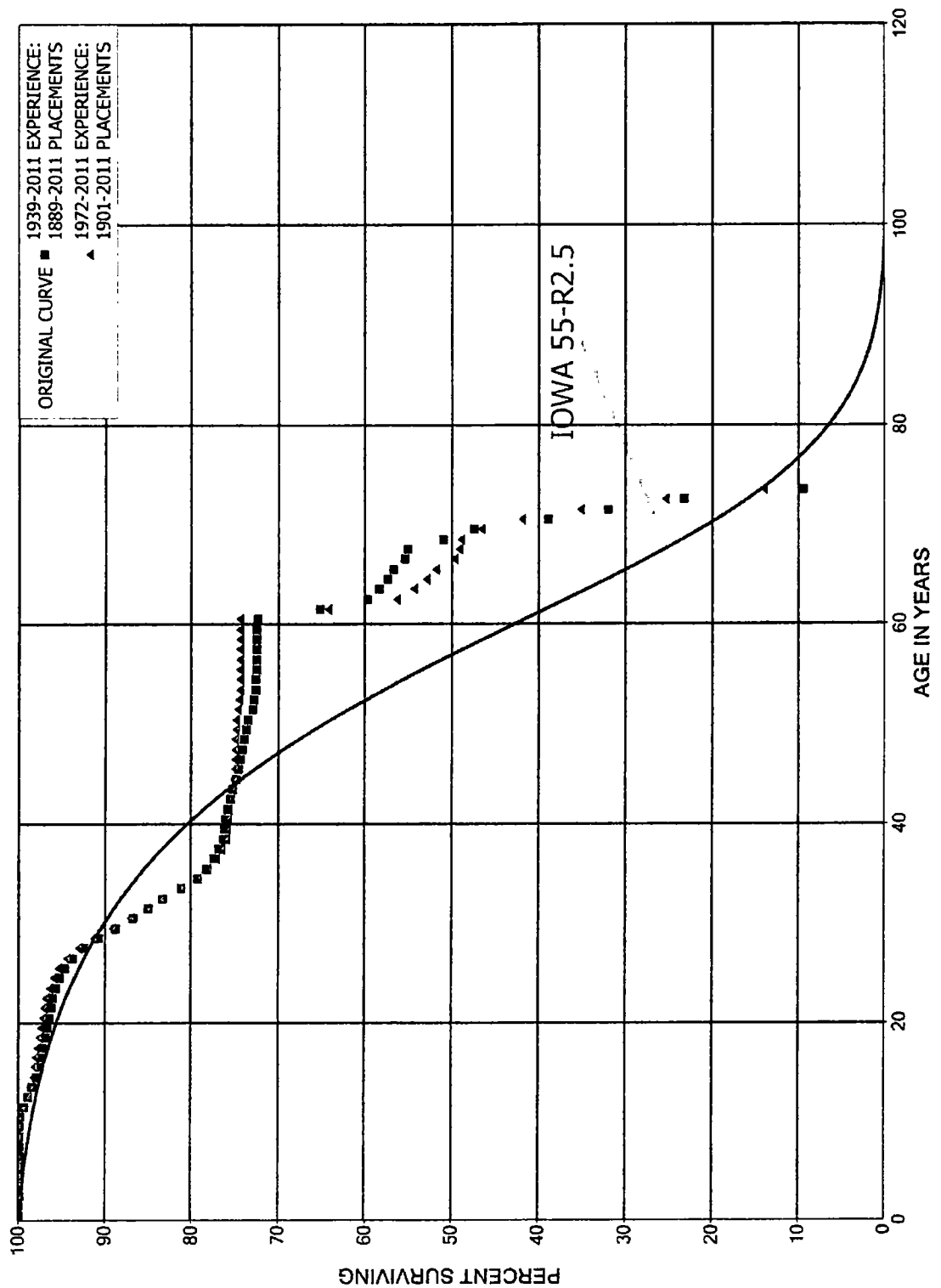
ORIGINAL LIFE TABLE, CONT.

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

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



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



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 382 METER INSTALLATIONS

ORIGINAL LIFE TABLE

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 382 METER INSTALLATIONS

ORIGINAL LIFE TABLE, CONT.

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 382 METER INSTALLATIONS

ORIGINAL LIFE TABLE

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

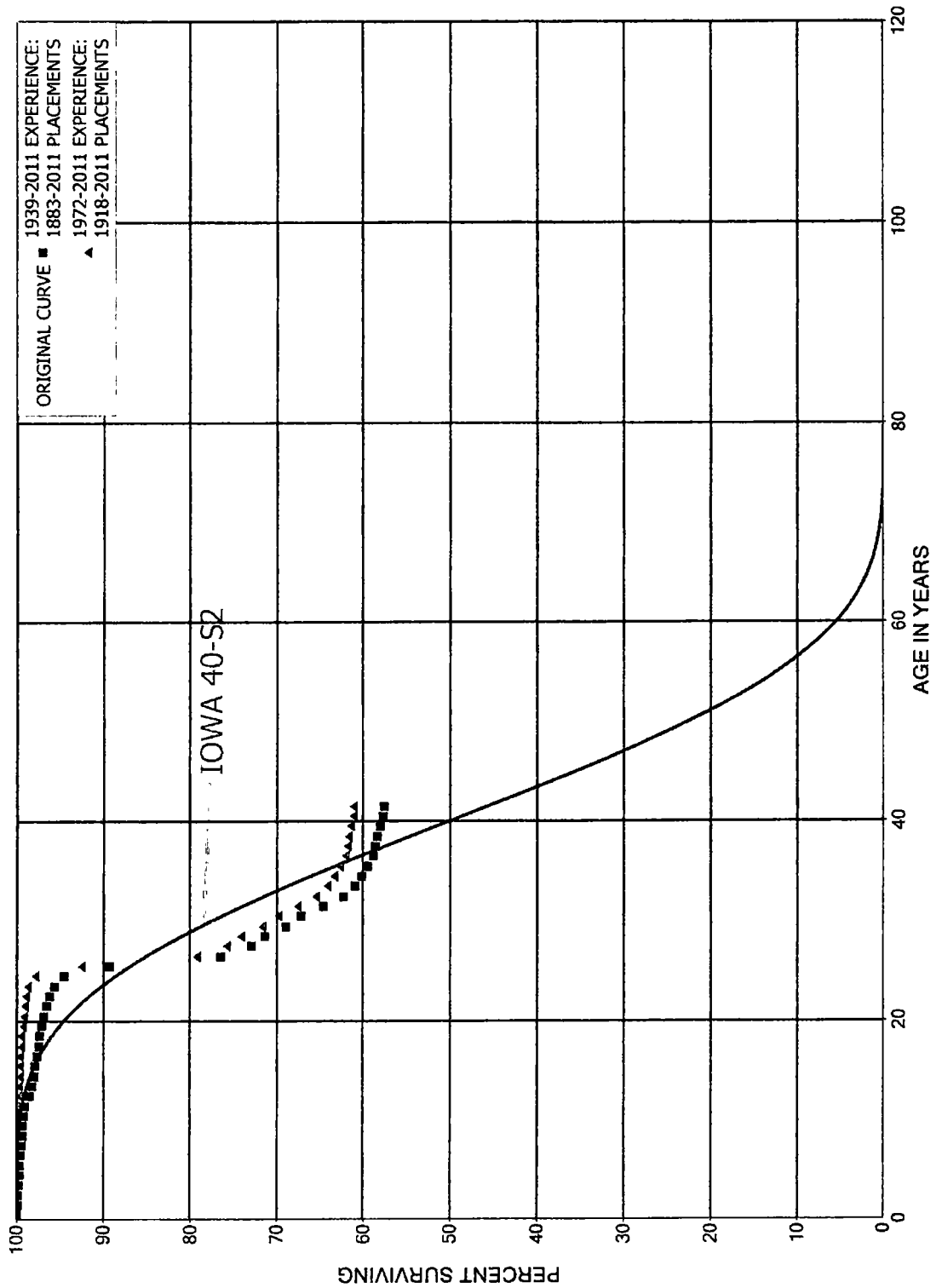
ACCOUNT 382 METER INSTALLATIONS

ORIGINAL LIFE TABLE, CONT.

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



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



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 383 HOUSE REGULATORS

ORIGINAL LIFE TABLE

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 383 HOUSE REGULATORS

ORIGINAL LIFE TABLE, CONT.

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 383 HOUSE REGULATORS

ORIGINAL LIFE TABLE, CONT.

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 383 HOUSE REGULATORS

ORIGINAL LIFE TABLE

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 383 HOUSE REGULATORS

ORIGINAL LIFE TABLE, CONT.

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

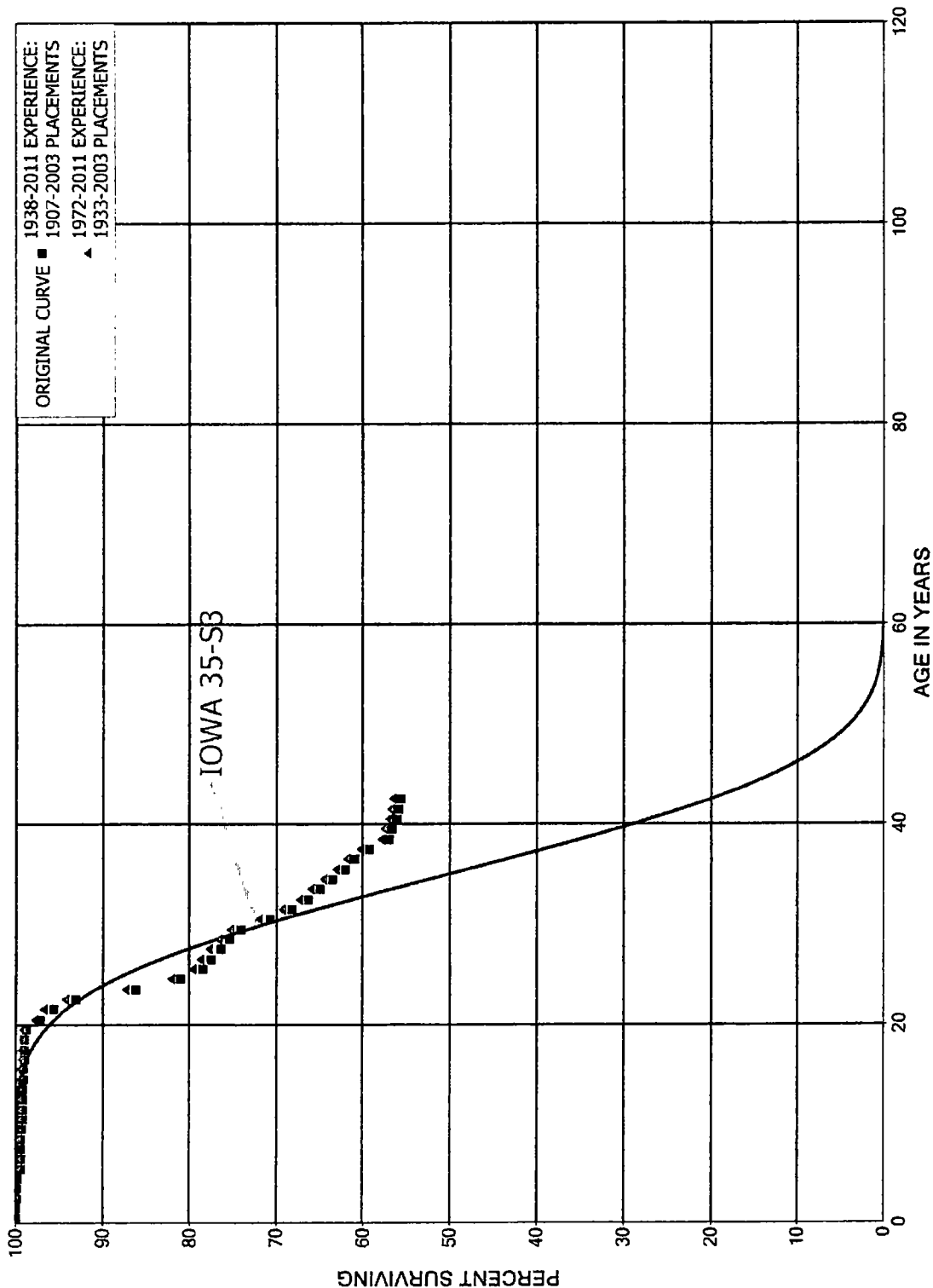
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 383 HOUSE REGULATORS

ORIGINAL LIFE TABLE, CONT.

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

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





COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 384 HOUSE REGULATOR INSTALLATIONS

ORIGINAL LIFE TABLE

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

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

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 384 HOUSE REGULATOR INSTALLATIONS

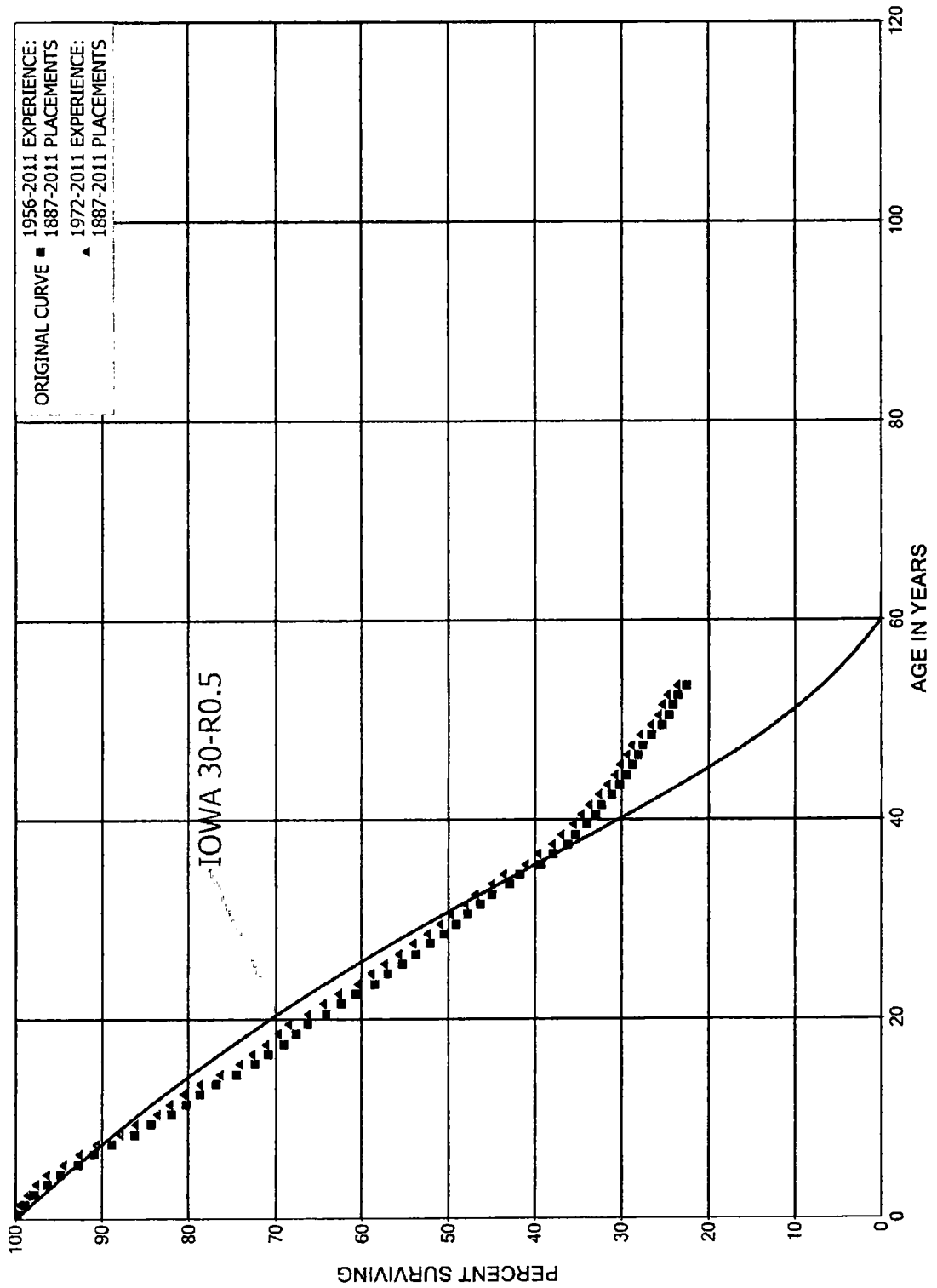
ORIGINAL LIFE TABLE

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

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

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

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



COLUMBIA GAS OF PENNSYLVANIA, INC.

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

ORIGINAL LIFE TABLE

PLACEMENT BAND 1887-2011

EXPERIENCE BAND 1956-2011

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

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

ORIGINAL LIFE TABLE, CONT.

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

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

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1887-2011

EXPERIENCE BAND 1956-2011

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



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 385 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT - OTHER  
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ORIGINAL LIFE TABLE, CONT.

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

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THAN METERS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1887-2011

EXPERIENCE BAND 1972-2011

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

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

ORIGINAL LIFE TABLE, CONT.

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

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

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1887-2011

EXPERIENCE BAND 1972-2011

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

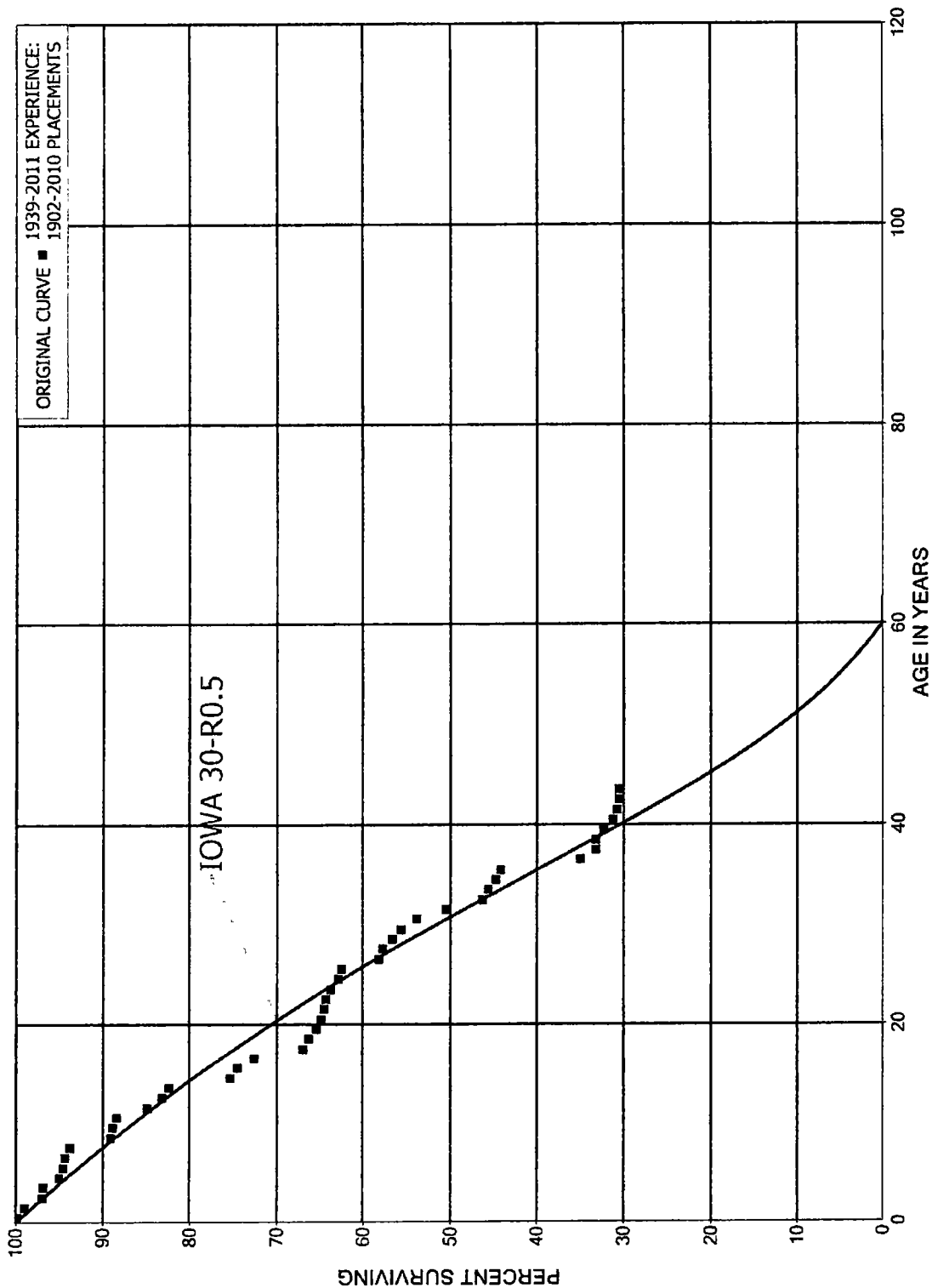
COLUMBIA GAS OF PENNSYLVANIA, INC.

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

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1887-2011       |                                              |                                       | EXPERIENCE BAND 1972-2011 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<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                          | 24                                           |                                       | 0.0000                    | 1.0000        | 2.87                             |
| 120.5                          | 24                                           |                                       | 0.0000                    | 1.0000        | 2.87                             |
| 121.5                          |                                              |                                       |                           |               | 2.87                             |

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



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 387 OTHER EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

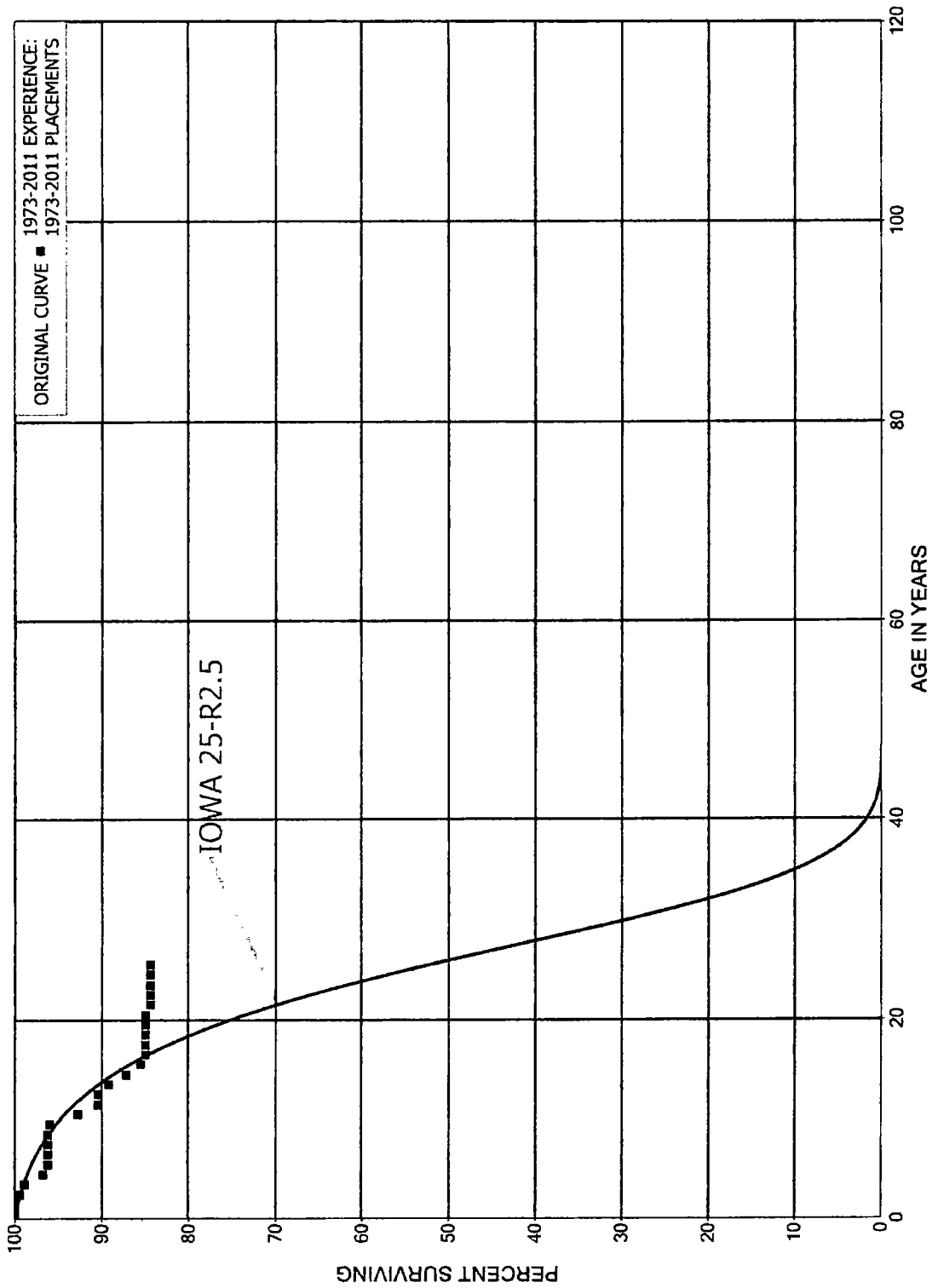
ACCOUNT 387 OTHER EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE, CONT.

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



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



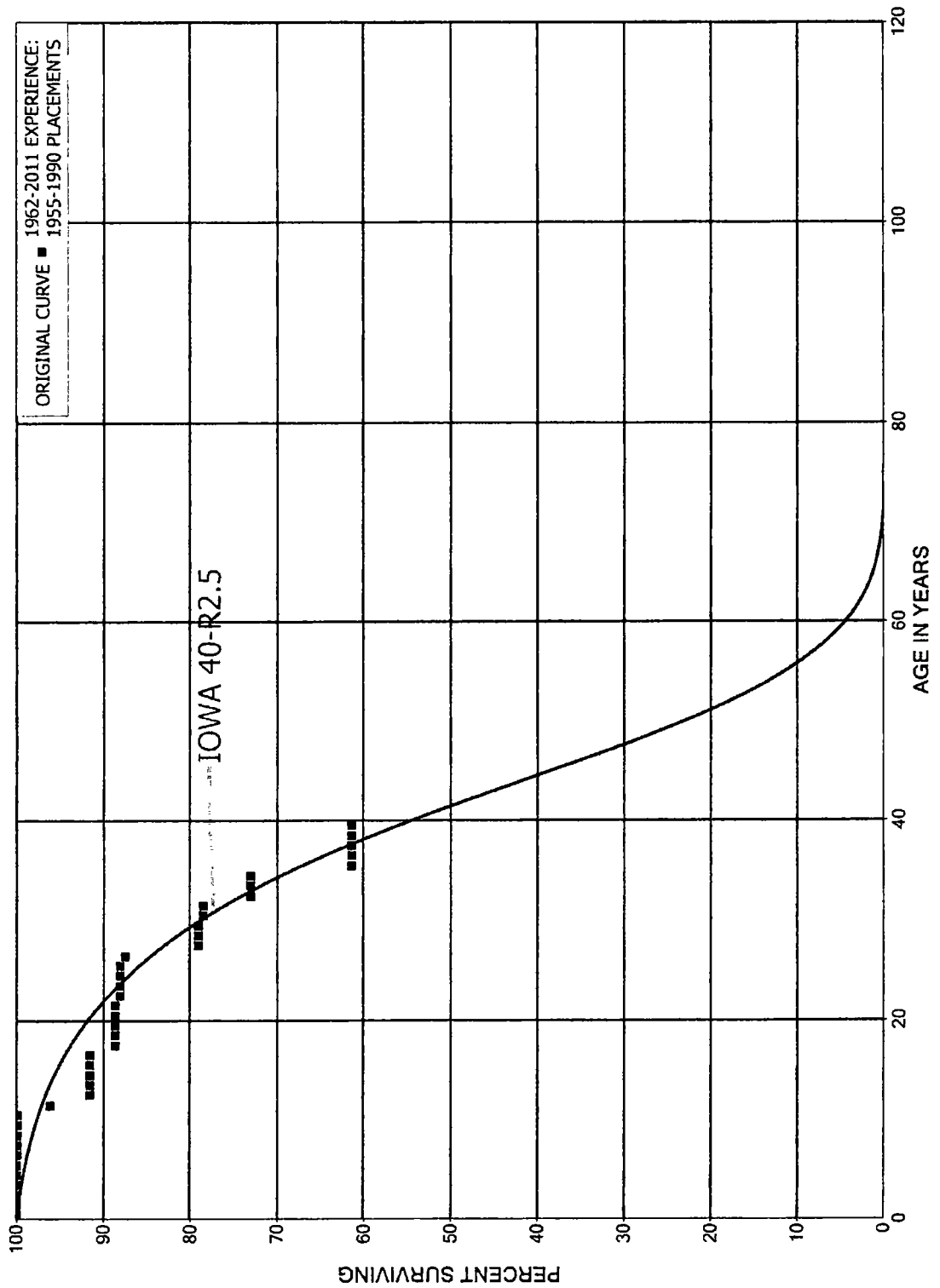
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 387.4 OTHER EQUIPMENT - CUSTOMER INFORMATION SERVICES

ORIGINAL LIFE TABLE

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

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



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 390 STRUCTURES AND IMPROVEMENTS - COMMUNICATIONS

ORIGINAL LIFE TABLE

| PLACEMENT BAND 1955-1990       |                                              |                                       | EXPERIENCE BAND 1962-2011 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<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                           | 59,981                                       | 368                                   | 0.0061                    | 0.9939        | 88.60                            |
| 22.5                           | 59,614                                       |                                       | 0.0000                    | 1.0000        | 88.06                            |
| 23.5                           | 50,185                                       |                                       | 0.0000                    | 1.0000        | 88.06                            |
| 24.5                           | 43,398                                       |                                       | 0.0000                    | 1.0000        | 88.06                            |
| 25.5                           | 43,398                                       | 257                                   | 0.0059                    | 0.9941        | 88.06                            |
| 26.5                           | 43,142                                       | 4,164                                 | 0.0965                    | 0.9035        | 87.54                            |
| 27.5                           | 35,527                                       |                                       | 0.0000                    | 1.0000        | 79.09                            |
| 28.5                           | 27,655                                       |                                       | 0.0000                    | 1.0000        | 79.09                            |
| 29.5                           | 27,655                                       | 189                                   | 0.0068                    | 0.9932        | 79.09                            |
| 30.5                           | 27,466                                       |                                       | 0.0000                    | 1.0000        | 78.55                            |
| 31.5                           | 27,466                                       | 1,918                                 | 0.0698                    | 0.9302        | 78.55                            |
| 32.5                           | 25,548                                       |                                       | 0.0000                    | 1.0000        | 73.06                            |
| 33.5                           | 25,548                                       |                                       | 0.0000                    | 1.0000        | 73.06                            |
| 34.5                           | 25,548                                       | 4,084                                 | 0.1599                    | 0.8401        | 73.06                            |
| 35.5                           | 21,464                                       |                                       | 0.0000                    | 1.0000        | 61.38                            |
| 36.5                           | 21,464                                       |                                       | 0.0000                    | 1.0000        | 61.38                            |
| 37.5                           | 21,464                                       |                                       | 0.0000                    | 1.0000        | 61.38                            |
| 38.5                           | 21,464                                       |                                       | 0.0000                    | 1.0000        | 61.38                            |

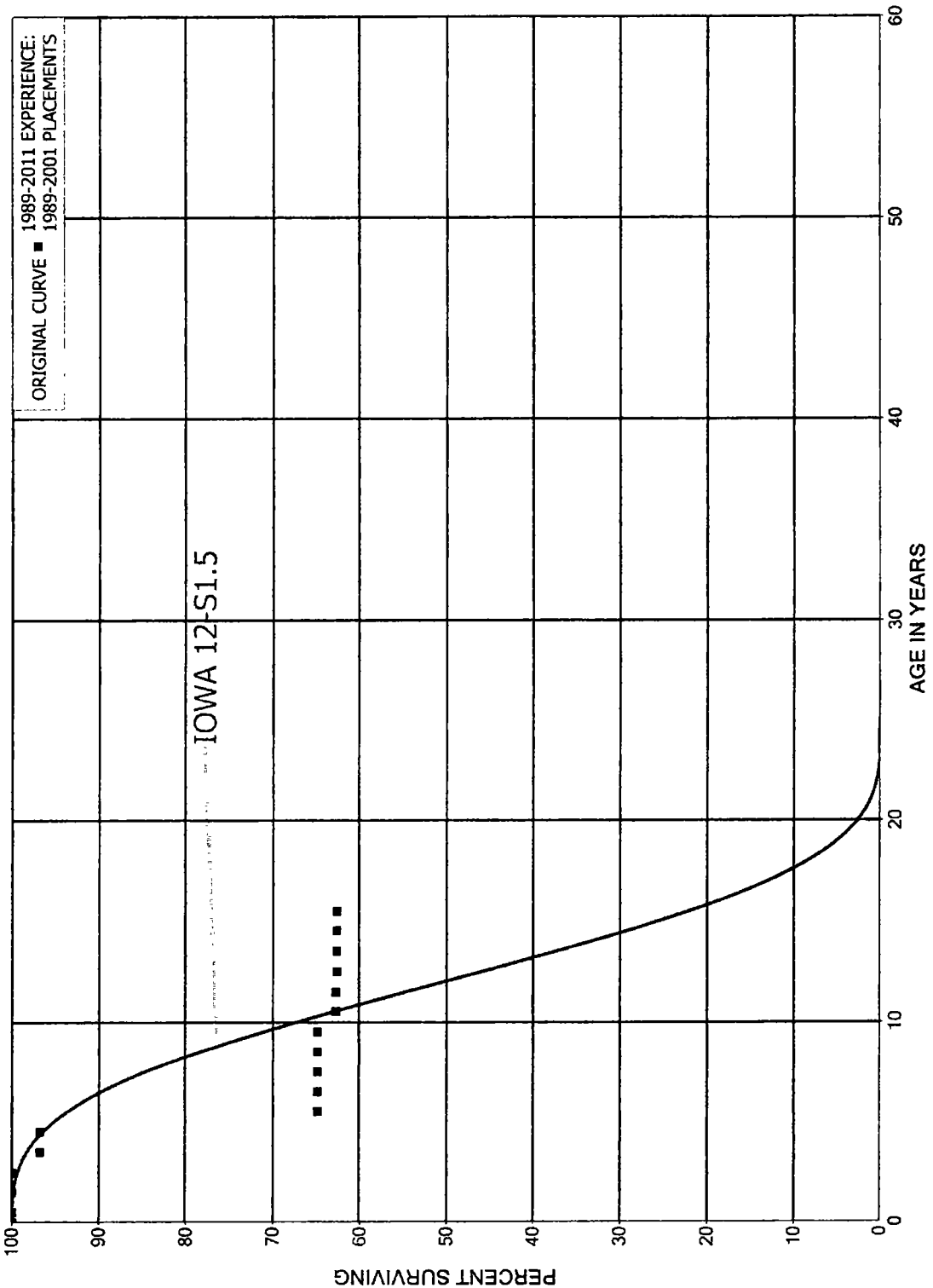
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 390 STRUCTURES AND IMPROVEMENTS - COMMUNICATIONS

ORIGINAL LIFE TABLE, CONT.

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

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



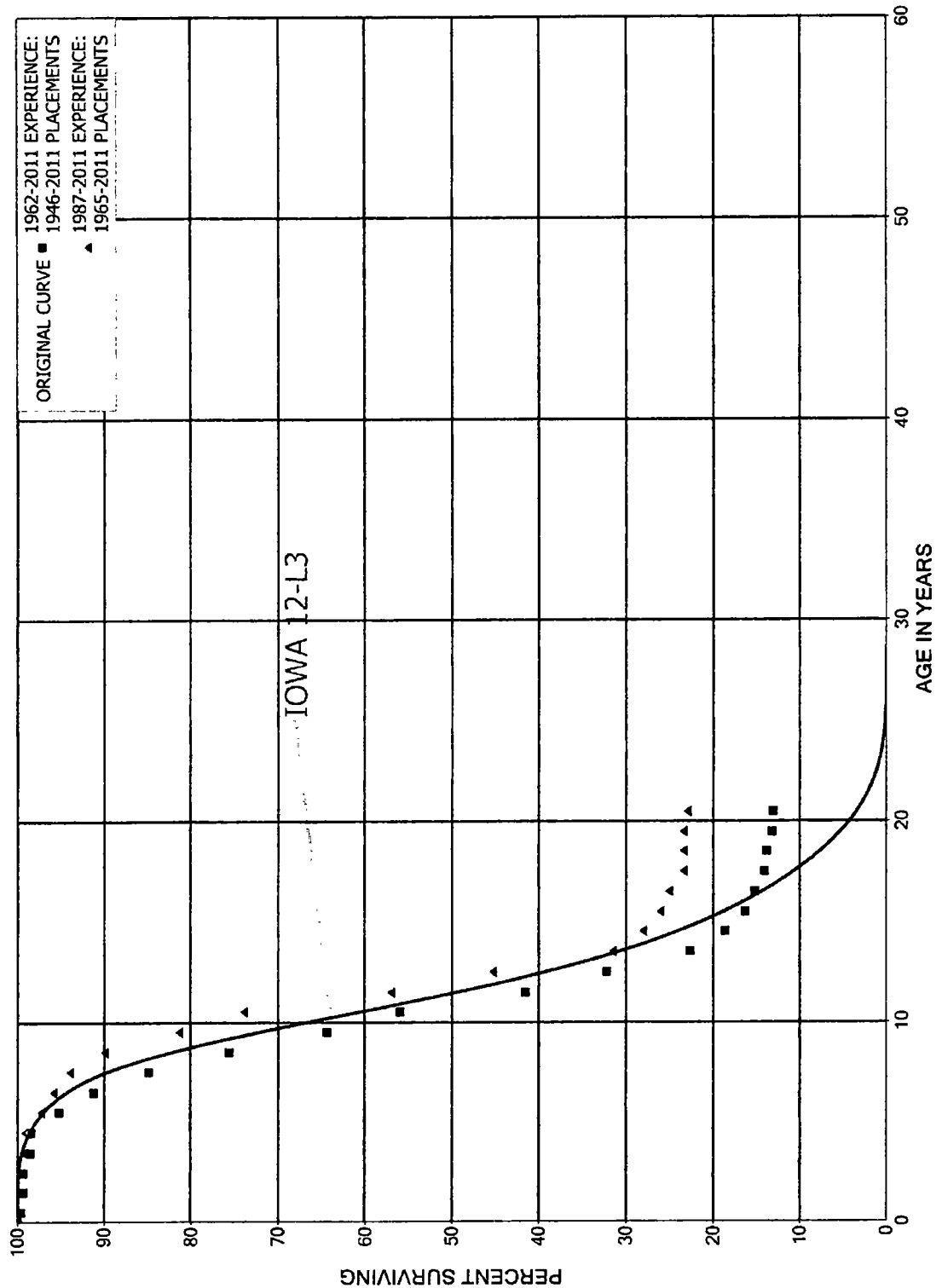
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 394.12 TOOLS, SHOP AND GARAGE EQUIPMENT - CNG FACILITIES

ORIGINAL LIFE TABLE

| PLACEMENT BAND 1989-2001       |                                              |                                       | EXPERIENCE BAND 1989-2011 |               |                                  |
|--------------------------------|----------------------------------------------|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<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                           | 1,878,220                                    |                                       | 0.0000                    | 1.0000        | 62.75                            |
| 11.5                           | 1,878,220                                    | 4,406                                 | 0.0023                    | 0.9977        | 62.75                            |
| 12.5                           | 1,855,364                                    | 1,064                                 | 0.0006                    | 0.9994        | 62.61                            |
| 13.5                           | 1,755,899                                    |                                       | 0.0000                    | 1.0000        | 62.57                            |
| 14.5                           | 1,755,899                                    |                                       | 0.0000                    | 1.0000        | 62.57                            |
| 15.5                           | 1,475,807                                    |                                       | 0.0000                    | 1.0000        | 62.57                            |
| 16.5                           | 340,339                                      |                                       | 0.0000                    | 1.0000        | 62.57                            |
| 17.5                           | 222,411                                      |                                       | 0.0000                    | 1.0000        | 62.57                            |
| 18.5                           | 126,466                                      |                                       | 0.0000                    | 1.0000        | 62.57                            |
| 19.5                           | 126,466                                      |                                       | 0.0000                    | 1.0000        | 62.57                            |
| 20.5                           | 101,772                                      |                                       | 0.0000                    | 1.0000        | 62.57                            |
| 21.5                           | 99,674                                       |                                       | 0.0000                    | 1.0000        | 62.57                            |
| 22.5                           |                                              |                                       |                           |               | 62.57                            |

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





COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 396 POWER OPERATED EQUIPMENT

ORIGINAL LIFE TABLE

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 396 POWER OPERATED EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 396 POWER OPERATED EQUIPMENT

ORIGINAL LIFE TABLE

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

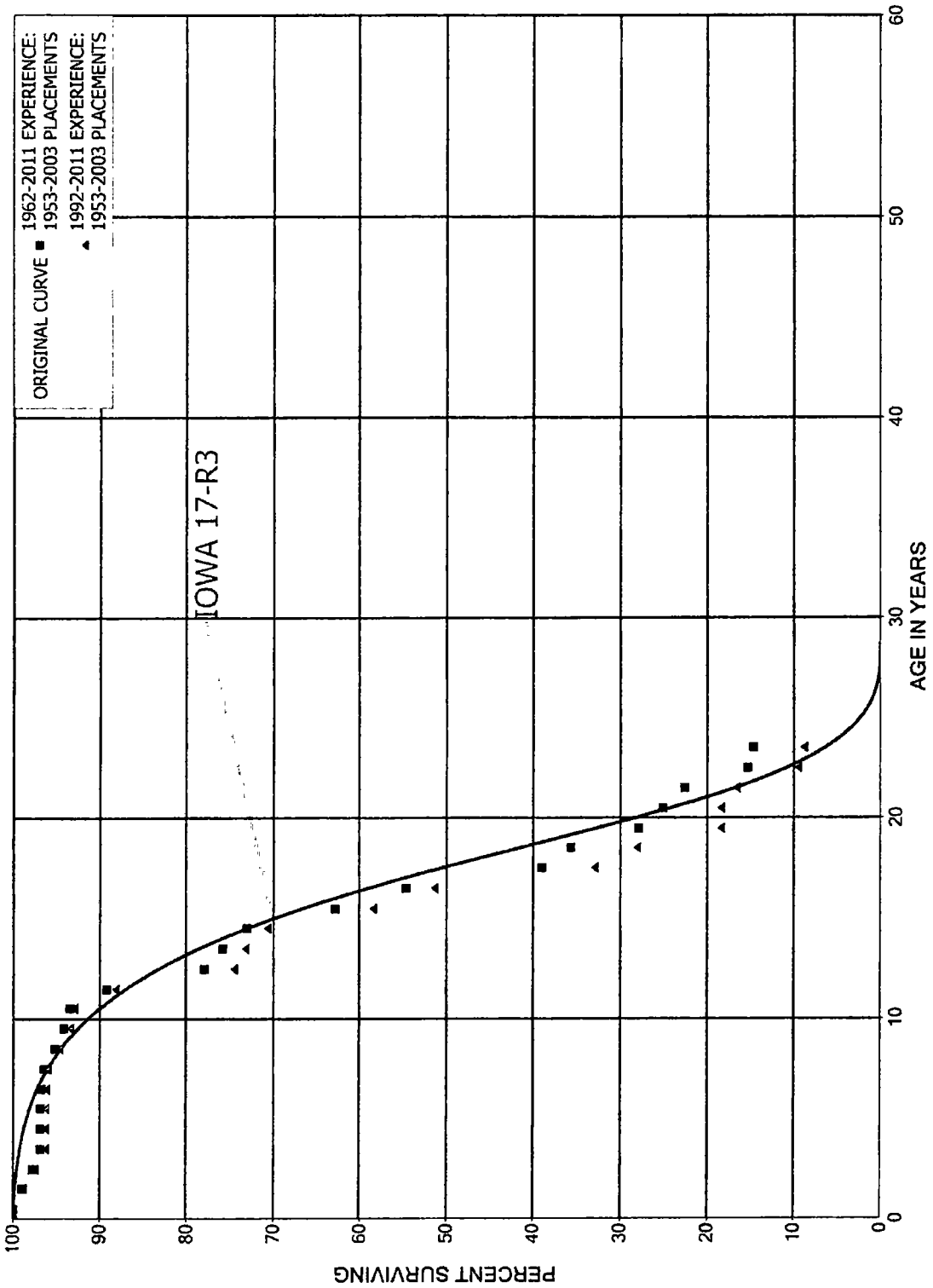
COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 396 POWER OPERATED EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

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

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



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 397.5 COMMUNICATION EQUIPMENT - TELEMETERING

ORIGINAL LIFE TABLE

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 397.5 COMMUNICATION EQUIPMENT - TELEMETERING

ORIGINAL LIFE TABLE, CONT.

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 397.5 COMMUNICATION EQUIPMENT - TELEMETERING

ORIGINAL LIFE TABLE

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



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 397.5 COMMUNICATION EQUIPMENT - TELEMETERING

ORIGINAL LIFE TABLE, CONT.

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

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## **PART VII. DETAILED DEPRECIATION CALCULATIONS**

CUMULATIVE DEPRECIATED ORIGINAL COST

COLUMBIA GAS OF PENNSYLVANIA, INC.

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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)    |     |                             |                                 |
| 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                   | 4,673                          |        | 17  | 17                          | 0.0                             |
| 1888                | 6,580                   | 6,548                          |        | 32  | 49                          | 0.0                             |
| 1889                | 6,551                   | 6,511                          |        | 40  | 89                          | 0.0                             |
| 1890                | 1,703                   | 1,689                          |        | 14  | 103                         | 0.0                             |
| 1891                | 8,350                   | 8,273                          |        | 77  | 180                         | 0.0                             |
| 1892                | 1,355                   | 1,341                          |        | 14  | 194                         | 0.0                             |
| 1893                | 675                     | 668                            |        | 7   | 201                         | 0.0                             |
| 1894                | 1,617                   | 1,596                          |        | 21  | 222                         | 0.0                             |
| 1895                | 1,133                   | 1,118                          |        | 15  | 237                         | 0.0                             |
| 1896                | 4,261                   | 4,193                          |        | 68  | 305                         | 0.0                             |
| 1897                | 2,268                   | 2,229                          |        | 39  | 344                         | 0.0                             |
| 1898                | 1,634                   | 1,604                          |        | 30  | 374                         | 0.0                             |
| 1899                | 934                     | 915                            |        | 19  | 393                         | 0.0                             |
| 1900                | 8,185                   | 8,011                          |        | 174 | 567                         | 0.0                             |
| 1901                | 29,337                  | 26,069                         | 3,268  |     | 3,835                       | 0.0                             |
| 1902                | 7,497                   | 7,290                          | 207    |     | 4,042                       | 0.0                             |
| 1903                | 15,760                  | 15,294                         | 466    |     | 4,508                       | 0.0                             |
| 1904                | 9,089                   | 8,723                          | 366    |     | 4,874                       | 0.0                             |
| 1905                | 13,584                  | 13,124                         | 460    |     | 5,334                       | 0.0                             |
| 1906                | 5,827                   | 5,648                          | 179    |     | 5,513                       | 0.0                             |
| 1907                | 4,319                   | 4,179                          | 140    |     | 5,653                       | 0.0                             |
| 1908                | 5,095                   | 4,920                          | 175    |     | 5,828                       | 0.0                             |
| 1909                | 5,578                   | 5,378                          | 200    |     | 6,028                       | 0.0                             |
| 1910                | 945                     | 909                            | 36     |     | 6,064                       | 0.0                             |
| 1911                | 2,461                   | 2,247                          | 214    |     | 6,278                       | 0.0                             |
| 1912                | 1,643                   | 1,566                          | 77     |     | 6,355                       | 0.0                             |
| 1913                | 8,651                   | 7,504                          | 1,147  |     | 7,502                       | 0.0                             |
| 1914                | 7,367                   | 6,957                          | 410    |     | 7,912                       | 0.0                             |
| 1915                | 11,241                  | 10,711                         | 530    |     | 8,442                       | 0.0                             |
| 1916                | 3,453                   | 3,341                          | 112    |     | 8,554                       | 0.0                             |
| 1917                | 4,903                   | 4,551                          | 352    |     | 8,906                       | 0.0                             |
| 1918                | 2,547                   | 2,487                          | 60     |     | 8,966                       | 0.0                             |
| 1919                | 2,392                   | 2,331                          | 61     |     | 9,027                       | 0.0                             |
| 1920                | 4,369                   | 3,892                          | 477    |     | 9,504                       | 0.0                             |
| 1921                | 25,790                  | 20,658                         | 5,132  |     | 14,636                      | 0.0                             |
| 1922                | 10,219                  | 9,625                          | 594    |     | 15,230                      | 0.0                             |
| 1923                | 33,592                  | 28,034                         | 5,558  |     | 20,788                      | 0.0                             |
| 1924                | 71,786                  | 56,866                         | 14,920 |     | 35,708                      | 0.0                             |
| 1925                | 56,429                  | 46,779                         | 9,650  |     | 45,358                      | 0.0                             |
| 1926                | 65,701                  | 53,144                         | 12,557 |     | 57,915                      | 0.0                             |
| 1927                | 34,332                  | 29,038                         | 5,294  |     | 63,209                      | 0.0                             |

COLUMBIA GAS OF PENNSYLVANIA, INC.

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| YEAR<br>INST<br>(1) | ORIGINAL<br>COST<br>(2) | ACCRUED<br>DEPRECIATION<br>(3) | DEPRECIATED ORIGINAL COST<br>AMOUNT |            | PCT OF<br>COL 4<br>TOTAL<br>(6) |
|---------------------|-------------------------|--------------------------------|-------------------------------------|------------|---------------------------------|
|                     |                         |                                | (2)                                 | (3)        |                                 |
|                     |                         |                                | (4)                                 | (5)        |                                 |
| 1928                | 51,654                  | 42,573                         | 9,081                               | 72,290     | 0.0                             |
| 1929                | 127,097                 | 101,103                        | 25,994                              | 98,284     | 0.0                             |
| 1930                | 98,047                  | 76,486                         | 21,561                              | 119,845    | 0.0                             |
| 1931                | 105,973                 | 82,114                         | 23,859                              | 143,704    | 0.0                             |
| 1932                | 46,529                  | 35,978                         | 10,551                              | 154,255    | 0.0                             |
| 1933                | 31,184                  | 24,568                         | 6,616                               | 160,871    | 0.0                             |
| 1934                | 39,519                  | 31,301                         | 8,218                               | 169,089    | 0.0                             |
| 1935                | 42,901                  | 33,069                         | 9,832                               | 178,921    | 0.0                             |
| 1936                | 54,596                  | 42,636                         | 11,960                              | 190,881    | 0.0                             |
| 1937                | 81,242                  | 64,366                         | 16,876                              | 207,757    | 0.0                             |
| 1938                | 78,153                  | 63,158                         | 14,995                              | 222,752    | 0.0                             |
| 1939                | 234,896                 | 181,101                        | 53,795                              | 276,547    | 0.0                             |
| 1940                | 155,920                 | 122,503                        | 33,417                              | 309,964    | 0.0                             |
| 1941                | 204,306                 | 158,888                        | 45,418                              | 355,382    | 0.0                             |
| 1942                | 136,577                 | 108,036                        | 28,541                              | 383,923    | 0.0                             |
| 1943                | 71,453                  | 56,614                         | 14,839                              | 398,762    | 0.0                             |
| 1944                | 36,132                  | 29,381                         | 6,751                               | 405,513    | 0.0                             |
| 1945                | 31,622                  | 25,508                         | 6,114                               | 411,627    | 0.0                             |
| 1946                | 144,990                 | 112,838                        | 32,152                              | 443,779    | 0.0                             |
| 1947                | 141,616                 | 112,409                        | 29,207                              | 472,986    | 0.0                             |
| 1948                | 348,966                 | 270,258                        | 78,708                              | 551,694    | 0.0                             |
| 1949                | 897,960                 | 681,655                        | 216,305                             | 767,999    | 0.1                             |
| 1950                | 1,379,130               | 1,043,238                      | 335,892                             | 1,103,891  | 0.1                             |
| 1951                | 1,131,205               | 860,693                        | 270,512                             | 1,374,403  | 0.1                             |
| 1952                | 2,250,319               | 1,667,365                      | 582,954                             | 1,957,357  | 0.1                             |
| 1953                | 1,591,364               | 1,188,923                      | 402,441                             | 2,359,798  | 0.2                             |
| 1954                | 1,967,420               | 1,471,062                      | 496,358                             | 2,856,156  | 0.2                             |
| 1955                | 4,541,124               | 3,316,202                      | 1,224,922                           | 4,081,078  | 0.3                             |
| 1956                | 3,027,325               | 2,186,988                      | 840,337                             | 4,921,415  | 0.4                             |
| 1957                | 3,809,608               | 2,769,864                      | 1,039,744                           | 5,961,159  | 0.4                             |
| 1958                | 4,612,153               | 3,335,917                      | 1,276,236                           | 7,237,395  | 0.5                             |
| 1959                | 4,022,713               | 2,873,660                      | 1,149,053                           | 8,386,448  | 0.6                             |
| 1960                | 4,202,517               | 2,990,068                      | 1,212,449                           | 9,598,897  | 0.7                             |
| 1961                | 4,476,034               | 3,185,870                      | 1,290,164                           | 10,889,061 | 0.8                             |
| 1962                | 4,099,415               | 2,871,092                      | 1,228,323                           | 12,117,384 | 0.9                             |
| 1963                | 5,032,979               | 3,518,813                      | 1,514,166                           | 13,631,550 | 1.0                             |
| 1964                | 5,081,022               | 3,523,785                      | 1,557,237                           | 15,188,787 | 1.1                             |
| 1965                | 4,311,231               | 2,991,271                      | 1,319,960                           | 16,508,747 | 1.2                             |
| 1966                | 6,016,084               | 4,141,713                      | 1,874,371                           | 18,383,118 | 1.3                             |
| 1967                | 5,719,251               | 3,922,388                      | 1,796,863                           | 20,179,981 | 1.5                             |
| 1968                | 4,968,540               | 3,292,790                      | 1,675,750                           | 21,855,731 | 1.6                             |
| 1969                | 4,479,656               | 2,854,732                      | 1,624,924                           | 23,480,655 | 1.7                             |
| 1970                | 4,202,750               | 3,003,750                      | 1,199,000                           | 24,679,655 | 1.8                             |
| 1971                | 6,276,579               | 4,039,832                      | 2,236,747                           | 26,916,402 | 2.0                             |
| 1972                | 3,799,475               | 2,246,016                      | 1,553,459                           | 28,469,861 | 2.1                             |

COLUMBIA GAS OF PENNSYLVANIA, INC.

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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) |                                 |
| 1973                | 4,404,114               | 2,128,412                      | 2,275,702                  | 30,745,563                  | 2.2                             |
| 1974                | 3,662,831               | 1,520,208                      | 2,142,623                  | 32,888,186                  | 2.4                             |
| 1975                | 3,842,271               | 1,595,737                      | 2,246,534                  | 35,134,720                  | 2.6                             |
| 1976                | 4,242,260               | 2,197,476                      | 2,044,784                  | 37,179,504                  | 2.7                             |
| 1977                | 8,573,861               | 4,432,717                      | 4,141,144                  | 41,320,648                  | 3.0                             |
| 1978                | 7,842,777               | 3,964,872                      | 3,877,905                  | 45,198,553                  | 3.3                             |
| 1979                | 9,624,978               | 4,806,153                      | 4,818,825                  | 50,017,378                  | 3.6                             |
| 1980                | 12,930,987              | 6,525,066                      | 6,405,921                  | 56,423,299                  | 4.1                             |
| 1981                | 15,117,910              | 7,534,453                      | 7,583,457                  | 64,006,756                  | 4.7                             |
| 1982                | 14,009,539              | 6,631,240                      | 7,378,299                  | 71,385,055                  | 5.2                             |
| 1983                | 11,446,351              | 5,357,739                      | 6,088,612                  | 77,473,667                  | 5.6                             |
| 1984                | 13,228,600              | 6,054,374                      | 7,174,226                  | 84,647,893                  | 6.2                             |
| 1985                | 13,321,061              | 6,067,509                      | 7,253,552                  | 91,901,445                  | 6.7                             |
| 1986                | 14,760,262              | 6,614,260                      | 8,146,002                  | 100,047,447                 | 7.3                             |
| 1987                | 15,222,187              | 6,784,194                      | 8,437,993                  | 108,485,440                 | 7.9                             |
| 1988                | 17,679,377              | 7,640,250                      | 10,039,127                 | 118,524,567                 | 8.6                             |
| 1989                | 16,855,212              | 7,248,266                      | 9,606,946                  | 128,131,513                 | 9.3                             |
| 1990                | 15,438,757              | 6,600,135                      | 8,838,622                  | 136,970,135                 | 10.0                            |
| 1991                | 14,991,200              | 6,241,114                      | 8,750,086                  | 145,720,221                 | 10.6                            |
| 1992                | 16,575,840              | 6,652,887                      | 9,922,953                  | 155,643,174                 | 11.3                            |
| 1993                | 17,990,266              | 7,138,757                      | 10,851,509                 | 166,494,683                 | 12.1                            |
| 1994                | 21,163,300              | 8,046,577                      | 13,116,723                 | 179,611,406                 | 13.1                            |
| 1995                | 21,520,714              | 8,356,043                      | 13,164,671                 | 192,776,077                 | 14.1                            |
| 1996                | 22,412,871              | 8,432,154                      | 13,980,717                 | 206,756,794                 | 15.1                            |
| 1997                | 24,806,096              | 8,753,946                      | 16,052,150                 | 222,808,944                 | 16.2                            |
| 1998                | 23,083,878              | 7,794,008                      | 15,289,870                 | 238,098,814                 | 17.4                            |
| 1999                | 22,181,798              | 6,975,389                      | 15,206,409                 | 253,305,223                 | 18.5                            |
| 2000                | 24,048,319              | 8,891,577                      | 15,156,742                 | 268,461,965                 | 19.6                            |
| 2001                | 22,775,686              | 6,540,621                      | 16,235,065                 | 284,697,030                 | 20.8                            |
| 2002                | 18,565,888              | 5,186,849                      | 13,379,039                 | 298,076,069                 | 21.7                            |
| 2003                | 22,935,706              | 6,032,565                      | 16,903,141                 | 314,979,210                 | 23.0                            |
| 2004                | 33,104,701              | 7,500,569                      | 25,604,132                 | 340,583,342                 | 24.8                            |
| 2005                | 37,776,834              | 7,605,771                      | 30,171,063                 | 370,754,405                 | 27.0                            |
| 2006                | 28,167,281              | 5,660,478                      | 22,506,803                 | 393,261,208                 | 28.7                            |
| 2007                | 57,382,792              | 9,453,149                      | 47,929,643                 | 441,190,851                 | 32.2                            |
| 2008                | 82,432,212              | 12,099,969                     | 70,332,243                 | 511,523,094                 | 37.3                            |
| 2009                | 57,442,516              | 7,755,963                      | 49,686,553                 | 561,209,647                 | 40.9                            |
| 2010                | 71,711,675              | 8,364,580                      | 63,347,095                 | 624,556,742                 | 45.5                            |
| 2011                | 130,289,555             | 15,804,048                     | 114,485,507                | 739,042,249                 | 53.9                            |
| 2012                | 141,784,459             | 12,011,881                     | 129,772,578                | 868,814,827                 | 63.3                            |
| 2013                | 168,778,001             | 9,638,566                      | 159,139,435                | 1,027,954,262               | 74.9                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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                    | 180,633,840             | 7,208,538                      | 173,425,302                | 1,201,379,564               | 87.6                            |
| 2015                    | 172,828,900             | 2,183,878                      | 170,645,022                | 1,372,024,586               | 100.0                           |
| SUBTOTAL                | 1,732,254,275           | 360,229,684                    | 1,372,024,586              |                             |                                 |
| AMORTIZABLE<br>PLANT    | 23,940,135              | 7,472,254                      | 16,467,881                 |                             |                                 |
| NONDEPRECIABLE<br>PLANT | 172,413                 | -                              | 172,413                    |                             |                                 |
| TOTAL                   | 1,756,366,823           | 367,701,938                    | 1,388,664,880              |                             |                                 |

## 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, 2015

| 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.. 6-2035                            |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                      |                         |                              |                               |                                |                     |                          |
| 1972                                                         | 1,896.43                | 1,307                        | 1,896                         |                                |                     |                          |
| 1973                                                         | 35.65                   | 24                           | 35                            |                                | 1                   | 19.58                    |
|                                                              | 1,932.08                | 1,331                        | 1,931                         |                                | 1                   |                          |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. |                         |                              |                               |                                |                     | 0.0 0.00                 |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 351 COMPRESSOR STATION STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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.. 6-2035                                 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                           |                         |                              |                               |                                |                     |                          |
| 1970                                                              | 124,246.77              | 87,708                       | 102,356                       | 21,891                         | 16.63               | 1,316                    |
| 1971                                                              | 44,955.88               | 31,485                       | 36,743                        | 8,213                          | 16.78               | 489                      |
| 1972                                                              | 23,833.95               | 16,563                       | 19,329                        | 4,505                          | 16.91               | 266                      |
| 1973                                                              | 1,046.90                | 722                          | 843                           | 204                            | 17.04               | 12                       |
| 1996                                                              | 107,318.16              | 55,011                       | 64,198                        | 43,120                         | 18.46               | 2,336                    |
| 1997                                                              | 932.86                  | 466                          | 544                           | 389                            | 18.48               | 21                       |
| 1998                                                              | 7,804.72                | 3,779                        | 4,410                         | 3,395                          | 18.55               | 183                      |
| 2001                                                              | 87,639.68               | 38,158                       | 44,531                        | 43,109                         | 18.70               | 2,305                    |
| 2003                                                              | 212,167.85              | 84,570                       | 98,694                        | 113,474                        | 18.74               | 6,055                    |
| 2004                                                              | 195,419.81              | 73,849                       | 86,182                        | 109,238                        | 18.79               | 5,814                    |
| 2008                                                              | 673,302.63              | 190,275                      | 222,051                       | 451,252                        | 18.83               | 23,965                   |
| 2009                                                              | 4,140.12                | 1,052                        | 1,228                         | 2,912                          | 18.84               | 155                      |
| 2010                                                              | 4,750.10                | 1,060                        | 1,237                         | 3,513                          | 18.85               | 186                      |
| 2012                                                              | 59,116.96               | 9,092                        | 10,610                        | 48,507                         | 18.80               | 2,580                    |
| 2013                                                              | 744,499.19              | 84,947                       | 99,134                        | 645,365                        | 18.77               | 34,383                   |
| 2014                                                              | 841,978.92              | 59,275                       | 69,174                        | 772,805                        | 18.70               | 41,326                   |
|                                                                   | 3,133,154.50            | 738,012                      | 861,264                       | 2,271,890                      |                     | 121,392                  |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 18.7 |                         |                              |                               |                                |                     | 3.87                     |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 352 WELLS - CONSTRUCTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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.. 6-2035                            |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                      |                         |                              |                               |                                |                     |                          |
| 1970                                                         | 326,259.85              | 227,981                      | 326,260                       |                                |                     |                          |
| 1971                                                         | 246,359.45              | 170,988                      | 246,359                       |                                |                     |                          |
| 1972                                                         | 166,322.06              | 114,631                      | 166,322                       |                                |                     |                          |
| 1978                                                         | 60,192.37               | 39,512                       | 60,177                        | 15                             | 19.58               | 1                        |
|                                                              | 799,133.73              | 553,112                      | 799,118                       | 16                             |                     | 1                        |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. |                         |                              |                               |                                |                     | 16.0 0.00                |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 352 WELLS - EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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 45-S2.5                                 |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 6-2035                                     |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                               |                         |                              |                               |                                |                     |                          |
| 1970                                                                  | 62,707.48               | 49,474                       | 62,707                        |                                |                     |                          |
| 1971                                                                  | 61,403.78               | 48,015                       | 61,404                        |                                |                     |                          |
| 1972                                                                  | 42,286.87               | 32,768                       | 42,287                        |                                |                     |                          |
| 1978                                                                  | 2,281.54                | 1,759                        | 2,282                         |                                |                     |                          |
|                                                                       | 168,679.67              | 132,016                      | 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, 2015

| 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.. 6-2035                                |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                          |                         |                              |                               |                                |                     |                          |
| 1970                                                             | 206,940.78              | 144,604                      | 206,932                       | 9                              | 19.58               |                          |
|                                                                  | 206,940.78              | 144,604                      | 206,932                       | 9                              |                     |                          |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 0.0 |                         |                              |                               |                                |                     | 0.00                     |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 353 LINES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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.. 6-2035                                     |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                               |                         |                              |                               |                                |                     |                          |
| 1971                                                                  | 260,327.01              | 188,443                      | 260,327                       |                                |                     |                          |
| 1972                                                                  | 62,624.57               | 44,982                       | 62,625                        |                                |                     |                          |
| 1973                                                                  | 54,831.76               | 39,083                       | 54,832                        |                                |                     |                          |
| 1984                                                                  | 13,885.22               | 9,423                        | 13,885                        |                                |                     |                          |
| 1989                                                                  | 13,619.22               | 8,562                        | 13,619                        |                                |                     |                          |
|                                                                       | 405,287.78              | 290,493                      | 405,288                       |                                |                     |                          |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 0.0 0.00 |                         |                              |                               |                                |                     |                          |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 354 COMPRESSOR STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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-R2.5 |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 6-2035     |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0               |                         |                              |                               |                                |                     |                          |
| 1950                                  | 4,470.32                | 3,875                        | 4,470                         |                                |                     |                          |
| 1952                                  | 20,420.15               | 17,507                       | 20,420                        |                                |                     |                          |
| 1957                                  | 322.25                  | 268                          | 322                           |                                |                     |                          |
| 1967                                  | 1,101.11                | 846                          | 1,073                         | 28                             | 11.40               | 2                        |
| 1969                                  | 2,049.90                | 1,545                        | 1,959                         | 91                             | 12.06               | 8                        |
| 1970                                  | 466,754.38              | 348,343                      | 441,705                       | 25,049                         | 12.38               | 2,023                    |
| 1971                                  | 20,265.11               | 14,966                       | 18,977                        | 1,288                          | 12.71               | 101                      |
| 1972                                  | 3,947.56                | 2,885                        | 3,658                         | 290                            | 13.03               | 22                       |
| 1979                                  | 1,814.60                | 1,302                        | 1,651                         | 164                            | 14.35               | 11                       |
| 1987                                  | 19,410.12               | 12,411                       | 15,737                        | 3,673                          | 16.03               | 229                      |
| 1991                                  | 11,030.99               | 6,545                        | 8,299                         | 2,732                          | 16.74               | 163                      |
| 1993                                  | 1,494.62                | 848                          | 1,075                         | 420                            | 17.11               | 25                       |
| 2013                                  | 280,270.55              | 32,511                       | 41,225                        | 239,046                        | 18.42               | 12,978                   |
| 2014                                  | 24,600.00               | 1,766                        | 2,239                         | 22,361                         | 18.31               | 1,221                    |
| 2015                                  | 239,900.00              | 5,446                        | 6,906                         | 232,994                        | 17.93               | 12,995                   |
|                                       | 1,097,851.66            | 451,064                      | 569,716                       | 528,136                        |                     | 29,778                   |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 17.7 2.71

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 355 MEASURING AND REGULATING EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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.. 6-2035                                     |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                               |                         |                              |                               |                                |                     |                          |
| 1970                                                                  | 74,761.84               | 58,049                       | 74,762                        |                                |                     |                          |
| 1975                                                                  | 2,685.09                | 1,964                        | 2,685                         |                                |                     |                          |
| 1981                                                                  | 13,738.52               | 10,450                       | 13,739                        |                                |                     |                          |
| 1986                                                                  | 29,489.73               | 20,734                       | 29,490                        |                                |                     |                          |
| 1987                                                                  | 2,334.83                | 1,619                        | 2,334                         |                                |                     |                          |
|                                                                       | 123,010.01              | 92,816                       | 123,010                       |                                |                     |                          |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 0.0 0.00 |                         |                              |                               |                                |                     |                          |



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 374.4 LAND AND LAND RIGHTS - LAND RIGHTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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 65-R3 |                  |                       |                        |                         |              |                   |
| NET SALVAGE PERCENT.. 0     |                  |                       |                        |                         |              |                   |
| 1920                        | 80.52            | 76                    | 73                     | 8                       | 3.51         | 2                 |
| 1953                        | 1.87             | 1                     | 1                      | 1                       | 14.38        |                   |
| 1957                        | 3,093.04         | 2,307                 | 2,213                  | 880                     | 16.52        | 53                |
| 1961                        | 799.67           | 567                   | 544                    | 256                     | 18.89        | 14                |
| 1962                        | 312.88           | 219                   | 210                    | 103                     | 19.52        | 5                 |
| 1963                        | 5,543.49         | 3,825                 | 3,669                  | 1,874                   | 20.15        | 93                |
| 1964                        | 3,594.90         | 2,445                 | 2,345                  | 1,250                   | 20.80        | 60                |
| 1965                        | 1,116.13         | 748                   | 718                    | 398                     | 21.46        | 19                |
| 1966                        | 2,315.75         | 1,527                 | 1,465                  | 851                     | 22.13        | 38                |
| 1967                        | 11,196.02        | 7,265                 | 6,969                  | 4,227                   | 22.82        | 185               |
| 1968                        | 1,951.89         | 1,246                 | 1,195                  | 757                     | 23.51        | 32                |
| 1969                        | 12,068.25        | 7,571                 | 7,263                  | 4,805                   | 24.22        | 198               |
| 1970                        | 8,400.45         | 5,179                 | 4,968                  | 3,432                   | 24.93        | 138               |
| 1971                        | 20,624.34        | 12,486                | 11,977                 | 8,647                   | 25.65        | 337               |
| 1972                        | 11,465.21        | 6,810                 | 6,533                  | 4,932                   | 26.39        | 187               |
| 1973                        | 5,400.51         | 3,146                 | 3,018                  | 2,383                   | 27.13        | 88                |
| 1974                        | 16,451.72        | 9,395                 | 9,012                  | 7,440                   | 27.88        | 267               |
| 1975                        | 24,941.90        | 13,952                | 13,384                 | 11,558                  | 28.64        | 404               |
| 1976                        | 25,575.57        | 15,322                | 14,698                 | 10,878                  | 26.38        | 412               |
| 1977                        | 53,895.97        | 31,680                | 30,390                 | 23,506                  | 26.94        | 873               |
| 1978                        | 20,968.74        | 12,082                | 11,590                 | 9,379                   | 27.52        | 341               |
| 1979                        | 36,203.17        | 20,303                | 19,476                 | 16,727                  | 28.52        | 587               |
| 1980                        | 22,790.33        | 12,512                | 12,002                 | 10,788                  | 29.10        | 371               |
| 1981                        | 39,646.18        | 21,286                | 20,419                 | 19,227                  | 29.69        | 648               |
| 1982                        | 62,451.65        | 32,762                | 31,427                 | 31,025                  | 30.28        | 1,025             |
| 1983                        | 39,930.33        | 20,321                | 19,493                 | 20,437                  | 31.28        | 653               |
| 1984                        | 44,483.97        | 22,082                | 21,183                 | 23,301                  | 31.87        | 731               |
| 1985                        | 68,875.25        | 33,308                | 31,951                 | 36,924                  | 32.48        | 1,137             |
| 1986                        | 41,797.51        | 19,674                | 18,873                 | 22,925                  | 33.08        | 693               |
| 1987                        | 63,541.46        | 28,892                | 27,715                 | 35,826                  | 34.08        | 1,051             |
| 1988                        | 98,355.87        | 43,414                | 41,646                 | 56,710                  | 34.70        | 1,634             |
| 1989                        | 130,553.33       | 55,877                | 53,601                 | 76,952                  | 35.31        | 2,179             |
| 1990                        | 83,708.95        | 34,471                | 33,067                 | 50,642                  | 36.31        | 1,395             |
| 1991                        | 49,055.75        | 19,524                | 18,729                 | 30,327                  | 36.93        | 821               |
| 1992                        | 13,417.64        | 5,152                 | 4,942                  | 8,476                   | 37.56        | 226               |
| 1993                        | 43,179.19        | 15,873                | 15,226                 | 27,953                  | 38.56        | 725               |
| 1994                        | 35,190.73        | 12,436                | 11,929                 | 23,262                  | 39.19        | 594               |
| 1995                        | 19,218.45        | 6,513                 | 6,248                  | 12,970                  | 39.83        | 326               |
| 1996                        | 45,908.18        | 14,796                | 14,193                 | 31,715                  | 40.83        | 777               |
| 1997                        | 41,246.16        | 12,687                | 12,170                 | 29,076                  | 41.46        | 701               |
| 1998                        | 9,164.57         | 2,666                 | 2,557                  | 6,608                   | 42.46        | 156               |
| 1999                        | 6,016.70         | 1,659                 | 1,591                  | 4,426                   | 43.11        | 103               |

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, 2015

| 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 65-R3                                            |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                                |                         |                              |                               |                                |                     |                          |
| 2000                                                                   | 14,194.65               | 3,698                        | 3,547                         | 10,648                         | 43.76               | 243                      |
| 2001                                                                   | 14,585.11               | 3,553                        | 3,408                         | 11,177                         | 44.76               | 250                      |
| 2002                                                                   | 3,022.43                | 689                          | 661                           | 2,361                          | 45.41               | 52                       |
| 2003                                                                   | 43,610.14               | 9,206                        | 8,831                         | 34,779                         | 46.41               | 749                      |
| 2004                                                                   | 76,943.39               | 15,019                       | 14,407                        | 62,536                         | 47.06               | 1,329                    |
| 2005                                                                   | 26,759.63               | 4,795                        | 4,600                         | 22,160                         | 47.72               | 464                      |
| 2006                                                                   | 37,329.33               | 6,047                        | 5,801                         | 31,528                         | 48.72               | 647                      |
| 2007                                                                   | 66,924.78               | 9,744                        | 9,347                         | 57,578                         | 49.39               | 1,166                    |
| 2008                                                                   | 28,109.96               | 3,626                        | 3,478                         | 24,632                         | 50.06               | 492                      |
| 2009                                                                   | 92,650.99               | 10,340                       | 9,919                         | 82,732                         | 51.06               | 1,620                    |
| 2010                                                                   | 122,441.83              | 11,607                       | 11,134                        | 111,308                        | 51.73               | 2,152                    |
| 2011                                                                   | 76,536.72               | 5,947                        | 5,705                         | 70,832                         | 52.40               | 1,352                    |
| 2012                                                                   | 184,163.44              | 11,142                       | 10,689                        | 173,474                        | 53.08               | 3,268                    |
| 2013                                                                   | 191,314.28              | 8,227                        | 7,892                         | 183,422                        | 53.76               | 3,412                    |
| 2014                                                                   | 10,935.45               | 278                          | 267                           | 10,668                         | 54.45               | 196                      |
| 2015                                                                   | 95,500.00               | 726                          | 696                           | 94,804                         | 54.23               | 1,748                    |
|                                                                        | 2,309,556.32            | 678,701                      | 651,055                       | 1,658,501                      |                     | 39,419                   |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 42.1 1.71 |                         |                              |                               |                                |                     |                          |

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, 2015

| 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 75-S4 |                  |                       |                        |                         |              |                   |
| NET SALVAGE PERCENT.. 0     |                  |                       |                        |                         |              |                   |
| 1883                        | 866.25           | 866                   | 866                    |                         |              |                   |
| 1884                        | 2,319.40         | 2,319                 | 2,319                  |                         |              |                   |
| 1885                        | 952.00           | 951                   | 952                    |                         |              |                   |
| 1886                        | 9,401.15         | 9,332                 | 9,401                  |                         |              |                   |
| 1887                        | 4,690.00         | 4,625                 | 4,673                  | 17                      | 1.04         | 16                |
| 1888                        | 6,579.75         | 6,480                 | 6,548                  | 32                      | 1.14         | 28                |
| 1889                        | 6,551.18         | 6,444                 | 6,511                  | 40                      | 1.23         | 33                |
| 1890                        | 1,679.50         | 1,649                 | 1,666                  | 14                      | 1.36         | 10                |
| 1891                        | 8,350.23         | 8,187                 | 8,273                  | 77                      | 1.47         | 52                |
| 1892                        | 1,354.95         | 1,327                 | 1,341                  | 14                      | 1.54         | 9                 |
| 1893                        | 650.85           | 637                   | 644                    | 7                       | 1.65         | 4                 |
| 1894                        | 1,616.78         | 1,579                 | 1,596                  | 21                      | 1.75         | 12                |
| 1895                        | 1,133.20         | 1,106                 | 1,118                  | 15                      | 1.83         | 8                 |
| 1896                        | 4,260.56         | 4,150                 | 4,193                  | 68                      | 1.94         | 35                |
| 1897                        | 2,267.65         | 2,206                 | 2,229                  | 39                      | 2.05         | 19                |
| 1898                        | 1,633.73         | 1,587                 | 1,604                  | 30                      | 2.14         | 14                |
| 1899                        | 934.25           | 906                   | 915                    | 19                      | 2.25         | 8                 |
| 1900                        | 8,185.42         | 7,928                 | 8,011                  | 174                     | 2.36         | 74                |
| 1901                        | 15,227.76        | 14,728                | 14,882                 | 346                     | 2.46         | 141               |
| 1902                        | 7,330.74         | 7,079                 | 7,153                  | 178                     | 2.58         | 69                |
| 1903                        | 15,446.32        | 14,890                | 15,046                 | 400                     | 2.70         | 148               |
| 1904                        | 8,443.31         | 8,128                 | 8,213                  | 230                     | 2.80         | 82                |
| 1905                        | 13,211.32        | 12,695                | 12,828                 | 383                     | 2.93         | 131               |
| 1906                        | 5,826.89         | 5,590                 | 5,648                  | 179                     | 3.05         | 59                |
| 1907                        | 4,318.72         | 4,136                 | 4,179                  | 140                     | 3.17         | 44                |
| 1908                        | 5,084.82         | 4,861                 | 4,912                  | 173                     | 3.30         | 52                |
| 1909                        | 5,578.23         | 5,322                 | 5,378                  | 200                     | 3.44         | 58                |
| 1910                        | 944.58           | 900                   | 909                    | 36                      | 3.57         | 10                |
| 1911                        | 1,805.52         | 1,716                 | 1,734                  | 72                      | 3.71         | 19                |
| 1912                        | 1,590.08         | 1,508                 | 1,524                  | 66                      | 3.85         | 17                |
| 1913                        | 4,199.64         | 3,976                 | 4,018                  | 182                     | 3.99         | 46                |
| 1914                        | 6,522.34         | 6,162                 | 6,226                  | 296                     | 4.14         | 71                |
| 1915                        | 9,299.36         | 8,766                 | 8,858                  | 441                     | 4.30         | 103               |
| 1916                        | 2,133.53         | 2,007                 | 2,028                  | 106                     | 4.45         | 24                |
| 1917                        | 2,947.27         | 2,766                 | 2,795                  | 152                     | 4.62         | 33                |
| 1918                        | 969.85           | 908                   | 917                    | 53                      | 4.79         | 11                |
| 1919                        | 713.16           | 666                   | 673                    | 40                      | 4.95         | 8                 |
| 1920                        | 1,116.43         | 1,040                 | 1,051                  | 65                      | 5.13         | 13                |
| 1921                        | 2,386.50         | 2,217                 | 2,240                  | 146                     | 5.32         | 27                |
| 1922                        | 5,478.84         | 5,077                 | 5,130                  | 349                     | 5.50         | 63                |
| 1923                        | 5,748.64         | 5,312                 | 5,368                  | 381                     | 5.70         | 67                |
| 1924                        | 2,962.36         | 2,729                 | 2,758                  | 204                     | 5.90         | 35                |

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, 2015

| 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 75-S4 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0     |                         |                              |                               |                                |                     |                          |
| 1925                        | 8,085.67                | 7,427                        | 7,505                         | 581                            | 6.11                | 95                       |
| 1926                        | 3,690.49                | 3,379                        | 3,414                         | 276                            | 6.33                | 44                       |
| 1927                        | 3,441.21                | 3,141                        | 3,174                         | 267                            | 6.55                | 41                       |
| 1928                        | 3,616.30                | 3,289                        | 3,323                         | 293                            | 6.78                | 43                       |
| 1929                        | 9,736.71                | 8,825                        | 8,917                         | 820                            | 7.02                | 117                      |
| 1930                        | 3,705.73                | 3,347                        | 3,382                         | 324                            | 7.27                | 45                       |
| 1931                        | 4,695.61                | 4,224                        | 4,268                         | 428                            | 7.53                | 57                       |
| 1932                        | 2,031.20                | 1,820                        | 1,839                         | 192                            | 7.79                | 25                       |
| 1933                        | 2,540.95                | 2,268                        | 2,292                         | 249                            | 8.07                | 31                       |
| 1934                        | 4,020.82                | 3,573                        | 3,610                         | 411                            | 8.36                | 49                       |
| 1935                        | 866.62                  | 767                          | 775                           | 92                             | 8.66                | 11                       |
| 1936                        | 4,994.63                | 4,397                        | 4,443                         | 552                            | 8.97                | 62                       |
| 1937                        | 3,607.79                | 3,161                        | 3,194                         | 414                            | 9.29                | 45                       |
| 1938                        | 1,245.49                | 1,086                        | 1,097                         | 148                            | 9.62                | 15                       |
| 1939                        | 956.06                  | 829                          | 838                           | 118                            | 9.97                | 12                       |
| 1940                        | 13,850.45               | 11,943                       | 12,068                        | 1,782                          | 10.33               | 173                      |
| 1941                        | 4,887.61                | 4,190                        | 4,234                         | 654                            | 10.71               | 61                       |
| 1942                        | 8,169.68                | 6,961                        | 7,034                         | 1,136                          | 11.10               | 102                      |
| 1943                        | 1,693.42                | 1,434                        | 1,449                         | 244                            | 11.51               | 21                       |
| 1944                        | 978.40                  | 823                          | 832                           | 146                            | 11.93               | 12                       |
| 1945                        | 1,004.81                | 839                          | 848                           | 157                            | 12.38               | 13                       |
| 1946                        | 344.00                  | 285                          | 288                           | 56                             | 12.83               | 4                        |
| 1947                        | 142.29                  | 117                          | 118                           | 24                             | 13.31               | 2                        |
| 1948                        | 3,080.71                | 2,513                        | 2,539                         | 542                            | 13.81               | 39                       |
| 1949                        | 16,198.32               | 13,106                       | 13,243                        | 2,955                          | 14.32               | 206                      |
| 1950                        | 20,911.66               | 16,768                       | 16,943                        | 3,969                          | 14.86               | 267                      |
| 1951                        | 11,956.42               | 9,500                        | 9,599                         | 2,357                          | 15.41               | 153                      |
| 1952                        | 8,038.39                | 6,325                        | 6,391                         | 1,647                          | 15.99               | 103                      |
| 1953                        | 5,949.87                | 4,634                        | 4,682                         | 1,268                          | 16.59               | 76                       |
| 1954                        | 21,585.01               | 16,632                       | 16,806                        | 4,779                          | 17.21               | 278                      |
| 1955                        | 32,149.56               | 24,498                       | 24,754                        | 7,396                          | 17.85               | 414                      |
| 1956                        | 51,558.51               | 38,827                       | 39,233                        | 12,326                         | 18.52               | 666                      |
| 1957                        | 19,916.61               | 14,818                       | 14,973                        | 4,944                          | 19.20               | 258                      |
| 1958                        | 63,499.25               | 46,642                       | 47,130                        | 16,369                         | 19.91               | 822                      |
| 1959                        | 28,371.09               | 20,563                       | 20,778                        | 7,593                          | 20.64               | 368                      |
| 1960                        | 26,305.63               | 18,803                       | 19,000                        | 7,306                          | 21.39               | 342                      |
| 1961                        | 15,768.03               | 11,109                       | 11,225                        | 4,543                          | 22.16               | 205                      |
| 1962                        | 18,087.78               | 12,553                       | 12,684                        | 5,404                          | 22.95               | 235                      |
| 1963                        | 27,374.57               | 18,702                       | 18,898                        | 8,477                          | 23.76               | 357                      |
| 1964                        | 40,027.79               | 26,904                       | 27,185                        | 12,843                         | 24.59               | 522                      |
| 1965                        | 17,574.04               | 11,613                       | 11,734                        | 5,840                          | 25.44               | 230                      |
| 1966                        | 18,597.25               | 12,073                       | 12,199                        | 6,398                          | 26.31               | 243                      |

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, 2015

| 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 75-S4 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0     |                         |                              |                               |                                |                     |                          |
| 1967                        | 96,910.77               | 61,778                       | 62,424                        | 34,487                         | 27.19               | 1,268                    |
| 1968                        | 82,637.79               | 51,687                       | 52,227                        | 30,411                         | 28.09               | 1,083                    |
| 1969                        | 46,057.56               | 28,248                       | 28,543                        | 17,515                         | 29.00               | 604                      |
| 1970                        | 45,097.36               | 27,107                       | 27,390                        | 17,707                         | 29.92               | 592                      |
| 1971                        | 54,600.87               | 32,142                       | 32,478                        | 22,123                         | 30.85               | 717                      |
| 1972                        | 80,841.70               | 46,565                       | 47,052                        | 33,790                         | 31.80               | 1,063                    |
| 1973                        | 31,060.02               | 17,497                       | 17,680                        | 13,380                         | 32.75               | 409                      |
| 1974                        | 42,716.26               | 23,511                       | 23,757                        | 18,959                         | 33.72               | 562                      |
| 1975                        | 53,203.52               | 28,595                       | 28,894                        | 24,310                         | 34.69               | 701                      |
| 1976                        | 46,796.87               | 25,270                       | 25,534                        | 21,263                         | 33.58               | 633                      |
| 1977                        | 50,016.13               | 26,519                       | 26,796                        | 23,220                         | 34.04               | 682                      |
| 1978                        | 27,600.77               | 14,253                       | 14,402                        | 13,199                         | 35.04               | 377                      |
| 1979                        | 28,364.25               | 14,256                       | 14,405                        | 13,959                         | 36.04               | 387                      |
| 1980                        | 24,054.08               | 11,758                       | 11,881                        | 12,173                         | 37.04               | 329                      |
| 1981                        | 55,235.53               | 26,237                       | 26,511                        | 28,725                         | 38.04               | 755                      |
| 1982                        | 47,534.94               | 21,923                       | 22,152                        | 25,383                         | 39.04               | 650                      |
| 1983                        | 27,148.25               | 12,146                       | 12,273                        | 14,875                         | 40.04               | 372                      |
| 1984                        | 30,306.87               | 13,141                       | 13,278                        | 17,029                         | 41.04               | 415                      |
| 1985                        | 72,105.59               | 30,270                       | 30,587                        | 41,519                         | 42.04               | 988                      |
| 1986                        | 17,533.91               | 7,119                        | 7,193                         | 10,341                         | 43.04               | 240                      |
| 1987                        | 27,416.83               | 10,753                       | 10,865                        | 16,552                         | 44.04               | 376                      |
| 1988                        | 11,339.22               | 4,291                        | 4,336                         | 7,003                          | 45.04               | 155                      |
| 1989                        | 70,082.23               | 25,552                       | 25,819                        | 44,263                         | 46.04               | 961                      |
| 1990                        | 44,760.66               | 15,702                       | 15,866                        | 28,895                         | 47.04               | 614                      |
| 1991                        | 35,224.46               | 11,871                       | 11,995                        | 23,229                         | 48.04               | 484                      |
| 1992                        | 54,141.31               | 17,498                       | 17,681                        | 36,460                         | 49.04               | 743                      |
| 1993                        | 58,993.43               | 18,253                       | 18,444                        | 40,549                         | 50.04               | 810                      |
| 1994                        | 184,531.84              | 54,548                       | 55,119                        | 129,413                        | 51.04               | 2,536                    |
| 1995                        | 584,928.49              | 164,833                      | 166,558                       | 418,370                        | 52.04               | 8,039                    |
| 1996                        | 126,940.88              | 34,020                       | 34,376                        | 92,565                         | 53.04               | 1,745                    |
| 1997                        | 68,030.65               | 17,293                       | 17,474                        | 50,557                         | 54.04               | 936                      |
| 1998                        | 40,132.45               | 9,648                        | 9,749                         | 30,383                         | 55.04               | 552                      |
| 2000                        | 15,568.19               | 3,313                        | 3,348                         | 12,220                         | 57.04               | 214                      |
| 2001                        | 39,714.12               | 7,903                        | 7,985                         | 31,729                         | 58.04               | 547                      |
| 2002                        | 181,571.19              | 33,627                       | 33,979                        | 147,592                        | 59.04               | 2,500                    |
| 2003                        | 1,938.28                | 332                          | 335                           | 1,603                          | 60.04               | 27                       |
|                             | 3,233,106.76            | 1,539,625                    | 1,555,652                     | 1,677,455                      |                     | 42,583                   |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 39.4 1.32

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, 2015

| 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-R1.5 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0       |                         |                              |                               |                                |                     |                          |
| 1905                          | 55.47                   | 52                           | 46                            | 9                              | 3.38                | 3                        |
| 1913                          | 365.84                  | 333                          | 297                           | 69                             | 5.36                | 13                       |
| 1914                          | 373.05                  | 338                          | 301                           | 72                             | 5.59                | 13                       |
| 1916                          | 38.57                   | 35                           | 31                            | 8                              | 6.05                | 1                        |
| 1922                          | 314.29                  | 275                          | 245                           | 69                             | 7.58                | 9                        |
| 1925                          | 192.84                  | 166                          | 148                           | 45                             | 8.40                | 5                        |
| 1927                          | 206.79                  | 176                          | 157                           | 50                             | 8.97                | 6                        |
| 1928                          | 517.83                  | 438                          | 390                           | 128                            | 9.25                | 14                       |
| 1929                          | 4,187.69                | 3,521                        | 3,135                         | 1,053                          | 9.55                | 110                      |
| 1930                          | 4,233.59                | 3,539                        | 3,151                         | 1,083                          | 9.84                | 110                      |
| 1931                          | 1,144.14                | 951                          | 847                           | 297                            | 10.14               | 29                       |
| 1932                          | 2,333.33                | 1,927                        | 1,716                         | 617                            | 10.45               | 59                       |
| 1933                          | 2,577.59                | 2,116                        | 1,884                         | 694                            | 10.75               | 65                       |
| 1934                          | 1,030.62                | 841                          | 749                           | 282                            | 11.06               | 25                       |
| 1935                          | 91.08                   | 74                           | 66                            | 25                             | 11.38               | 2                        |
| 1936                          | 1,877.21                | 1,511                        | 1,345                         | 532                            | 11.70               | 45                       |
| 1938                          | 583.50                  | 463                          | 412                           | 172                            | 12.36               | 14                       |
| 1939                          | 4,422.97                | 3,487                        | 3,105                         | 1,318                          | 12.70               | 104                      |
| 1940                          | 525.01                  | 411                          | 366                           | 159                            | 13.04               | 12                       |
| 1941                          | 851.83                  | 662                          | 589                           | 263                            | 13.39               | 20                       |
| 1942                          | 1,222.54                | 942                          | 839                           | 384                            | 13.75               | 28                       |
| 1943                          | 714.66                  | 547                          | 487                           | 228                            | 14.11               | 16                       |
| 1945                          | 611.44                  | 460                          | 410                           | 201                            | 14.86               | 14                       |
| 1946                          | 981.09                  | 732                          | 652                           | 329                            | 15.25               | 22                       |
| 1947                          | 2,657.67                | 1,965                        | 1,750                         | 908                            | 15.64               | 58                       |
| 1948                          | 6,452.19                | 4,727                        | 4,209                         | 2,243                          | 16.04               | 140                      |
| 1949                          | 1,113.17                | 808                          | 719                           | 394                            | 16.45               | 24                       |
| 1950                          | 4,859.65                | 3,493                        | 3,110                         | 1,750                          | 16.87               | 104                      |
| 1951                          | 11,906.74               | 8,474                        | 7,546                         | 4,361                          | 17.30               | 252                      |
| 1952                          | 18,661.56               | 13,147                       | 11,707                        | 6,955                          | 17.73               | 392                      |
| 1953                          | 22,243.33               | 15,504                       | 13,806                        | 8,437                          | 18.18               | 464                      |
| 1954                          | 18,551.21               | 12,791                       | 11,390                        | 7,161                          | 18.63               | 384                      |
| 1955                          | 11,781.68               | 8,033                        | 7,153                         | 4,629                          | 19.09               | 242                      |
| 1956                          | 32,696.55               | 22,037                       | 19,623                        | 13,074                         | 19.56               | 668                      |
| 1957                          | 29,353.78               | 19,550                       | 17,408                        | 11,946                         | 20.04               | 596                      |
| 1958                          | 42,224.82               | 27,777                       | 24,734                        | 17,491                         | 20.53               | 852                      |
| 1959                          | 24,924.96               | 16,189                       | 14,415                        | 10,510                         | 21.03               | 500                      |
| 1960                          | 29,117.38               | 18,669                       | 16,624                        | 12,493                         | 21.53               | 580                      |
| 1961                          | 38,944.22               | 24,632                       | 21,933                        | 17,011                         | 22.05               | 771                      |
| 1962                          | 44,542.63               | 27,787                       | 24,743                        | 19,800                         | 22.57               | 877                      |
| 1963                          | 29,876.40               | 18,374                       | 16,361                        | 13,515                         | 23.10               | 585                      |
| 1964                          | 46,297.43               | 28,056                       | 24,982                        | 21,315                         | 23.64               | 902                      |

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, 2015

| 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-R1.5 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0       |                         |                              |                               |                                |                     |                          |
| 1965                          | 30,742.35               | 18,348                       | 16,338                        | 14,404                         | 24.19               | 595                      |
| 1966                          | 26,700.17               | 15,691                       | 13,972                        | 12,728                         | 24.74               | 514                      |
| 1967                          | 19,125.40               | 11,058                       | 9,847                         | 9,278                          | 25.31               | 367                      |
| 1968                          | 9,992.99                | 5,683                        | 5,060                         | 4,933                          | 25.88               | 191                      |
| 1969                          | 17,975.87               | 10,049                       | 8,948                         | 9,028                          | 26.46               | 341                      |
| 1970                          | 5,833.27                | 3,203                        | 2,852                         | 2,981                          | 27.05               | 110                      |
| 1971                          | 20,336.18               | 10,965                       | 9,764                         | 10,572                         | 27.65               | 382                      |
| 1972                          | 11,753.73               | 6,220                        | 5,539                         | 6,215                          | 28.25               | 220                      |
| 1973                          | 14,051.89               | 7,293                        | 6,494                         | 7,558                          | 28.86               | 262                      |
| 1974                          | 12,441.69               | 6,329                        | 5,636                         | 6,806                          | 29.48               | 231                      |
| 1975                          | 16,656.67               | 8,298                        | 7,389                         | 9,268                          | 30.11               | 308                      |
| 1976                          | 25,997.41               | 15,575                       | 13,869                        | 12,128                         | 26.38               | 460                      |
| 1977                          | 22,307.23               | 13,112                       | 11,676                        | 10,631                         | 26.94               | 395                      |
| 1978                          | 20,794.23               | 11,982                       | 10,669                        | 10,125                         | 27.52               | 368                      |
| 1979                          | 32,711.91               | 18,584                       | 16,548                        | 16,164                         | 27.69               | 584                      |
| 1980                          | 12,251.03               | 6,812                        | 6,066                         | 6,185                          | 28.28               | 219                      |
| 1981                          | 27,427.35               | 14,915                       | 13,281                        | 14,146                         | 28.87               | 490                      |
| 1982                          | 40,781.84               | 21,667                       | 19,293                        | 21,489                         | 29.48               | 729                      |
| 1983                          | 18,012.34               | 9,401                        | 8,371                         | 9,641                          | 29.70               | 325                      |
| 1984                          | 14,417.14               | 7,338                        | 6,534                         | 7,883                          | 30.31               | 260                      |
| 1985                          | 12,683.13               | 6,288                        | 5,599                         | 7,084                          | 30.93               | 229                      |
| 1986                          | 26,175.43               | 12,706                       | 11,314                        | 14,861                         | 31.19               | 476                      |
| 1987                          | 11,180.69               | 5,274                        | 4,696                         | 6,485                          | 31.83               | 204                      |
| 1988                          | 40,843.83               | 18,813                       | 16,752                        | 24,092                         | 32.11               | 750                      |
| 1989                          | 14,356.22               | 6,409                        | 5,707                         | 8,649                          | 32.76               | 264                      |
| 1990                          | 10,319.80               | 4,485                        | 3,994                         | 6,326                          | 33.06               | 191                      |
| 1991                          | 35,531.56               | 14,923                       | 13,288                        | 22,244                         | 33.72               | 660                      |
| 1992                          | 128.93                  | 53                           | 47                            | 82                             | 34.06               | 2                        |
| 1993                          | 23,354.92               | 9,214                        | 8,205                         | 15,150                         | 34.40               | 440                      |
| 1994                          | 1,503.01                | 570                          | 508                           | 995                            | 35.08               | 28                       |
| 1995                          | 13,523.06               | 4,943                        | 4,401                         | 9,122                          | 35.45               | 257                      |
| 1996                          | 15,600.10               | 5,482                        | 4,881                         | 10,719                         | 35.83               | 299                      |
| 1997                          | 25,587.67               | 8,623                        | 7,678                         | 17,910                         | 36.23               | 494                      |
| 1998                          | 63,662.34               | 20,512                       | 18,265                        | 45,397                         | 36.64               | 1,239                    |
| 1999                          | 4,522.68                | 1,388                        | 1,236                         | 3,287                          | 37.06               | 89                       |
| 2000                          | 29,438.18               | 8,578                        | 7,638                         | 21,800                         | 37.49               | 581                      |
| 2001                          | 30,545.92               | 8,412                        | 7,490                         | 23,056                         | 37.94               | 608                      |
| 2002                          | 24,113.69               | 6,277                        | 5,589                         | 18,525                         | 38.13               | 486                      |
| 2003                          | 65,726.13               | 15,998                       | 14,245                        | 51,481                         | 38.60               | 1,334                    |
| 2004                          | 33,997.42               | 7,724                        | 6,878                         | 27,119                         | 38.83               | 698                      |
| 2005                          | 65,899.72               | 13,865                       | 12,346                        | 53,554                         | 39.09               | 1,370                    |
| 2006                          | 199,577.51              | 38,718                       | 34,477                        | 165,101                        | 39.13               | 4,219                    |

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, 2015

| 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-R1.5                                |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                      |                         |                              |                               |                                |                     |                          |
| 2007                                                         | 99,875.96               | 17,568                       | 15,643                        | 84,233                         | 39.43               | 2,136                    |
| 2008                                                         | 415,459.68              | 65,643                       | 58,452                        | 357,008                        | 39.53               | 9,031                    |
| 2009                                                         | 42,127.66               | 5,894                        | 5,248                         | 36,880                         | 39.45               | 935                      |
| 2010                                                         | 180,140.65              | 21,761                       | 19,377                        | 160,764                        | 39.43               | 4,077                    |
| 2011                                                         | 223,564.45              | 22,602                       | 20,126                        | 203,438                        | 39.25               | 5,183                    |
| 2012                                                         | 254,982.77              | 20,654                       | 18,392                        | 236,591                        | 38.78               | 6,101                    |
| 2013                                                         | 380,979.96              | 22,821                       | 20,321                        | 360,659                        | 37.91               | 9,514                    |
| 2014                                                         | 205,745.52              | 7,715                        | 6,870                         | 198,876                        | 36.32               | 5,476                    |
| 2015                                                         | 233,500.00              | 2,965                        | 2,640                         | 230,860                        | 32.48               | 7,108                    |
|                                                              | 3,630,617.62            | 925,411                      | 824,030                       | 2,806,588                      |                     | 80,960                   |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. |                         |                              |                               |                                |                     | 34.7 2.23                |



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, 2015

| 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-R1.5 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0       |                         |                              |                               |                                |                     |                          |
| 1922                          | 114.31                  | 109                          | 114                           |                                |                     |                          |
| 1928                          | 87.15                   | 80                           | 87                            |                                |                     |                          |
| 1930                          | 127.57                  | 116                          | 128                           |                                |                     |                          |
| 1931                          | 263.40                  | 239                          | 263                           |                                |                     |                          |
| 1934                          | 783.68                  | 699                          | 784                           |                                |                     |                          |
| 1935                          | 147.25                  | 131                          | 147                           |                                |                     |                          |
| 1936                          | 21.46                   | 19                           | 21                            |                                |                     |                          |
| 1937                          | 618.76                  | 543                          | 619                           |                                |                     |                          |
| 1938                          | 1,463.03                | 1,275                        | 1,463                         |                                |                     |                          |
| 1940                          | 440.04                  | 379                          | 440                           |                                |                     |                          |
| 1942                          | 1,018.37                | 865                          | 1,009                         | 9                              | 7.55                | 1                        |
| 1944                          | 2,850.41                | 2,387                        | 2,785                         | 65                             | 8.13                | 8                        |
| 1946                          | 377.07                  | 311                          | 363                           | 14                             | 8.73                | 2                        |
| 1947                          | 568.77                  | 466                          | 544                           | 25                             | 9.04                | 3                        |
| 1948                          | 482.71                  | 392                          | 457                           | 26                             | 9.36                | 3                        |
| 1950                          | 1,857.60                | 1,486                        | 1,734                         | 124                            | 10.00               | 12                       |
| 1951                          | 3,131.90                | 2,485                        | 2,900                         | 232                            | 10.33               | 22                       |
| 1952                          | 3,969.07                | 3,122                        | 3,643                         | 326                            | 10.67               | 31                       |
| 1953                          | 4,259.74                | 3,321                        | 3,875                         | 385                            | 11.02               | 35                       |
| 1955                          | 4,904.63                | 3,754                        | 4,381                         | 524                            | 11.73               | 45                       |
| 1956                          | 2,507.83                | 1,900                        | 2,217                         | 291                            | 12.11               | 24                       |
| 1957                          | 14,375.38               | 10,784                       | 12,584                        | 1,791                          | 12.49               | 143                      |
| 1958                          | 1,667.93                | 1,239                        | 1,446                         | 222                            | 12.87               | 17                       |
| 1959                          | 5,902.55                | 4,336                        | 5,060                         | 843                            | 13.27               | 64                       |
| 1960                          | 1,345.00                | 977                          | 1,140                         | 205                            | 13.68               | 15                       |
| 1961                          | 1,954.81                | 1,404                        | 1,638                         | 317                            | 14.10               | 22                       |
| 1963                          | 3,416.99                | 2,394                        | 2,794                         | 623                            | 14.97               | 42                       |
| 1964                          | 1,441.97                | 997                          | 1,163                         | 279                            | 15.42               | 18                       |
| 1967                          | 1,614.49                | 1,071                        | 1,250                         | 364                            | 16.83               | 22                       |
| 1970                          | 2,450.11                | 1,551                        | 1,810                         | 640                            | 18.34               | 35                       |
| 1971                          | 7,721.50                | 4,809                        | 5,612                         | 2,110                          | 18.86               | 112                      |
| 1972                          | 1.00                    | 1                            | 1                             |                                |                     |                          |
| 1980                          | 3,885.67                | 2,450                        | 2,859                         | 1,027                          | 20.76               | 49                       |
| 1988                          | 11,897.69               | 6,263                        | 7,308                         | 4,590                          | 24.67               | 186                      |
|                               | 87,669.84               | 62,355                       | 72,639                        | 15,031                         |                     | 911                      |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 16.5 1.04

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, 2015

| 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                   |                         |                              |                               |                                |                     |                          |
| INTERIM SURVIVOR CURVE.. IOWA 90-R1 |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 6-2007   |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0             |                         |                              |                               |                                |                     |                          |
| 1934                                | 778.19                  | 778                          | 778                           |                                |                     |                          |
| 1955                                | 80.00                   | 80                           | 80                            |                                |                     |                          |
| 1957                                | 860.20                  | 860                          | 860                           |                                |                     |                          |
| 1971                                | 1,426.78                | 1,427                        | 1,427                         |                                |                     |                          |
|                                     | 3,145.17                | 3,145                        | 3,145                         |                                |                     |                          |
| WARREN SERVICE CENTER               |                         |                              |                               |                                |                     |                          |
| INTERIM SURVIVOR CURVE.. IOWA 90-R1 |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 6-2028   |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0             |                         |                              |                               |                                |                     |                          |
| 1985                                | 11,777.53               | 8,419                        | 7,858                         | 3,920                          | 12.14               | 323                      |
| 1987                                | 5,355.61                | 3,759                        | 3,508                         | 1,847                          | 12.07               | 153                      |
| 1995                                | 7,244.15                | 4,541                        | 4,238                         | 3,006                          | 12.16               | 247                      |
| 1998                                | 13,437.87               | 7,911                        | 7,384                         | 6,054                          | 12.17               | 497                      |
| 1999                                | 4,835.77                | 2,779                        | 2,594                         | 2,242                          | 12.15               | 185                      |
| 2003                                | 16,326.16               | 8,251                        | 7,701                         | 8,625                          | 12.15               | 710                      |
| 2007                                | 4,422.55                | 1,813                        | 1,692                         | 2,730                          | 12.12               | 225                      |
| 2010                                | 1,359.72                | 421                          | 393                           | 967                            | 12.07               | 80                       |
| 2012                                | 15,657.94               | 3,471                        | 3,240                         | 12,418                         | 11.99               | 1,036                    |
| 2014                                | 83,995.15               | 9,021                        | 8,420                         | 75,576                         | 11.78               | 6,416                    |
| 2015                                | 404,250.00              | 14,270                       | 13,319                        | 390,931                        | 11.39               | 34,322                   |
|                                     | 568,662.45              | 64,656                       | 60,345                        | 508,317                        |                     | 44,194                   |
| WASHINGTON SERVICE CENTER           |                         |                              |                               |                                |                     |                          |
| INTERIM SURVIVOR CURVE.. IOWA 90-R1 |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 6-2030   |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0             |                         |                              |                               |                                |                     |                          |
| 1965                                | 402.68                  | 305                          | 285                           | 118                            | 13.83               | 9                        |
| 1968                                | 286.40                  | 214                          | 200                           | 87                             | 13.87               | 6                        |
| 1969                                | 575.80                  | 428                          | 399                           | 176                            | 13.89               | 13                       |
| 1973                                | 921.97                  | 670                          | 625                           | 297                            | 13.94               | 21                       |
| 1976                                | 1,685.19                | 1,249                        | 1,166                         | 519                            | 13.78               | 38                       |
| 1978                                | 1,481.10                | 1,081                        | 1,009                         | 472                            | 13.87               | 34                       |
| 1982                                | 1,006.26                | 710                          | 663                           | 344                            | 13.98               | 25                       |

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, 2015

| 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)               |
| WASHINGTON SERVICE CENTER           |                  |                       |                        |                         |              |                   |
| INTERIM SURVIVOR CURVE.. IOWA 90-R1 |                  |                       |                        |                         |              |                   |
| PROBABLE RETIREMENT YEAR.. 6-2030   |                  |                       |                        |                         |              |                   |
| NET SALVAGE PERCENT.. 0             |                  |                       |                        |                         |              |                   |
| 1984                                | 4,375.33         | 3,038                 | 2,835                  | 1,540                   | 13.83        | 111               |
| 1985                                | 842.87           | 579                   | 540                    | 302                     | 13.83        | 22                |
| 1987                                | 168,830.35       | 113,218               | 105,669                | 63,161                  | 13.96        | 4,524             |
| 1995                                | 187,897.92       | 111,630               | 104,187                | 83,711                  | 13.95        | 6,001             |
| 1996                                | 40,388.28        | 23,526                | 21,957                 | 18,431                  | 13.92        | 1,324             |
| 1997                                | 49,654.21        | 28,258                | 26,374                 | 23,280                  | 13.94        | 1,670             |
| 1998                                | 27,089.01        | 15,051                | 14,047                 | 13,042                  | 13.93        | 936               |
| 2005                                | 150,085.94       | 64,252                | 59,968                 | 90,118                  | 13.91        | 6,479             |
| 2006                                | 8,705.52         | 3,508                 | 3,274                  | 5,431                   | 13.95        | 389               |
| 2008                                | 7,692.60         | 2,675                 | 2,497                  | 5,196                   | 13.91        | 374               |
| 2010                                | 85,028.54        | 23,902                | 22,308                 | 62,720                  | 13.85        | 4,529             |
| 2011                                | 15,560.77        | 3,773                 | 3,521                  | 12,039                  | 13.80        | 872               |
| 2013                                | 101,488.82       | 15,284                | 14,265                 | 87,224                  | 13.63        | 6,399             |
| 2014                                | 164,400.00       | 15,651                | 14,607                 | 149,793                 | 13.46        | 11,129            |
| 2015                                | 808,500.00       | 25,225                | 23,543                 | 784,957                 | 12.93        | 60,708            |
|                                     | 1,826,899.56     | 454,227               | 423,941                | 1,402,959               |              | 105,613           |

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

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

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, 2015

| 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) |
|-------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| HANOVER SERVICE CENTER              |                         |                              |                               |                                |                     |                          |
| INTERIM SURVIVOR CURVE.. IOWA 90-R1 |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 6-2029   |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0             |                         |                              |                               |                                |                     |                          |
| 1979                                | 75,545.94               | 55,572                       | 51,718                        | 23,828                         | 13.09               | 1,820                    |
| 1983                                | 5,025.32                | 3,584                        | 3,335                         | 1,690                          | 13.04               | 130                      |
| 1991                                | 1,551.26                | 1,011                        | 941                           | 610                            | 13.04               | 47                       |
| 1992                                | 2,956.94                | 1,897                        | 1,765                         | 1,191                          | 13.08               | 91                       |
| 1998                                | 242,343.07              | 138,451                      | 128,850                       | 113,493                        | 13.07               | 8,683                    |
| 2000                                | 1,924.72                | 1,041                        | 969                           | 956                            | 13.07               | 73                       |
| 2007                                | 8,503.35                | 3,343                        | 3,111                         | 5,392                          | 13.00               | 415                      |
| 2009                                | 8,784.52                | 2,903                        | 2,702                         | 6,083                          | 13.00               | 468                      |
| 2013                                | 75,999.13               | 12,084                       | 11,246                        | 64,753                         | 12.78               | 5,067                    |
| 2014                                | 109,600.00              | 11,059                       | 10,292                        | 99,308                         | 12.63               | 7,863                    |
| 2015                                | 539,000.00              | 17,841                       | 16,604                        | 522,396                        | 12.16               | 42,960                   |
|                                     | 1,071,234.25            | 248,786                      | 231,534                       | 839,700                        |                     | 67,617                   |

JEANNETTE SERVICE CENTER  
INTERIM SURVIVOR CURVE.. IOWA 90-R1  
PROBABLE RETIREMENT YEAR.. 6-2036  
NET SALVAGE PERCENT.. 0

|      |              |         |         |           |       |        |
|------|--------------|---------|---------|-----------|-------|--------|
| 1996 | 2,700.01     | 1,358   | 1,264   | 1,436     | 19.19 | 75     |
| 1997 | 7,912.22     | 3,876   | 3,607   | 4,305     | 19.18 | 224    |
| 2006 | 122,192.82   | 40,275  | 37,482  | 84,711    | 19.15 | 4,424  |
| 2007 | 83,513.69    | 25,589  | 23,814  | 59,699    | 19.05 | 3,134  |
| 2013 | 779,903.37   | 90,079  | 83,832  | 696,071   | 18.50 | 37,625 |
| 2014 | 82,200.00    | 5,960   | 5,547   | 76,653    | 18.12 | 4,230  |
| 2015 | 404,250.00   | 9,581   | 8,917   | 395,333   | 17.16 | 23,038 |
|      | 1,482,672.11 | 176,718 | 164,463 | 1,318,209 |       | 72,750 |

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

|      |           |        |        |        |      |       |
|------|-----------|--------|--------|--------|------|-------|
| 1969 | 522.92    | 433    | 403    | 120    | 5.67 | 21    |
| 1971 | 68,924.86 | 55,704 | 51,841 | 17,084 | 6.33 | 2,699 |
| 1972 | 6,449.07  | 5,146  | 4,789  | 1,660  | 6.67 | 249   |
| 1975 | 4,522.00  | 3,463  | 3,223  | 1,299  | 7.73 | 168   |
| 1976 | 5,376.54  | 4,514  | 4,201  | 1,176  | 7.53 | 156   |



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, 2015

| 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-R2                                       |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                           |                         |                              |                               |                                |                     |                          |
| 2001                                                              | 16,515.17               | 5,262                        | 6,177                         | 10,338                         | 30.83               | 335                      |
|                                                                   | 16,515.17               | 5,262                        | 6,177                         | 10,338                         |                     | 335                      |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 30.9 |                         |                              |                               |                                |                     | 2.03                     |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 376.1 MAINS - CAST IRON

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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 72-R1.5 |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 12-2025    |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0               |                         |                              |                               |                                |                     |                          |
| 1901                                  | 14,108.87               | 12,852                       | 11,187                        | 2,922                          | 6.40                | 457                      |
| 1902                                  | 142.71                  | 130                          | 113                           | 30                             | 6.50                | 5                        |
| 1903                                  | 313.41                  | 285                          | 248                           | 65                             | 6.59                | 10                       |
| 1904                                  | 646.03                  | 586                          | 510                           | 136                            | 6.68                | 20                       |
| 1905                                  | 317.25                  | 287                          | 250                           | 67                             | 6.77                | 10                       |
| 1908                                  | 10.20                   | 9                            | 8                             | 2                              | 7.02                |                          |
| 1911                                  | 655.54                  | 589                          | 513                           | 143                            | 7.24                | 20                       |
| 1912                                  | 53.18                   | 48                           | 42                            | 11                             | 7.31                | 2                        |
| 1913                                  | 4,082.49                | 3,660                        | 3,186                         | 896                            | 7.38                | 121                      |
| 1914                                  | 190.32                  | 170                          | 148                           | 42                             | 7.45                | 6                        |
| 1915                                  | 393.88                  | 352                          | 306                           | 88                             | 7.51                | 12                       |
| 1917                                  | 897.25                  | 801                          | 697                           | 200                            | 7.63                | 26                       |
| 1918                                  | 32.18                   | 29                           | 25                            | 7                              | 7.69                | 1                        |
| 1919                                  | 32.61                   | 29                           | 25                            | 8                              | 7.75                | 1                        |
| 1920                                  | 1,692.24                | 1,505                        | 1,310                         | 382                            | 7.80                | 49                       |
| 1921                                  | 21,855.98               | 19,415                       | 16,899                        | 4,957                          | 7.86                | 631                      |
| 1922                                  | 345.63                  | 307                          | 267                           | 79                             | 7.91                | 10                       |
| 1923                                  | 21,667.77               | 19,203                       | 16,715                        | 4,953                          | 7.97                | 621                      |
| 1924                                  | 63,060.02               | 55,825                       | 48,592                        | 14,468                         | 8.02                | 1,804                    |
| 1925                                  | 36,770.71               | 32,515                       | 28,302                        | 8,469                          | 8.07                | 1,049                    |
| 1926                                  | 50,382.11               | 44,499                       | 38,733                        | 11,649                         | 8.12                | 1,435                    |
| 1927                                  | 18,610.58               | 16,418                       | 14,291                        | 4,320                          | 8.17                | 529                      |
| 1928                                  | 28,156.95               | 24,809                       | 21,595                        | 6,562                          | 8.22                | 798                      |
| 1929                                  | 46,525.47               | 40,942                       | 35,637                        | 10,888                         | 8.27                | 1,317                    |
| 1930                                  | 12,168.73               | 10,694                       | 9,308                         | 2,861                          | 8.32                | 344                      |
| 1931                                  | 9,354.59                | 8,212                        | 7,148                         | 2,207                          | 8.36                | 264                      |
| 1932                                  | 64.89                   | 57                           | 50                            | 15                             | 8.41                | 2                        |
| 1933                                  | 1,822.49                | 1,595                        | 1,388                         | 434                            | 8.46                | 51                       |
| 1934                                  | 869.23                  | 760                          | 662                           | 207                            | 8.50                | 24                       |
| 1937                                  | 127.87                  | 111                          | 97                            | 31                             | 8.63                | 4                        |
| 1938                                  | 3,169.72                | 2,756                        | 2,399                         | 771                            | 8.67                | 89                       |
| 1939                                  | 152,890.77              | 132,726                      | 115,528                       | 37,363                         | 8.71                | 4,290                    |
| 1940                                  | 3,280.63                | 2,844                        | 2,476                         | 805                            | 8.75                | 92                       |
| 1941                                  | 7,172.43                | 6,207                        | 5,403                         | 1,769                          | 8.79                | 201                      |
| 1942                                  | 732.71                  | 633                          | 551                           | 182                            | 8.83                | 21                       |
| 1943                                  | 1,848.57                | 1,595                        | 1,388                         | 461                            | 8.87                | 52                       |
| 1944                                  | 2,394.16                | 2,062                        | 1,795                         | 599                            | 8.90                | 67                       |
| 1945                                  | 1,786.14                | 1,536                        | 1,337                         | 449                            | 8.94                | 50                       |
| 1946                                  | 1,417.81                | 1,217                        | 1,059                         | 359                            | 8.98                | 40                       |
| 1947                                  | 676.30                  | 579                          | 504                           | 172                            | 9.01                | 19                       |
| 1948                                  | 8,707.53                | 7,446                        | 6,481                         | 2,227                          | 9.04                | 246                      |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 376.1 MAINS - CAST IRON

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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 72-R1.5                            |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 12-2025                               |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                          |                         |                              |                               |                                |                     |                          |
| 1949                                                             | 106.38                  | 91                           | 79                            | 27                             | 9.08                | 3                        |
| 1951                                                             | 71.67                   | 61                           | 53                            | 19                             | 9.14                | 2                        |
| 1982                                                             | 333.43                  | 259                          | 226                           | 107                            | 9.69                | 11                       |
|                                                                  | 519,939.43              | 456,706                      | 397,531                       | 122,408                        |                     | 14,806                   |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 8.3 |                         |                              |                               |                                |                     | 2.85                     |



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 376.3 MAINS - BARE STEEL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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 72-R1.5 |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 12-2025    |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0               |                         |                              |                               |                                |                     |                          |
| 1928                                  | 5,940.48                | 5,234                        | 4,556                         | 1,384                          | 8.22                | 168                      |
| 1929                                  | 53,252.28               | 46,861                       | 40,789                        | 12,463                         | 8.27                | 1,507                    |
| 1930                                  | 71,284.21               | 62,647                       | 54,530                        | 16,754                         | 8.32                | 2,014                    |
| 1931                                  | 87,418.67               | 76,739                       | 66,796                        | 20,623                         | 8.36                | 2,467                    |
| 1932                                  | 40,178.39               | 35,222                       | 30,658                        | 9,520                          | 8.41                | 1,132                    |
| 1933                                  | 20,067.46               | 17,567                       | 15,291                        | 4,776                          | 8.46                | 565                      |
| 1934                                  | 29,447.58               | 25,747                       | 22,411                        | 7,037                          | 8.50                | 828                      |
| 1935                                  | 39,321.70               | 34,335                       | 29,886                        | 9,436                          | 8.54                | 1,105                    |
| 1936                                  | 42,886.93               | 37,391                       | 32,546                        | 10,341                         | 8.59                | 1,204                    |
| 1937                                  | 63,728.95               | 55,484                       | 48,295                        | 15,434                         | 8.63                | 1,788                    |
| 1938                                  | 50,039.44               | 43,504                       | 37,867                        | 12,172                         | 8.67                | 1,404                    |
| 1939                                  | 51,053.88               | 44,320                       | 38,577                        | 12,477                         | 8.71                | 1,432                    |
| 1940                                  | 115,527.59              | 100,139                      | 87,164                        | 28,364                         | 8.75                | 3,242                    |
| 1941                                  | 161,074.19              | 139,398                      | 121,336                       | 39,738                         | 8.79                | 4,521                    |
| 1942                                  | 92,016.84               | 79,505                       | 69,204                        | 22,813                         | 8.83                | 2,584                    |
| 1943                                  | 50,310.10               | 43,396                       | 37,773                        | 12,537                         | 8.87                | 1,413                    |
| 1944                                  | 19,384.21               | 16,694                       | 14,531                        | 4,853                          | 8.90                | 545                      |
| 1945                                  | 15,143.08               | 13,019                       | 11,332                        | 3,811                          | 8.94                | 426                      |
| 1946                                  | 109,117.18              | 93,632                       | 81,500                        | 27,617                         | 8.98                | 3,075                    |
| 1947                                  | 85,732.11               | 73,440                       | 63,924                        | 21,808                         | 9.01                | 2,420                    |
| 1948                                  | 250,594.70              | 214,279                      | 186,515                       | 64,080                         | 9.04                | 7,088                    |
| 1949                                  | 775,402.45              | 661,682                      | 575,948                       | 199,454                        | 9.08                | 21,966                   |
| 1950                                  | 1,205,153.39            | 1,026,405                    | 893,414                       | 311,739                        | 9.11                | 34,219                   |
| 1951                                  | 910,363.34              | 773,782                      | 673,523                       | 236,840                        | 9.14                | 25,912                   |
| 1952                                  | 1,913,324.27            | 1,622,882                    | 1,412,605                     | 500,719                        | 9.17                | 54,604                   |
| 1953                                  | 1,360,166.14            | 1,151,231                    | 1,002,066                     | 358,100                        | 9.20                | 38,924                   |
| 1954                                  | 1,639,885.88            | 1,384,900                    | 1,205,459                     | 434,427                        | 9.23                | 47,067                   |
| 1955                                  | 3,970,510.86            | 3,345,989                    | 2,912,450                     | 1,058,061                      | 9.25                | 114,385                  |
| 1956                                  | 2,402,034.60            | 2,019,366                    | 1,757,717                     | 644,318                        | 9.28                | 69,431                   |
| 1957                                  | 3,016,971.41            | 2,530,002                    | 2,202,190                     | 814,781                        | 9.31                | 87,517                   |
| 1958                                  | 3,637,355.10            | 3,043,011                    | 2,648,728                     | 988,627                        | 9.33                | 105,962                  |
| 1959                                  | 2,920,623.49            | 2,437,377                    | 2,121,566                     | 799,057                        | 9.35                | 85,461                   |
| 1960                                  | 3,030,034.12            | 2,521,594                    | 2,194,871                     | 835,163                        | 9.38                | 89,037                   |
| 1961                                  | 3,373,406.23            | 2,799,792                    | 2,437,023                     | 936,383                        | 9.40                | 99,615                   |
| 1962                                  | 2,845,085.56            | 2,354,764                    | 2,049,657                     | 795,429                        | 9.42                | 84,440                   |
| 1963                                  | 3,760,143.43            | 3,103,058                    | 2,700,995                     | 1,059,148                      | 9.44                | 112,198                  |
| 1964                                  | 3,631,816.43            | 2,988,077                    | 2,600,912                     | 1,030,904                      | 9.46                | 108,975                  |
| 1965                                  | 2,902,853.55            | 2,380,775                    | 2,072,298                     | 830,556                        | 9.48                | 87,611                   |
| 1966                                  | 4,205,057.41            | 3,437,424                    | 2,992,038                     | 1,213,019                      | 9.50                | 127,686                  |
| 1967                                  | 3,958,640.77            | 3,224,867                    | 2,807,021                     | 1,151,620                      | 9.52                | 120,968                  |
| 1968                                  | 2,975,105.32            | 2,414,952                    | 2,102,047                     | 873,058                        | 9.54                | 91,516                   |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 376.3 MAINS - BARE STEEL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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 72-R1.5                                 |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 12-2025                                    |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                               |                         |                              |                               |                                |                     |                          |
| 1969                                                                  | 2,347,050.10            | 1,898,036                    | 1,652,108                     | 694,942                        | 9.56                | 72,693                   |
| 1970                                                                  | 1,060,500.69            | 854,467                      | 743,754                       | 316,747                        | 9.57                | 33,098                   |
| 1971                                                                  | 2,566,241.62            | 2,059,229                    | 1,792,415                     | 773,827                        | 9.59                | 80,691                   |
| 1972                                                                  | 943,051.63              | 753,536                      | 655,900                       | 287,152                        | 9.61                | 29,881                   |
| 1973                                                                  | 613,177.13              | 487,887                      | 424,672                       | 188,505                        | 9.62                | 19,595                   |
| 1974                                                                  | 1,369.21                | 1,084                        | 944                           | 425                            | 9.64                | 44                       |
| 1975                                                                  | 1,490.61                | 1,175                        | 1,023                         | 468                            | 9.65                | 48                       |
| 1976                                                                  | 251.97                  | 203                          | 177                           | 75                             | 9.60                | 8                        |
| 1977                                                                  | 2,262.99                | 1,808                        | 1,574                         | 689                            | 9.66                | 71                       |
| 1978                                                                  | 171,195.79              | 136,443                      | 118,764                       | 52,432                         | 9.53                | 5,502                    |
| 1979                                                                  | 17,875.45               | 14,125                       | 12,295                        | 5,580                          | 9.67                | 577                      |
| 1980                                                                  | 206,767.61              | 162,561                      | 141,497                       | 65,271                         | 9.63                | 6,778                    |
| 1981                                                                  | 58.77                   | 46                           | 40                            | 19                             | 9.63                | 2                        |
| 1982                                                                  | 252.33                  | 196                          | 171                           | 81                             | 9.69                | 8                        |
| 1983                                                                  | 7,639.24                | 5,894                        | 5,130                         | 2,509                          | 9.60                | 261                      |
| 1984                                                                  | 329.40                  | 251                          | 218                           | 111                            | 9.74                | 11                       |
| 1985                                                                  | 35.54                   | 27                           | 24                            | 12                             | 9.74                | 1                        |
| 1986                                                                  | 82.47                   | 62                           | 54                            | 28                             | 9.64                | 3                        |
| 1988                                                                  | 0.10                    |                              |                               |                                |                     |                          |
| 1989                                                                  | 898.42                  | 657                          | 572                           | 326                            | 9.69                | 34                       |
| 1990                                                                  | 11,746.60               | 8,479                        | 7,380                         | 4,367                          | 9.80                | 446                      |
| 1992                                                                  | 45,308.61               | 31,934                       | 27,796                        | 17,513                         | 9.81                | 1,785                    |
| 1997                                                                  | 4,024.19                | 2,631                        | 2,290                         | 1,734                          | 9.75                | 178                      |
| 1998                                                                  | 664.99                  | 426                          | 371                           | 294                            | 9.76                | 30                       |
| 2008                                                                  | 78.05                   | 34                           | 30                            | 48                             | 9.80                | 5                        |
| 2011                                                                  | 32,460.57               | 10,092                       | 8,784                         | 23,677                         | 9.79                | 2,418                    |
|                                                                       | 63,922,267.80           | 52,911,766                   | 46,055,992                    | 17,866,276                     |                     | 1,902,590                |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 9.4 2.98 |                         |                              |                               |                                |                     |                          |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 376.45 MAINS - OTHER

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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 72-R1.5 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0       |                         |                              |                               |                                |                     |                          |
| 1952                          | 99,517.94               | 61,591                       | 53,611                        | 45,907                         | 27.44               | 1,673                    |
| 1954                          | 26,581.04               | 16,052                       | 13,972                        | 12,609                         | 28.52               | 442                      |
| 1955                          | 100,019.53              | 59,637                       | 51,910                        | 48,110                         | 29.07               | 1,655                    |
| 1956                          | 93,552.93               | 55,053                       | 47,920                        | 45,633                         | 29.63               | 1,540                    |
| 1957                          | 99,186.17               | 57,596                       | 50,133                        | 49,053                         | 30.19               | 1,625                    |
| 1958                          | 78,967.51               | 45,231                       | 39,370                        | 39,598                         | 30.76               | 1,287                    |
| 1959                          | 91,746.97               | 51,811                       | 45,098                        | 46,649                         | 31.34               | 1,488                    |
| 1960                          | 65,128.16               | 36,255                       | 31,557                        | 33,571                         | 31.92               | 1,052                    |
| 1961                          | 34,874.19               | 19,127                       | 16,649                        | 18,225                         | 32.51               | 561                      |
| 1962                          | 91,020.46               | 49,164                       | 42,794                        | 48,226                         | 33.11               | 1,457                    |
| 1963                          | 88,753.49               | 47,200                       | 41,084                        | 47,669                         | 33.71               | 1,414                    |
| 1964                          | 169,642.30              | 88,779                       | 77,276                        | 92,366                         | 34.32               | 2,691                    |
| 1965                          | 87,774.88               | 45,192                       | 39,336                        | 48,439                         | 34.93               | 1,387                    |
| 1966                          | 119,627.62              | 60,545                       | 52,700                        | 66,928                         | 35.56               | 1,882                    |
| 1967                          | 83,397.42               | 41,490                       | 36,114                        | 47,283                         | 36.18               | 1,307                    |
| 1968                          | 314,213.03              | 153,528                      | 133,635                       | 180,578                        | 36.82               | 4,904                    |
| 1969                          | 692,519.46              | 332,215                      | 289,170                       | 403,349                        | 37.46               | 10,767                   |
| 1970                          | 707,855.41              | 333,280                      | 290,097                       | 417,758                        | 38.10               | 10,965                   |
| 1971                          | 1,426,663.54            | 658,847                      | 573,480                       | 853,184                        | 38.75               | 22,018                   |
| 1972                          | 1,177,780.70            | 533,111                      | 464,036                       | 713,745                        | 39.41               | 18,111                   |
| 1973                          | 2,700,378.45            | 1,197,537                    | 1,042,372                     | 1,658,006                      | 40.07               | 41,378                   |
| 1974                          | 3,057,271.47            | 1,327,376                    | 1,155,388                     | 1,901,883                      | 40.74               | 46,683                   |
| 1975                          | 3,031,633.32            | 1,288,020                    | 1,121,131                     | 1,910,502                      | 41.41               | 46,136                   |
| 1976                          | 3,000,963.36            | 1,585,109                    | 1,379,727                     | 1,621,236                      | 35.21               | 46,045                   |
| 1977                          | 5,549,399.52            | 2,856,831                    | 2,486,672                     | 3,062,728                      | 36.21               | 84,582                   |
| 1978                          | 5,414,679.24            | 2,734,954                    | 2,380,586                     | 3,034,093                      | 36.66               | 82,763                   |
| 1979                          | 6,442,927.00            | 3,191,182                    | 2,777,701                     | 3,665,226                      | 37.11               | 98,767                   |
| 1980                          | 7,998,458.77            | 3,880,852                    | 3,378,010                     | 4,620,449                      | 37.58               | 122,950                  |
| 1981                          | 9,387,154.24            | 4,458,898                    | 3,881,159                     | 5,505,995                      | 38.04               | 144,742                  |
| 1982                          | 9,319,935.89            | 4,329,110                    | 3,768,188                     | 5,551,748                      | 38.53               | 144,089                  |
| 1983                          | 7,428,696.50            | 3,371,142                    | 2,934,343                     | 4,494,354                      | 39.01               | 115,210                  |
| 1984                          | 8,587,206.38            | 3,804,132                    | 3,311,231                     | 5,275,975                      | 39.50               | 133,569                  |
| 1985                          | 8,059,741.54            | 3,481,002                    | 3,029,969                     | 5,029,773                      | 40.01               | 125,713                  |
| 1986                          | 8,851,655.44            | 3,723,891                    | 3,241,387                     | 5,610,268                      | 40.51               | 138,491                  |
| 1987                          | 8,505,063.57            | 3,504,086                    | 3,050,062                     | 5,455,002                      | 40.55               | 134,525                  |
| 1988                          | 9,811,594.08            | 3,927,581                    | 3,418,685                     | 6,392,909                      | 41.08               | 155,621                  |
| 1989                          | 8,802,331.81            | 3,417,945                    | 2,975,082                     | 5,827,250                      | 41.61               | 140,044                  |
| 1990                          | 7,513,260.11            | 2,826,488                    | 2,460,260                     | 5,053,000                      | 42.15               | 119,881                  |
| 1991                          | 7,443,903.85            | 2,708,092                    | 2,357,205                     | 5,086,699                      | 42.70               | 119,126                  |
| 1992                          | 8,252,751.75            | 2,918,173                    | 2,540,066                     | 5,712,686                      | 42.81               | 133,443                  |
| 1993                          | 8,907,365.22            | 3,034,739                    | 2,641,528                     | 6,265,837                      | 43.38               | 144,441                  |
| 1994                          | 10,842,061.39           | 3,552,944                    | 3,092,589                     | 7,749,472                      | 43.94               | 176,365                  |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 376.45 MAINS - OTHER

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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 72-R1.5                                |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                      |                         |                              |                               |                                |                     |                          |
| 1995                                                         | 10,891,376.02           | 3,447,121                    | 3,000,478                     | 7,890,898                      | 44.10               | 178,932                  |
| 1996                                                         | 10,751,848.41           | 3,256,735                    | 2,834,760                     | 7,917,088                      | 44.69               | 177,156                  |
| 1997                                                         | 13,482,116.78           | 3,923,296                    | 3,414,955                     | 10,067,162                     | 44.87               | 224,363                  |
| 1998                                                         | 11,584,934.64           | 3,207,868                    | 2,792,225                     | 8,792,710                      | 45.48               | 193,331                  |
| 1999                                                         | 10,958,968.66           | 2,896,455                    | 2,521,162                     | 8,437,807                      | 45.70               | 184,635                  |
| 2000                                                         | 10,085,659.30           | 2,534,526                    | 2,206,128                     | 7,879,531                      | 45.93               | 171,555                  |
| 2001                                                         | 11,945,641.86           | 2,841,868                    | 2,473,647                     | 9,471,995                      | 46.19               | 205,066                  |
| 2002                                                         | 7,733,179.75            | 1,733,006                    | 1,508,461                     | 6,224,719                      | 46.46               | 133,980                  |
| 2003                                                         | 11,632,642.64           | 2,440,528                    | 2,124,309                     | 9,508,334                      | 46.76               | 203,343                  |
| 2004                                                         | 18,522,798.84           | 3,615,650                    | 3,147,170                     | 15,375,629                     | 47.06               | 326,724                  |
| 2005                                                         | 24,753,186.37           | 4,485,277                    | 3,904,120                     | 20,849,066                     | 47.06               | 443,032                  |
| 2006                                                         | 13,548,906.93           | 2,245,054                    | 1,954,163                     | 11,594,744                     | 47.40               | 244,615                  |
| 2007                                                         | 38,384,241.81           | 5,784,505                    | 5,035,007                     | 33,349,235                     | 47.45               | 702,829                  |
| 2008                                                         | 58,645,595.07           | 7,958,207                    | 6,927,063                     | 51,718,532                     | 47.23               | 1,095,036                |
| 2009                                                         | 36,110,532.69           | 4,311,598                    | 3,752,944                     | 32,357,589                     | 47.34               | 683,515                  |
| 2010                                                         | 47,473,473.12           | 4,913,504                    | 4,276,862                     | 43,196,611                     | 46.94               | 920,252                  |
| 2011                                                         | 86,387,659.86           | 7,481,171                    | 6,511,836                     | 79,875,824                     | 46.60               | 1,714,073                |
| 2012                                                         | 95,136,208.15           | 6,564,398                    | 5,713,849                     | 89,422,359                     | 46.09               | 1,940,168                |
| 2013                                                         | 121,528,233.69          | 6,197,940                    | 5,394,873                     | 116,133,361                    | 44.98               | 2,581,889                |
| 2014                                                         | 109,592,233.98          | 3,495,992                    | 3,043,017                     | 106,549,217                    | 43.03               | 2,476,161                |
| 2015                                                         | 124,407,200.00          | 1,343,598                    | 1,169,508                     | 123,237,692                    | 38.34               | 3,214,337                |
|                                                              | 1,038,113,894.22        | 154,544,085                  | 134,519,820                   | 903,594,074                    |                     | 20,597,782               |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. |                         |                              |                               |                                |                     | 43.9 1.98                |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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-R0.5 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0       |                         |                              |                               |                                |                     |                          |
| 1924                          | 141.60                  | 142                          | 142                           |                                |                     |                          |
| 1925                          | 299.81                  | 300                          | 300                           |                                |                     |                          |
| 1926                          | 141.84                  | 141                          | 132                           | 10                             | 0.30                | 10                       |
| 1933                          | 1,047.32                | 963                          | 899                           | 148                            | 3.61                | 41                       |
| 1934                          | 40.44                   | 37                           | 35                            | 5                              | 4.06                | 1                        |
| 1935                          | 159.01                  | 143                          | 134                           | 25                             | 4.49                | 6                        |
| 1938                          | 63.21                   | 55                           | 51                            | 12                             | 5.77                | 2                        |
| 1939                          | 121.42                  | 105                          | 98                            | 23                             | 6.18                | 4                        |
| 1941                          | 17.55                   | 15                           | 14                            | 4                              | 6.99                | 1                        |
| 1942                          | 5,090.16                | 4,254                        | 3,972                         | 1,118                          | 7.39                | 151                      |
| 1943                          | 191.21                  | 158                          | 148                           | 43                             | 7.79                | 6                        |
| 1944                          | 175.99                  | 144                          | 134                           | 42                             | 8.19                | 5                        |
| 1945                          | 1,015.93                | 822                          | 768                           | 248                            | 8.58                | 29                       |
| 1946                          | 566.78                  | 454                          | 424                           | 143                            | 8.98                | 16                       |
| 1947                          | 209.61                  | 166                          | 155                           | 55                             | 9.38                | 6                        |
| 1948                          | 522.91                  | 409                          | 382                           | 141                            | 9.77                | 14                       |
| 1949                          | 219.78                  | 170                          | 159                           | 61                             | 10.17               | 6                        |
| 1950                          | 46.75                   | 36                           | 34                            | 13                             | 10.57               | 1                        |
| 1951                          | 7,428.15                | 5,617                        | 5,245                         | 2,183                          | 10.97               | 199                      |
| 1952                          | 10,373.86               | 7,753                        | 7,239                         | 3,135                          | 11.37               | 276                      |
| 1953                          | 37,983.31               | 28,040                       | 26,182                        | 11,801                         | 11.78               | 1,002                    |
| 1954                          | 3,207.81                | 2,340                        | 2,185                         | 1,023                          | 12.18               | 84                       |
| 1955                          | 51,285.42               | 36,937                       | 34,490                        | 16,795                         | 12.59               | 1,334                    |
| 1956                          | 49,571.38               | 35,240                       | 32,905                        | 16,666                         | 13.01               | 1,281                    |
| 1957                          | 79,699.83               | 55,932                       | 52,227                        | 27,473                         | 13.42               | 2,047                    |
| 1958                          | 153,235.72              | 106,073                      | 99,046                        | 54,190                         | 13.85               | 3,913                    |
| 1959                          | 186,837.61              | 127,590                      | 119,137                       | 67,701                         | 14.27               | 4,744                    |
| 1960                          | 239,075.70              | 160,977                      | 150,312                       | 88,764                         | 14.70               | 6,038                    |
| 1961                          | 126,406.71              | 83,906                       | 78,347                        | 48,060                         | 15.13               | 3,176                    |
| 1962                          | 213,627.24              | 139,712                      | 130,456                       | 83,171                         | 15.57               | 5,342                    |
| 1963                          | 154,178.01              | 99,325                       | 92,745                        | 61,433                         | 16.01               | 3,837                    |
| 1964                          | 94,299.08               | 59,827                       | 55,863                        | 38,436                         | 16.45               | 2,337                    |
| 1965                          | 81,082.94               | 50,631                       | 47,277                        | 33,806                         | 16.90               | 2,000                    |
| 1966                          | 138,064.57              | 84,802                       | 79,184                        | 58,881                         | 17.36               | 3,392                    |
| 1967                          | 56,002.67               | 33,826                       | 31,585                        | 24,418                         | 17.82               | 1,370                    |
| 1968                          | 59,502.27               | 35,331                       | 32,990                        | 26,512                         | 18.28               | 1,450                    |
| 1969                          | 75,034.24               | 43,770                       | 40,870                        | 34,164                         | 18.75               | 1,822                    |
| 1970                          | 41,697.87               | 23,879                       | 22,297                        | 19,401                         | 19.23               | 1,009                    |
| 1971                          | 180,669.82              | 101,536                      | 94,809                        | 85,861                         | 19.71               | 4,356                    |
| 1972                          | 143,868.78              | 79,319                       | 74,064                        | 69,805                         | 20.19               | 3,457                    |
| 1973                          | 140,441.97              | 75,870                       | 70,844                        | 69,598                         | 20.69               | 3,364                    |
| 1974                          | 125,014.47              | 66,174                       | 61,790                        | 63,224                         | 21.18               | 2,985                    |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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-R0.5 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0       |                         |                              |                               |                                |                     |                          |
| 1975                          | 81,455.30               | 42,212                       | 39,415                        | 42,040                         | 21.68               | 1,939                    |
| 1976                          | 91,356.53               | 61,574                       | 57,495                        | 33,862                         | 19.06               | 1,777                    |
| 1977                          | 81,480.39               | 53,842                       | 50,275                        | 31,205                         | 19.72               | 1,582                    |
| 1978                          | 69,437.62               | 45,204                       | 42,209                        | 27,229                         | 20.06               | 1,357                    |
| 1979                          | 110,035.61              | 70,522                       | 65,850                        | 44,186                         | 20.40               | 2,166                    |
| 1980                          | 178,248.23              | 112,368                      | 104,924                       | 73,324                         | 20.76               | 3,532                    |
| 1981                          | 187,042.70              | 115,873                      | 108,196                       | 78,847                         | 21.14               | 3,730                    |
| 1982                          | 499,260.70              | 303,650                      | 283,533                       | 215,728                        | 21.53               | 10,020                   |
| 1983                          | 181,276.83              | 108,712                      | 101,510                       | 79,767                         | 21.64               | 3,686                    |
| 1984                          | 199,182.84              | 117,020                      | 109,267                       | 89,916                         | 22.06               | 4,076                    |
| 1985                          | 243,156.51              | 139,791                      | 130,530                       | 112,627                        | 22.49               | 5,008                    |
| 1986                          | 226,871.37              | 127,479                      | 119,034                       | 107,837                        | 22.94               | 4,701                    |
| 1987                          | 203,194.12              | 112,021                      | 104,600                       | 98,594                         | 23.13               | 4,263                    |
| 1988                          | 380,559.54              | 204,513                      | 190,964                       | 189,596                        | 23.60               | 8,034                    |
| 1989                          | 415,178.96              | 218,260                      | 203,800                       | 211,379                        | 23.83               | 8,870                    |
| 1990                          | 300,191.19              | 154,118                      | 143,908                       | 156,283                        | 24.09               | 6,487                    |
| 1991                          | 285,905.51              | 143,096                      | 133,616                       | 152,290                        | 24.37               | 6,249                    |
| 1992                          | 157,589.01              | 76,383                       | 71,323                        | 86,266                         | 24.89               | 3,466                    |
| 1993                          | 223,587.35              | 105,757                      | 98,751                        | 124,836                        | 24.98               | 4,997                    |
| 1994                          | 384,077.79              | 176,023                      | 164,361                       | 219,717                        | 25.31               | 8,681                    |
| 1995                          | 236,973.59              | 104,979                      | 98,024                        | 138,950                        | 25.67               | 5,413                    |
| 1996                          | 540,564.49              | 231,956                      | 216,589                       | 323,975                        | 25.83               | 12,543                   |
| 1997                          | 470,550.42              | 194,102                      | 181,243                       | 289,307                        | 26.23               | 11,030                   |
| 1998                          | 390,800.13              | 155,187                      | 144,906                       | 245,894                        | 26.44               | 9,300                    |
| 1999                          | 785,539.28              | 300,469                      | 280,563                       | 504,976                        | 26.50               | 19,056                   |
| 2000                          | 1,125,728.96            | 411,341                      | 384,090                       | 741,639                        | 26.78               | 27,694                   |
| 2001                          | 324,218.55              | 113,120                      | 105,626                       | 218,593                        | 26.90               | 8,126                    |
| 2002                          | 477,615.53              | 158,282                      | 147,796                       | 329,820                        | 27.07               | 12,184                   |
| 2003                          | 678,757.99              | 213,198                      | 199,074                       | 479,684                        | 27.11               | 17,694                   |
| 2004                          | 445,696.57              | 131,792                      | 123,061                       | 322,636                        | 27.19               | 11,866                   |
| 2005                          | 549,631.88              | 152,303                      | 142,213                       | 407,419                        | 27.18               | 14,990                   |
| 2006                          | 1,332,002.54            | 342,458                      | 319,770                       | 1,012,233                      | 27.21               | 37,201                   |
| 2007                          | 412,699.21              | 97,975                       | 91,484                        | 321,215                        | 27.04               | 11,879                   |
| 2008                          | 1,904,611.60            | 411,015                      | 383,785                       | 1,520,827                      | 26.95               | 56,431                   |
| 2009                          | 1,366,320.62            | 265,613                      | 248,016                       | 1,118,305                      | 26.59               | 42,057                   |
| 2010                          | 1,508,129.87            | 258,192                      | 241,087                       | 1,267,043                      | 26.23               | 48,305                   |
| 2011                          | 1,969,063.60            | 288,665                      | 269,541                       | 1,699,523                      | 25.70               | 66,129                   |
| 2012                          | 1,924,024.22            | 231,460                      | 216,126                       | 1,707,898                      | 24.99               | 68,343                   |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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-R0.5                                     |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                           |                         |                              |                               |                                |                     |                          |
| 2013                                                              | 3,212,200.30            | 294,880                      | 275,344                       | 2,936,856                      | 23.90               | 122,881                  |
| 2014                                                              | 11,383,206.83           | 685,269                      | 639,870                       | 10,743,337                     | 22.11               | 485,904                  |
| 2015                                                              | 1,031,300.00            | 22,998                       | 21,474                        | 1,009,826                      | 18.24               | 55,363                   |
|                                                                   | 39,027,385.03           | 9,106,593                    | 8,503,313                     | 30,524,072                     |                     | 1,300,124                |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 23.5 |                         |                              |                               |                                |                     | 3.33                     |

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, 2015

| 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-S2.5                                          |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                                |                         |                              |                               |                                |                     |                          |
| 1976                                                                   | 591.42                  | 515                          | 471                           | 120                            | 5.83                | 21                       |
| 1983                                                                   | 32,512.26               | 26,033                       | 23,805                        | 8,707                          | 8.07                | 1,079                    |
| 1984                                                                   | 1,528.08                | 1,205                        | 1,102                         | 426                            | 8.42                | 51                       |
| 1987                                                                   | 7,476.62                | 5,588                        | 5,110                         | 2,367                          | 9.60                | 247                      |
| 1988                                                                   | 15,907.49               | 11,644                       | 10,647                        | 5,260                          | 10.04               | 524                      |
| 1989                                                                   | 35,024.29               | 24,979                       | 22,841                        | 12,183                         | 10.62               | 1,147                    |
| 1996                                                                   | 48,076.94               | 27,442                       | 25,093                        | 22,984                         | 14.60               | 1,574                    |
|                                                                        | 141,117.10              | 97,406                       | 89,069                        | 52,048                         |                     | 4,643                    |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 11.2 3.29 |                         |                              |                               |                                |                     |                          |



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 380.3 SERVICES - BARE STEEL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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.. 12-2025    |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0               |                         |                              |                               |                                |                     |                          |
| 1914                                  | 265.99                  | 266                          | 266                           |                                |                     |                          |
| 1915                                  | 1,526.47                | 1,526                        | 1,526                         |                                |                     |                          |
| 1916                                  | 1,225.55                | 1,218                        | 1,226                         |                                |                     |                          |
| 1917                                  | 889.88                  | 876                          | 890                           |                                |                     |                          |
| 1918                                  | 867.67                  | 846                          | 867                           | 1                              | 1.27                | 1                        |
| 1919                                  | 1,186.00                | 1,144                        | 1,173                         | 13                             | 1.75                | 7                        |
| 1920                                  | 1,097.79                | 1,049                        | 1,076                         | 22                             | 2.23                | 10                       |
| 1921                                  | 952.91                  | 901                          | 924                           | 29                             | 2.70                | 11                       |
| 1922                                  | 2,441.93                | 2,287                        | 2,345                         | 97                             | 3.17                | 31                       |
| 1923                                  | 4,595.40                | 4,262                        | 4,370                         | 225                            | 3.63                | 62                       |
| 1924                                  | 4,256.34                | 3,909                        | 4,008                         | 248                            | 4.08                | 61                       |
| 1925                                  | 8,233.06                | 7,487                        | 7,677                         | 556                            | 4.53                | 123                      |
| 1926                                  | 8,130.54                | 7,324                        | 7,509                         | 622                            | 4.96                | 125                      |
| 1927                                  | 7,851.16                | 7,016                        | 7,194                         | 657                            | 5.32                | 123                      |
| 1928                                  | 7,941.96                | 7,049                        | 7,228                         | 714                            | 5.62                | 127                      |
| 1929                                  | 8,098.33                | 7,147                        | 7,328                         | 770                            | 5.87                | 131                      |
| 1930                                  | 5,401.97                | 4,742                        | 4,862                         | 540                            | 6.10                | 89                       |
| 1931                                  | 2,933.69                | 2,564                        | 2,629                         | 305                            | 6.29                | 48                       |
| 1932                                  | 1,921.37                | 1,673                        | 1,715                         | 206                            | 6.46                | 32                       |
| 1933                                  | 2,834.31                | 2,458                        | 2,520                         | 314                            | 6.61                | 48                       |
| 1934                                  | 2,418.58                | 2,091                        | 2,144                         | 275                            | 6.75                | 41                       |
| 1935                                  | 2,171.90                | 1,871                        | 1,918                         | 254                            | 6.88                | 37                       |
| 1936                                  | 4,385.64                | 3,768                        | 3,863                         | 523                            | 7.00                | 75                       |
| 1937                                  | 6,226.99                | 5,335                        | 5,470                         | 757                            | 7.11                | 106                      |
| 1938                                  | 9,473.87                | 8,093                        | 8,298                         | 1,176                          | 7.22                | 163                      |
| 1939                                  | 16,180.19               | 13,788                       | 14,137                        | 2,043                          | 7.31                | 279                      |
| 1940                                  | 14,705.30               | 12,498                       | 12,815                        | 1,890                          | 7.41                | 255                      |
| 1941                                  | 17,038.27               | 14,447                       | 14,813                        | 2,225                          | 7.49                | 297                      |
| 1942                                  | 16,406.16               | 13,876                       | 14,227                        | 2,179                          | 7.58                | 287                      |
| 1943                                  | 7,027.24                | 5,931                        | 6,081                         | 946                            | 7.65                | 124                      |
| 1944                                  | 5,550.56                | 4,673                        | 4,791                         | 760                            | 7.73                | 98                       |
| 1945                                  | 5,771.78                | 4,848                        | 4,971                         | 801                            | 7.80                | 103                      |
| 1946                                  | 16,105.73               | 13,498                       | 13,840                        | 2,266                          | 7.87                | 288                      |
| 1947                                  | 31,085.31               | 25,991                       | 26,649                        | 4,436                          | 7.94                | 559                      |
| 1948                                  | 40,259.13               | 33,588                       | 34,439                        | 5,820                          | 8.00                | 728                      |
| 1949                                  | 59,731.97               | 49,710                       | 50,969                        | 8,763                          | 8.07                | 1,086                    |
| 1950                                  | 77,705.99               | 64,520                       | 66,154                        | 11,552                         | 8.13                | 1,421                    |
| 1951                                  | 99,141.68               | 82,140                       | 84,220                        | 14,922                         | 8.18                | 1,824                    |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 380.3 SERVICES - BARE STEEL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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.. 12-2025                               |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                          |                         |                              |                               |                                |                     |                          |
| 1952                                                             | 107,289.60              | 88,674                       | 90,920                        | 16,370                         | 8.24                | 1,987                    |
| 1953                                                             | 99,577.18               | 82,110                       | 84,189                        | 15,388                         | 8.29                | 1,856                    |
| 1954                                                             | 157,014.02              | 129,136                      | 132,406                       | 24,608                         | 8.35                | 2,947                    |
|                                                                  | 867,919.41              | 726,330                      | 744,647                       | 123,272                        |                     | 15,590                   |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 7.9 |                         |                              |                               |                                |                     | 1.80                     |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 380.45 SERVICES - OTHER

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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                          | 230,957.66              | 153,217                      | 157,081                       | 73,877                         | 16.83               | 4,390                    |
| 1956                          | 290,074.04              | 189,882                      | 194,671                       | 95,403                         | 17.27               | 5,524                    |
| 1957                          | 272,147.74              | 175,753                      | 180,185                       | 91,963                         | 17.71               | 5,193                    |
| 1958                          | 345,919.49              | 220,351                      | 225,908                       | 120,011                        | 18.15               | 6,612                    |
| 1959                          | 486,260.44              | 305,372                      | 313,073                       | 173,187                        | 18.60               | 9,311                    |
| 1960                          | 503,051.79              | 311,288                      | 319,138                       | 183,914                        | 19.06               | 9,649                    |
| 1961                          | 553,624.97              | 337,601                      | 346,115                       | 207,510                        | 19.51               | 10,636                   |
| 1962                          | 565,959.75              | 339,802                      | 348,371                       | 217,589                        | 19.98               | 10,890                   |
| 1963                          | 688,809.26              | 407,224                      | 417,494                       | 271,315                        | 20.44               | 13,274                   |
| 1964                          | 704,762.05              | 410,031                      | 420,371                       | 284,391                        | 20.91               | 13,601                   |
| 1965                          | 689,027.57              | 394,262                      | 404,205                       | 284,823                        | 21.39               | 13,316                   |
| 1966                          | 941,812.83              | 529,864                      | 543,226                       | 398,587                        | 21.87               | 18,225                   |
| 1967                          | 937,654.01              | 518,523                      | 531,599                       | 406,055                        | 22.35               | 18,168                   |
| 1968                          | 1,010,393.10            | 548,846                      | 562,687                       | 447,706                        | 22.84               | 19,602                   |
| 1969                          | 755,748.85              | 402,965                      | 413,127                       | 342,622                        | 23.34               | 14,680                   |
| 1970                          | 567,044.71              | 296,791                      | 304,276                       | 262,769                        | 23.83               | 11,027                   |
| 1971                          | 633,593.20              | 325,160                      | 333,360                       | 300,233                        | 24.34               | 12,335                   |
| 1972                          | 633,982.88              | 318,893                      | 326,935                       | 307,048                        | 24.85               | 12,356                   |
| 1973                          | 514,974.28              | 253,779                      | 260,179                       | 254,795                        | 25.36               | 10,047                   |
| 1974                          | 143,496.77              | 69,223                       | 70,969                        | 72,528                         | 25.88               | 2,802                    |
| 1975                          | 300,816.90              | 141,986                      | 145,567                       | 155,250                        | 26.40               | 5,881                    |
| 1976                          | 851,967.78              | 537,336                      | 550,887                       | 301,081                        | 23.08               | 13,045                   |
| 1977                          | 2,556,394.54            | 1,591,100                    | 1,631,225                     | 925,170                        | 23.31               | 39,690                   |
| 1978                          | 1,783,770.13            | 1,094,521                    | 1,122,123                     | 661,647                        | 23.56               | 28,083                   |
| 1979                          | 2,326,746.32            | 1,398,142                    | 1,433,401                     | 893,345                        | 24.19               | 36,930                   |
| 1980                          | 3,304,567.83            | 1,954,652                    | 2,003,945                     | 1,300,623                      | 24.46               | 53,173                   |
| 1981                          | 3,496,069.45            | 2,033,314                    | 2,084,591                     | 1,411,478                      | 24.76               | 57,006                   |
| 1982                          | 2,973,624.30            | 1,699,129                    | 1,741,978                     | 1,231,646                      | 25.06               | 49,148                   |
| 1983                          | 2,752,557.79            | 1,543,634                    | 1,582,562                     | 1,169,996                      | 25.39               | 46,081                   |
| 1984                          | 3,182,868.59            | 1,749,941                    | 1,794,072                     | 1,388,797                      | 25.73               | 53,976                   |
| 1985                          | 3,552,118.00            | 1,912,460                    | 1,960,689                     | 1,591,429                      | 26.08               | 61,021                   |
| 1986                          | 4,043,993.13            | 2,129,567                    | 2,183,271                     | 1,860,722                      | 26.45               | 70,349                   |
| 1987                          | 4,642,473.36            | 2,387,624                    | 2,447,836                     | 2,194,637                      | 26.83               | 81,798                   |
| 1988                          | 5,558,539.41            | 2,788,719                    | 2,859,046                     | 2,699,493                      | 27.23               | 99,137                   |
| 1989                          | 5,354,209.61            | 2,631,059                    | 2,697,410                     | 2,656,800                      | 27.34               | 97,176                   |
| 1990                          | 5,570,517.28            | 2,661,593                    | 2,728,714                     | 2,841,803                      | 27.78               | 102,297                  |
| 1991                          | 5,201,289.55            | 2,425,881                    | 2,487,058                     | 2,714,232                      | 27.94               | 97,145                   |
| 1992                          | 5,916,129.24            | 2,673,499                    | 2,740,920                     | 3,175,209                      | 28.40               | 111,803                  |
| 1993                          | 6,255,670.09            | 2,748,741                    | 2,818,060                     | 3,437,610                      | 28.60               | 120,196                  |
| 1994                          | 7,362,961.27            | 3,138,094                    | 3,217,232                     | 4,145,729                      | 28.83               | 143,799                  |
| 1995                          | 7,006,344.01            | 2,889,416                    | 2,962,282                     | 4,044,062                      | 29.09               | 139,019                  |
| 1996                          | 6,535,856.85            | 2,601,271                    | 2,666,871                     | 3,868,986                      | 29.37               | 131,733                  |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 380.45 SERVICES - OTHER

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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                                      |                         |                              |                               |                                |                     |                          |
| 1997                                                         | 7,015,430.04            | 2,700,239                    | 2,768,335                     | 4,247,095                      | 29.43               | 144,312                  |
| 1998                                                         | 7,538,084.45            | 2,783,061                    | 2,853,245                     | 4,684,839                      | 29.75               | 157,474                  |
| 1999                                                         | 7,856,773.32            | 2,786,012                    | 2,856,271                     | 5,000,502                      | 29.88               | 167,353                  |
| 2000                                                         | 7,715,408.73            | 2,617,067                    | 2,683,065                     | 5,032,344                      | 30.04               | 167,521                  |
| 2001                                                         | 7,390,926.77            | 2,397,617                    | 2,458,081                     | 4,932,846                      | 30.03               | 164,264                  |
| 2002                                                         | 6,549,326.36            | 2,011,953                    | 2,062,691                     | 4,486,635                      | 30.25               | 148,319                  |
| 2003                                                         | 6,219,303.28            | 1,814,793                    | 1,860,559                     | 4,358,744                      | 30.14               | 144,617                  |
| 2004                                                         | 9,986,914.19            | 2,736,414                    | 2,805,422                     | 7,181,492                      | 30.25               | 237,405                  |
| 2005                                                         | 9,171,924.04            | 2,349,847                    | 2,409,106                     | 6,762,818                      | 30.24               | 223,638                  |
| 2006                                                         | 9,776,027.59            | 2,328,650                    | 2,387,375                     | 7,388,653                      | 30.11               | 245,389                  |
| 2007                                                         | 13,816,483.57           | 3,035,481                    | 3,112,031                     | 10,704,453                     | 29.90               | 358,008                  |
| 2008                                                         | 15,640,193.37           | 3,131,167                    | 3,210,130                     | 12,430,063                     | 29.62               | 419,651                  |
| 2009                                                         | 14,583,738.15           | 2,620,698                    | 2,686,788                     | 11,896,950                     | 29.30               | 406,039                  |
| 2010                                                         | 17,006,606.02           | 2,680,241                    | 2,747,832                     | 14,258,774                     | 28.95               | 492,531                  |
| 2011                                                         | 24,070,986.44           | 3,254,397                    | 3,336,468                     | 20,734,518                     | 28.26               | 733,706                  |
| 2012                                                         | 30,244,007.52           | 3,348,012                    | 3,432,444                     | 26,811,564                     | 27.45               | 976,742                  |
| 2013                                                         | 36,026,669.54           | 3,047,856                    | 3,124,718                     | 32,901,952                     | 26.15               | 1,258,201                |
| 2014                                                         | 49,099,445.19           | 2,720,109                    | 2,788,706                     | 46,310,739                     | 24.16               | 1,916,835                |
| 2015                                                         | 37,849,600.00           | 775,917                      | 795,484                       | 37,054,116                     | 19.95               | 1,857,349                |
|                                                              | 419,556,629.39          | 100,380,037                  | 102,911,461                   | 316,645,168                    |                     | 12,079,478               |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. |                         |                              |                               |                                |                     | 26.2 2.88                |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 381 METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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 43-S1.5 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0       |                         |                              |                               |                                |                     |                          |
| 1913                          | 2.80                    | 3                            | 3                             |                                |                     |                          |
| 1914                          | 15.70                   | 16                           | 16                            |                                |                     |                          |
| 1915                          | 20.99                   | 21                           | 21                            |                                |                     |                          |
| 1916                          | 55.77                   | 56                           | 56                            |                                |                     |                          |
| 1917                          | 168.94                  | 169                          | 169                           |                                |                     |                          |
| 1918                          | 677.78                  | 678                          | 678                           |                                |                     |                          |
| 1919                          | 460.14                  | 460                          | 460                           |                                |                     |                          |
| 1920                          | 381.61                  | 382                          | 382                           |                                |                     |                          |
| 1921                          | 595.07                  | 595                          | 595                           |                                |                     |                          |
| 1922                          | 1,513.28                | 1,513                        | 1,513                         |                                |                     |                          |
| 1923                          | 1,580.61                | 1,581                        | 1,581                         |                                |                     |                          |
| 1924                          | 1,365.77                | 1,366                        | 1,366                         |                                |                     |                          |
| 1925                          | 2,847.03                | 2,847                        | 2,847                         |                                |                     |                          |
| 1926                          | 3,356.19                | 3,356                        | 3,356                         |                                |                     |                          |
| 1927                          | 4,222.35                | 4,222                        | 4,222                         |                                |                     |                          |
| 1928                          | 5,284.92                | 5,285                        | 5,285                         |                                |                     |                          |
| 1929                          | 4,545.60                | 4,546                        | 4,546                         |                                |                     |                          |
| 1930                          | 352.02                  | 351                          | 352                           |                                |                     |                          |
| 1931                          | 22.50                   | 22                           | 22                            |                                |                     |                          |
| 1934                          | 118.11                  | 115                          | 116                           | 2                              | 1.20                | 2                        |
| 1935                          | 24.47                   | 24                           | 24                            |                                |                     |                          |
| 1936                          | 430.10                  | 413                          | 418                           | 12                             | 1.72                | 7                        |
| 1937                          | 70.67                   | 67                           | 68                            | 3                              | 1.98                | 2                        |
| 1938                          | 213.76                  | 203                          | 205                           | 9                              | 2.24                | 4                        |
| 1939                          | 391.81                  | 369                          | 373                           | 19                             | 2.49                | 8                        |
| 1941                          | 2,045.19                | 1,902                        | 1,925                         | 120                            | 3.00                | 40                       |
| 1942                          | 3,074.58                | 2,842                        | 2,876                         | 199                            | 3.25                | 61                       |
| 1943                          | 1,775.22                | 1,631                        | 1,651                         | 124                            | 3.50                | 35                       |
| 1944                          | 110.69                  | 101                          | 102                           | 9                              | 3.75                | 2                        |
| 1945                          | 659.02                  | 598                          | 605                           | 54                             | 4.01                | 13                       |
| 1946                          | 3,985.32                | 3,590                        | 3,633                         | 352                            | 4.26                | 83                       |
| 1947                          | 2,156.29                | 1,930                        | 1,953                         | 203                            | 4.51                | 45                       |
| 1948                          | 14,981.09               | 13,319                       | 13,480                        | 1,501                          | 4.77                | 315                      |
| 1949                          | 16,233.43               | 14,334                       | 14,507                        | 1,726                          | 5.03                | 343                      |
| 1950                          | 27,959.49               | 24,520                       | 24,816                        | 3,143                          | 5.29                | 594                      |
| 1951                          | 52,907.96               | 46,079                       | 46,636                        | 6,272                          | 5.55                | 1,130                    |
| 1952                          | 33,887.21               | 29,308                       | 29,662                        | 4,225                          | 5.81                | 727                      |
| 1953                          | 18,453.74               | 15,844                       | 16,035                        | 2,419                          | 6.08                | 398                      |
| 1954                          | 52,016.69               | 44,335                       | 44,871                        | 7,146                          | 6.35                | 1,125                    |
| 1955                          | 65,466.83               | 55,372                       | 56,041                        | 9,426                          | 6.63                | 1,422                    |
| 1956                          | 30,971.14               | 25,994                       | 26,308                        | 4,663                          | 6.91                | 675                      |
| 1957                          | 177,028.33              | 147,427                      | 149,208                       | 27,820                         | 7.19                | 3,869                    |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 381 METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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 43-S1.5 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0       |                         |                              |                               |                                |                     |                          |
| 1958                          | 171,894.08              | 141,993                      | 143,708                       | 28,186                         | 7.48                | 3,768                    |
| 1959                          | 174,799.93              | 143,214                      | 144,944                       | 29,856                         | 7.77                | 3,842                    |
| 1960                          | 215,453.48              | 175,019                      | 177,133                       | 38,320                         | 8.07                | 4,748                    |
| 1961                          | 244,979.87              | 197,238                      | 199,620                       | 45,360                         | 8.38                | 5,413                    |
| 1962                          | 226,641.87              | 180,840                      | 183,024                       | 43,618                         | 8.69                | 5,019                    |
| 1963                          | 152,538.32              | 120,612                      | 122,069                       | 30,469                         | 9.00                | 3,385                    |
| 1964                          | 211,517.04              | 165,622                      | 167,623                       | 43,894                         | 9.33                | 4,705                    |
| 1965                          | 274,783.59              | 213,053                      | 215,626                       | 59,158                         | 9.66                | 6,124                    |
| 1966                          | 335,235.45              | 257,350                      | 260,458                       | 74,777                         | 9.99                | 7,485                    |
| 1967                          | 305,530.95              | 232,060                      | 234,863                       | 70,668                         | 10.34               | 6,834                    |
| 1968                          | 214,195.15              | 160,946                      | 162,890                       | 51,305                         | 10.69               | 4,799                    |
| 1969                          | 231,617.17              | 172,096                      | 174,175                       | 57,442                         | 11.05               | 5,198                    |
| 1970                          | 199,466.26              | 146,492                      | 148,261                       | 51,205                         | 11.42               | 4,484                    |
| 1971                          | 308,629.01              | 223,935                      | 226,640                       | 81,989                         | 11.80               | 6,948                    |
| 1972                          | 255,505.87              | 183,073                      | 185,284                       | 70,222                         | 12.19               | 5,761                    |
| 1973                          | 145,285.55              | 102,781                      | 104,022                       | 41,264                         | 12.58               | 3,280                    |
| 1974                          | 191,727.14              | 133,808                      | 135,424                       | 56,303                         | 12.99               | 4,334                    |
| 1975                          | 238,445.06              | 164,084                      | 166,066                       | 72,379                         | 13.41               | 5,397                    |
| 1976                          | 114,710.94              | 87,261                       | 88,315                        | 26,396                         | 12.40               | 2,129                    |
| 1977                          | 192,851.56              | 145,217                      | 146,971                       | 45,881                         | 12.60               | 3,641                    |
| 1978                          | 196,912.33              | 145,873                      | 147,635                       | 49,277                         | 13.09               | 3,764                    |
| 1979                          | 313,350.35              | 229,372                      | 232,143                       | 81,207                         | 13.33               | 6,092                    |
| 1980                          | 631,550.31              | 456,295                      | 461,807                       | 169,743                        | 13.60               | 12,481                   |
| 1981                          | 682,052.97              | 483,576                      | 489,417                       | 192,636                        | 14.13               | 13,633                   |
| 1982                          | 461,834.90              | 322,545                      | 326,441                       | 135,394                        | 14.43               | 9,383                    |
| 1983                          | 340,080.08              | 232,615                      | 235,425                       | 104,655                        | 14.98               | 6,986                    |
| 1984                          | 464,757.68              | 312,457                      | 316,231                       | 148,527                        | 15.31               | 9,701                    |
| 1985                          | 569,131.67              | 375,627                      | 380,164                       | 188,968                        | 15.67               | 12,059                   |
| 1986                          | 625,522.09              | 404,838                      | 409,728                       | 215,794                        | 16.04               | 13,453                   |
| 1987                          | 638,013.83              | 402,459                      | 407,320                       | 230,694                        | 16.63               | 13,872                   |
| 1988                          | 708,773.08              | 437,242                      | 442,523                       | 266,250                        | 17.03               | 15,634                   |
| 1989                          | 822,582.38              | 495,441                      | 501,425                       | 321,157                        | 17.44               | 18,415                   |
| 1990                          | 517,652.95              | 302,620                      | 306,275                       | 211,378                        | 18.06               | 11,704                   |
| 1991                          | 577,182.70              | 328,359                      | 332,325                       | 244,858                        | 18.50               | 13,236                   |
| 1992                          | 853,121.90              | 471,435                      | 477,129                       | 375,993                        | 18.96               | 19,831                   |
| 1993                          | 982,104.94              | 526,212                      | 532,568                       | 449,537                        | 19.42               | 23,148                   |
| 1994                          | 410,993.73              | 212,114                      | 214,676                       | 196,318                        | 20.08               | 9,777                    |
| 1995                          | 8,127.62                | 4,049                        | 4,098                         | 4,030                          | 20.57               | 196                      |
| 1996                          | 1,756,574.07            | 842,453                      | 852,629                       | 903,945                        | 21.07               | 42,902                   |
| 1997                          | 780,188.90              | 357,795                      | 362,117                       | 418,072                        | 21.74               | 19,231                   |
| 1998                          | 1,087,046.94            | 477,105                      | 482,868                       | 604,179                        | 22.27               | 27,130                   |
| 1999                          | 1,231,160.39            | 513,394                      | 519,595                       | 711,565                        | 22.95               | 31,005                   |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 381 METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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 43-S1.5                                |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                      |                         |                              |                               |                                |                     |                          |
| 2000                                                         | 95,295.87               | 37,756                       | 38,212                        | 57,084                         | 23.49               | 2,430                    |
| 2001                                                         | 530,204.36              | 197,978                      | 200,369                       | 329,835                        | 24.19               | 13,635                   |
| 2002                                                         | 1,175,475.25            | 411,651                      | 416,624                       | 758,851                        | 24.90               | 30,476                   |
| 2003                                                         | 860,483.61              | 282,067                      | 285,474                       | 575,010                        | 25.46               | 22,585                   |
| 2004                                                         | 1,198,761.05            | 364,064                      | 368,462                       | 830,299                        | 26.18               | 31,715                   |
| 2005                                                         | 400,034.66              | 111,690                      | 113,039                       | 286,996                        | 26.90               | 10,669                   |
| 2006                                                         | 628,706.97              | 159,817                      | 161,747                       | 466,960                        | 27.62               | 16,907                   |
| 2007                                                         | 1,036,298.55            | 236,380                      | 239,235                       | 797,064                        | 28.48               | 27,987                   |
| 2008                                                         | 1,088,756.61            | 220,473                      | 223,136                       | 865,621                        | 29.21               | 29,634                   |
| 2009                                                         | 1,428,874.31            | 252,196                      | 255,243                       | 1,173,631                      | 29.95               | 39,186                   |
| 2010                                                         | 1,149,401.22            | 171,835                      | 173,911                       | 975,490                        | 30.82               | 31,651                   |
| 2011                                                         | 1,057,886.20            | 129,379                      | 130,942                       | 926,944                        | 31.69               | 29,250                   |
| 2012                                                         | 1,382,647.05            | 131,351                      | 132,937                       | 1,249,710                      | 32.55               | 38,394                   |
| 2013                                                         | 1,311,861.30            | 88,419                       | 89,487                        | 1,222,374                      | 33.43               | 36,565                   |
| 2014                                                         | 1,177,343.12            | 46,741                       | 47,306                        | 1,130,037                      | 34.30               | 32,946                   |
| 2015                                                         | 1,056,300.00            | 12,359                       | 12,508                        | 1,043,792                      | 35.30               | 29,569                   |
|                                                              | 35,175,284.44           | 14,992,512                   | 15,173,270                    | 20,002,014                     |                     | 865,426                  |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. |                         |                              |                               |                                |                     | 23.1 2.46                |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 381.1 METERS - AMR

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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                                                         | 275,713.03              | 231,654                      | 215,869                       | 59,844                         | 2.93                | 20,425                   |
| 2001                                                         | 262,852.68              | 214,488                      | 199,872                       | 62,981                         | 3.25                | 19,379                   |
| 2003                                                         | 495.81                  | 374                          | 349                           | 147                            | 4.03                | 36                       |
| 2004                                                         | 104,918.93              | 75,342                       | 70,208                        | 34,711                         | 4.48                | 7,748                    |
| 2005                                                         | 165,705.26              | 112,017                      | 104,384                       | 61,321                         | 4.99                | 12,289                   |
| 2007                                                         | 106,406.60              | 61,343                       | 57,163                        | 49,244                         | 6.18                | 7,968                    |
| 2008                                                         | 482,593.22              | 250,562                      | 233,488                       | 249,105                        | 6.87                | 36,260                   |
| 2009                                                         | 419,299.70              | 191,578                      | 178,523                       | 240,777                        | 7.63                | 31,557                   |
| 2010                                                         | 823,298.40              | 321,498                      | 299,591                       | 523,707                        | 8.45                | 61,977                   |
| 2011                                                         | 11,252,980.18           | 3,617,833                    | 3,371,307                     | 7,881,673                      | 9.32                | 845,673                  |
| 2012                                                         | 8,732,404.46            | 2,186,594                    | 2,037,595                     | 6,694,809                      | 10.23               | 654,429                  |
| 2014                                                         | 346,870.53              | 36,179                       | 33,713                        | 313,158                        | 12.17               | 25,732                   |
| 2015                                                         | 535,500.00              | 16,440                       | 15,320                        | 520,180                        | 13.17               | 39,497                   |
|                                                              | 23,509,038.80           | 7,315,902                    | 6,817,382                     | 16,691,657                     |                     | 1,762,970                |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. |                         |                              |                               |                                |                     | 9.5 7.50                 |



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 382 METER INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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-R2.5 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0       |                         |                              |                               |                                |                     |                          |
| 1937                          | 5,719.64                | 5,112                        | 5,482                         | 238                            | 5.84                | 41                       |
| 1938                          | 11,620.76               | 10,338                       | 11,086                        | 535                            | 6.07                | 88                       |
| 1939                          | 8,611.03                | 7,625                        | 8,177                         | 434                            | 6.30                | 69                       |
| 1940                          | 7,590.98                | 6,690                        | 7,174                         | 417                            | 6.53                | 64                       |
| 1941                          | 10,810.66               | 9,480                        | 10,166                        | 645                            | 6.77                | 95                       |
| 1942                          | 8,113.20                | 7,079                        | 7,591                         | 522                            | 7.01                | 74                       |
| 1943                          | 3,683.34                | 3,197                        | 3,428                         | 255                            | 7.26                | 35                       |
| 1944                          | 3,726.31                | 3,217                        | 3,450                         | 276                            | 7.51                | 37                       |
| 1945                          | 4,957.57                | 4,257                        | 4,565                         | 393                            | 7.77                | 51                       |
| 1946                          | 12,037.76               | 10,278                       | 11,022                        | 1,016                          | 8.04                | 126                      |
| 1947                          | 17,575.13               | 14,920                       | 16,000                        | 1,575                          | 8.31                | 190                      |
| 1948                          | 22,383.09               | 18,887                       | 20,254                        | 2,129                          | 8.59                | 248                      |
| 1949                          | 28,954.04               | 24,274                       | 26,031                        | 2,923                          | 8.89                | 329                      |
| 1950                          | 33,730.70               | 28,095                       | 30,129                        | 3,602                          | 9.19                | 392                      |
| 1951                          | 29,477.37               | 24,386                       | 26,151                        | 3,326                          | 9.50                | 350                      |
| 1952                          | 30,763.81               | 25,265                       | 27,094                        | 3,670                          | 9.83                | 373                      |
| 1953                          | 36,871.66               | 30,054                       | 32,230                        | 4,642                          | 10.17               | 456                      |
| 1954                          | 34,701.15               | 28,064                       | 30,096                        | 4,605                          | 10.52               | 438                      |
| 1955                          | 43,634.46               | 34,995                       | 37,528                        | 6,106                          | 10.89               | 561                      |
| 1956                          | 46,137.28               | 36,683                       | 39,339                        | 6,798                          | 11.27               | 603                      |
| 1957                          | 42,474.35               | 33,462                       | 35,884                        | 6,590                          | 11.67               | 565                      |
| 1958                          | 55,686.51               | 43,456                       | 46,602                        | 9,085                          | 12.08               | 752                      |
| 1959                          | 66,371.18               | 51,275                       | 54,987                        | 11,384                         | 12.51               | 910                      |
| 1960                          | 48,436.01               | 37,032                       | 39,713                        | 8,723                          | 12.95               | 674                      |
| 1961                          | 42,007.06               | 31,765                       | 34,065                        | 7,942                          | 13.41               | 592                      |
| 1962                          | 60,147.98               | 44,958                       | 48,213                        | 11,935                         | 13.89               | 859                      |
| 1963                          | 64,125.65               | 47,360                       | 50,789                        | 13,337                         | 14.38               | 927                      |
| 1964                          | 115,117.54              | 83,952                       | 90,030                        | 25,088                         | 14.89               | 1,685                    |
| 1965                          | 152,938.43              | 110,088                      | 118,058                       | 34,880                         | 15.41               | 2,263                    |
| 1966                          | 141,847.54              | 100,712                      | 108,003                       | 33,845                         | 15.95               | 2,122                    |
| 1967                          | 131,096.28              | 91,767                       | 98,410                        | 32,686                         | 16.50               | 1,981                    |
| 1968                          | 168,137.48              | 115,954                      | 124,348                       | 43,789                         | 17.07               | 2,565                    |
| 1969                          | 159,250.00              | 108,145                      | 115,974                       | 43,276                         | 17.65               | 2,452                    |
| 1970                          | 146,029.38              | 97,574                       | 104,638                       | 41,391                         | 18.25               | 2,268                    |
| 1971                          | 127,635.72              | 83,868                       | 89,940                        | 37,696                         | 18.86               | 1,999                    |
| 1972                          | 80,296.83               | 51,857                       | 55,611                        | 24,686                         | 19.43               | 1,267                    |
| 1973                          | 74,643.58               | 47,351                       | 50,779                        | 23,865                         | 20.11               | 1,187                    |
| 1974                          | 14,164.82               | 8,818                        | 9,456                         | 4,709                          | 20.76               | 227                      |
| 1975                          | 26,614.27               | 16,254                       | 17,431                        | 9,183                          | 21.41               | 429                      |
| 1976                          | 51,730.98               | 34,458                       | 36,953                        | 14,778                         | 19.76               | 748                      |
| 1977                          | 57,639.32               | 37,863                       | 40,604                        | 17,035                         | 20.06               | 849                      |
| 1978                          | 54,161.04               | 34,858                       | 37,381                        | 16,780                         | 20.72               | 810                      |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 382 METER INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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-R2.5 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0       |                         |                              |                               |                                |                     |                          |
| 1979                          | 144,731.17              | 91,181                       | 97,782                        | 46,949                         | 21.39               | 2,195                    |
| 1980                          | 350,183.96              | 215,783                      | 231,404                       | 118,780                        | 22.06               | 5,384                    |
| 1981                          | 424,807.55              | 255,862                      | 274,385                       | 150,423                        | 22.73               | 6,618                    |
| 1982                          | 333,615.75              | 197,334                      | 211,620                       | 121,996                        | 23.08               | 5,286                    |
| 1983                          | 381,627.10              | 220,199                      | 236,140                       | 145,487                        | 23.76               | 6,123                    |
| 1984                          | 456,107.57              | 256,515                      | 275,085                       | 181,023                        | 24.45               | 7,404                    |
| 1985                          | 473,607.54              | 259,300                      | 278,072                       | 195,536                        | 25.14               | 7,778                    |
| 1986                          | 540,665.17              | 289,472                      | 310,428                       | 230,237                        | 25.53               | 9,018                    |
| 1987                          | 607,691.29              | 315,999                      | 338,875                       | 268,816                        | 26.23               | 10,248                   |
| 1988                          | 683,737.59              | 344,946                      | 369,918                       | 313,820                        | 26.93               | 11,653                   |
| 1989                          | 772,308.70              | 377,427                      | 404,750                       | 367,559                        | 27.64               | 13,298                   |
| 1990                          | 784,113.90              | 372,689                      | 399,669                       | 384,445                        | 28.06               | 13,701                   |
| 1991                          | 705,164.05              | 323,670                      | 347,102                       | 358,062                        | 28.78               | 12,441                   |
| 1992                          | 767,449.87              | 339,673                      | 364,263                       | 403,187                        | 29.49               | 13,672                   |
| 1993                          | 649,872.84              | 276,781                      | 296,818                       | 353,055                        | 30.22               | 11,683                   |
| 1994                          | 752,348.22              | 309,366                      | 331,762                       | 420,586                        | 30.67               | 13,713                   |
| 1995                          | 662,872.82              | 261,172                      | 280,079                       | 382,794                        | 31.40               | 12,191                   |
| 1996                          | 755,501.14              | 284,597                      | 305,200                       | 450,301                        | 32.13               | 14,015                   |
| 1997                          | 722,570.21              | 259,475                      | 278,259                       | 444,311                        | 32.87               | 13,517                   |
| 1998                          | 620,009.70              | 212,725                      | 228,125                       | 391,885                        | 33.35               | 11,751                   |
| 1999                          | 520,870.95              | 169,283                      | 181,538                       | 339,333                        | 34.09               | 9,954                    |
| 2000                          | 1,147,429.94            | 352,032                      | 377,517                       | 769,913                        | 34.83               | 22,105                   |
| 2001                          | 1,045,836.47            | 303,083                      | 325,024                       | 720,812                        | 35.33               | 20,402                   |
| 2002                          | 1,045,109.63            | 283,225                      | 303,729                       | 741,381                        | 36.09               | 20,543                   |
| 2003                          | 1,100,880.58            | 278,853                      | 299,040                       | 801,841                        | 36.60               | 21,908                   |
| 2004                          | 1,077,652.80            | 252,171                      | 270,427                       | 807,226                        | 37.37               | 21,601                   |
| 2005                          | 1,193,140.55            | 257,241                      | 275,864                       | 917,277                        | 37.89               | 24,209                   |
| 2006                          | 1,249,322.98            | 244,742                      | 262,460                       | 986,863                        | 38.66               | 25,527                   |
| 2007                          | 1,478,457.26            | 261,391                      | 280,314                       | 1,198,143                      | 39.20               | 30,565                   |
| 2008                          | 1,434,124.03            | 225,444                      | 241,765                       | 1,192,359                      | 39.75               | 29,996                   |
| 2009                          | 1,886,206.07            | 258,976                      | 277,724                       | 1,608,482                      | 40.31               | 39,903                   |
| 2010                          | 1,507,304.70            | 176,355                      | 189,122                       | 1,318,183                      | 40.88               | 32,245                   |
| 2011                          | 1,469,741.95            | 142,124                      | 152,413                       | 1,317,329                      | 41.25               | 31,935                   |
| 2012                          | 1,673,533.65            | 126,854                      | 136,038                       | 1,537,496                      | 41.63               | 36,932                   |
| 2013                          | 1,027,440.96            | 56,098                       | 60,159                        | 967,282                        | 41.83               | 23,124                   |
| 2014                          | 1,414,699.05            | 46,544                       | 49,914                        | 1,364,785                      | 41.69               | 32,737                   |
| 2015                          | 1,192,400.00            | 12,162                       | 13,042                        | 1,179,358                      | 40.24               | 29,308                   |
|                               | 35,334,789.60           | 10,556,467                   | 11,320,688                    | 24,014,102                     |                     | 687,434                  |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 34.9 1.95

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 383 HOUSE REGULATORS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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 40-S2 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0     |                         |                              |                               |                                |                     |                          |
| 1955                        | 333.28                  | 300                          | 333                           |                                |                     |                          |
| 1957                        | 395.63                  | 352                          | 396                           |                                |                     |                          |
| 1958                        | 576.00                  | 509                          | 575                           | 1                              | 4.68                |                          |
| 1960                        | 495.62                  | 431                          | 487                           | 9                              | 5.19                | 2                        |
| 1961                        | 784.54                  | 677                          | 764                           | 21                             | 5.46                | 4                        |
| 1962                        | 6,183.07                | 5,297                        | 5,979                         | 204                            | 5.73                | 36                       |
| 1963                        | 9,799.53                | 8,327                        | 9,400                         | 400                            | 6.01                | 67                       |
| 1964                        | 14,011.09               | 11,808                       | 13,329                        | 682                            | 6.29                | 108                      |
| 1965                        | 17,673.87               | 14,767                       | 16,669                        | 1,005                          | 6.58                | 153                      |
| 1966                        | 45,211.19               | 37,435                       | 42,257                        | 2,954                          | 6.88                | 429                      |
| 1967                        | 35,390.36               | 29,029                       | 32,768                        | 2,622                          | 7.19                | 365                      |
| 1968                        | 46,809.88               | 38,033                       | 42,932                        | 3,878                          | 7.50                | 517                      |
| 1969                        | 43,127.90               | 34,686                       | 39,154                        | 3,974                          | 7.83                | 508                      |
| 1970                        | 47,065.71               | 37,464                       | 42,290                        | 4,776                          | 8.16                | 585                      |
| 1971                        | 39,935.70               | 31,449                       | 35,500                        | 4,436                          | 8.50                | 522                      |
| 1972                        | 23,182.63               | 18,053                       | 20,379                        | 2,804                          | 8.85                | 317                      |
| 1973                        | 20,559.03               | 15,825                       | 17,864                        | 2,695                          | 9.21                | 293                      |
| 1974                        | 2,543.37                | 1,934                        | 2,183                         | 360                            | 9.59                | 38                       |
| 1975                        | 2,187.52                | 1,642                        | 1,854                         | 334                            | 9.97                | 34                       |
| 1976                        | 4,585.28                | 3,705                        | 4,182                         | 403                            | 9.37                | 43                       |
| 1977                        | 4,728.26                | 3,778                        | 4,265                         | 463                            | 9.66                | 48                       |
| 1978                        | 6,796.41                | 5,366                        | 6,057                         | 739                            | 9.98                | 74                       |
| 1979                        | 15,794.66               | 12,309                       | 13,895                        | 1,900                          | 10.31               | 184                      |
| 1980                        | 36,351.79               | 27,809                       | 31,391                        | 4,961                          | 10.88               | 456                      |
| 1981                        | 49,079.71               | 36,991                       | 41,756                        | 7,324                          | 11.25               | 651                      |
| 1982                        | 45,443.42               | 33,710                       | 38,052                        | 7,391                          | 11.63               | 636                      |
| 1983                        | 45,663.16               | 33,307                       | 37,597                        | 8,066                          | 12.03               | 670                      |
| 1984                        | 48,790.71               | 34,949                       | 39,451                        | 9,340                          | 12.44               | 751                      |
| 1985                        | 49,930.10               | 35,081                       | 39,600                        | 10,330                         | 12.87               | 803                      |
| 1986                        | 64,821.20               | 44,811                       | 50,583                        | 14,238                         | 13.14               | 1,084                    |
| 1987                        | 69,987.27               | 47,332                       | 53,429                        | 16,558                         | 13.60               | 1,218                    |
| 1988                        | 86,848.23               | 57,381                       | 64,773                        | 22,075                         | 14.08               | 1,568                    |
| 1989                        | 93,177.39               | 60,062                       | 67,799                        | 25,378                         | 14.57               | 1,742                    |
| 1990                        | 90,496.85               | 56,814                       | 64,133                        | 26,364                         | 15.07               | 1,749                    |
| 1991                        | 75,471.26               | 46,068                       | 52,002                        | 23,469                         | 15.58               | 1,506                    |
| 1992                        | 82,925.82               | 48,935                       | 55,239                        | 27,687                         | 16.27               | 1,702                    |
| 1993                        | 59,733.25               | 34,144                       | 38,542                        | 21,191                         | 16.80               | 1,261                    |
| 1994                        | 72,309.16               | 39,958                       | 45,105                        | 27,204                         | 17.34               | 1,569                    |
| 1995                        | 80,692.00               | 43,001                       | 48,540                        | 32,152                         | 17.90               | 1,796                    |
| 1996                        | 85,497.78               | 43,664                       | 49,289                        | 36,209                         | 18.60               | 1,947                    |
| 1997                        | 98,769.61               | 48,387                       | 54,620                        | 44,150                         | 19.18               | 2,302                    |
| 1998                        | 36,409.14               | 16,996                       | 19,185                        | 17,224                         | 19.90               | 866                      |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 383 HOUSE REGULATORS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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 40-S2                                  |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                      |                         |                              |                               |                                |                     |                          |
| 1999                                                         | 19,112.32               | 8,471                        | 9,562                         | 9,550                          | 20.62               | 463                      |
| 2000                                                         | 179,054.36              | 75,077                       | 84,748                        | 94,306                         | 21.35               | 4,417                    |
| 2001                                                         | 69,565.30               | 27,478                       | 31,018                        | 38,547                         | 22.08               | 1,746                    |
| 2002                                                         | 377,876.56              | 139,928                      | 157,953                       | 219,924                        | 22.82               | 9,637                    |
| 2003                                                         | 546,343.10              | 187,887                      | 212,090                       | 334,253                        | 23.69               | 14,109                   |
| 2004                                                         | 842,522.06              | 268,343                      | 302,910                       | 539,612                        | 24.43               | 22,088                   |
| 2005                                                         | 677,947.05              | 197,757                      | 223,231                       | 454,716                        | 25.30               | 17,973                   |
| 2006                                                         | 665,954.34              | 176,212                      | 198,911                       | 467,043                        | 26.17               | 17,847                   |
| 2007                                                         | 740,416.29              | 175,775                      | 198,417                       | 541,999                        | 27.04               | 20,044                   |
| 2008                                                         | 554,156.44              | 115,930                      | 130,864                       | 423,292                        | 28.04               | 15,096                   |
| 2009                                                         | 785,817.88              | 142,705                      | 161,087                       | 624,731                        | 28.92               | 21,602                   |
| 2010                                                         | 637,223.25              | 97,686                       | 110,270                       | 526,953                        | 29.92               | 17,612                   |
| 2011                                                         | 673,990.21              | 84,518                       | 95,405                        | 578,585                        | 30.80               | 18,785                   |
| 2012                                                         | 693,396.00              | 67,259                       | 75,923                        | 617,473                        | 31.80               | 19,417                   |
| 2013                                                         | 507,742.88              | 34,831                       | 39,318                        | 468,425                        | 32.80               | 14,281                   |
| 2014                                                         | 746,366.06              | 30,004                       | 33,869                        | 712,497                        | 33.80               | 21,080                   |
| 2015                                                         | 620,700.00              | 7,324                        | 8,267                         | 612,433                        | 34.80               | 17,599                   |
|                                                              | 10,998,752.48           | 2,939,761                    | 3,318,441                     | 7,680,311                      |                     | 282,400                  |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. |                         |                              |                               |                                |                     | 27.2 2.57                |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 384 HOUSE REGULATOR INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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-S3 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0     |                         |                              |                               |                                |                     |                          |
| 1956                        | 4,098.01                | 3,942                        | 4,098                         |                                |                     |                          |
| 1957                        | 11,093.12               | 10,627                       | 11,093                        |                                |                     |                          |
| 1958                        | 8,984.62                | 8,569                        | 8,985                         |                                |                     |                          |
| 1959                        | 10,504.99               | 9,974                        | 10,505                        |                                |                     |                          |
| 1960                        | 6,886.85                | 6,507                        | 6,887                         |                                |                     |                          |
| 1961                        | 5,770.97                | 5,426                        | 5,771                         |                                |                     |                          |
| 1962                        | 6,336.36                | 5,929                        | 6,336                         |                                |                     |                          |
| 1963                        | 9,429.02                | 8,774                        | 9,429                         |                                |                     |                          |
| 1964                        | 13,020.68               | 12,050                       | 13,021                        |                                |                     |                          |
| 1965                        | 14,473.42               | 13,320                       | 14,473                        |                                |                     |                          |
| 1966                        | 13,305.16               | 12,172                       | 13,305                        |                                |                     |                          |
| 1967                        | 17,106.02               | 15,552                       | 17,106                        |                                |                     |                          |
| 1968                        | 26,484.46               | 23,927                       | 26,484                        |                                |                     |                          |
| 1969                        | 37,452.06               | 33,600                       | 37,452                        |                                |                     |                          |
| 1970                        | 54,867.42               | 48,879                       | 54,867                        |                                |                     |                          |
| 1971                        | 52,330.89               | 46,261                       | 52,331                        |                                |                     |                          |
| 1972                        | 30,594.70               | 26,836                       | 30,539                        | 56                             | 4.30                | 13                       |
| 1973                        | 41,286.72               | 35,907                       | 40,862                        | 425                            | 4.56                | 93                       |
| 1974                        | 15,958.45               | 13,756                       | 15,654                        | 304                            | 4.83                | 63                       |
| 1975                        | 25,717.11               | 21,962                       | 24,992                        | 725                            | 5.11                | 142                      |
| 1976                        | 13,626.03               | 12,085                       | 13,626                        |                                |                     |                          |
| 1978                        | 1,304.20                | 1,132                        | 1,288                         | 16                             | 5.69                | 3                        |
| 1979                        | 41,749.48               | 35,880                       | 40,833                        | 916                            | 5.96                | 154                      |
| 1980                        | 78,231.18               | 66,497                       | 75,677                        | 2,554                          | 6.25                | 409                      |
| 1981                        | 103,540.67              | 86,953                       | 98,956                        | 4,585                          | 6.57                | 698                      |
| 1982                        | 111,541.38              | 92,434                       | 105,194                       | 6,347                          | 6.91                | 919                      |
| 1983                        | 94,279.56               | 77,017                       | 87,649                        | 6,631                          | 7.27                | 912                      |
| 1984                        | 100,051.83              | 80,472                       | 91,581                        | 8,471                          | 7.64                | 1,109                    |
| 1985                        | 116,774.98              | 92,346                       | 105,094                       | 11,681                         | 8.05                | 1,451                    |
| 1986                        | 125,389.90              | 97,378                       | 110,821                       | 14,569                         | 8.46                | 1,722                    |
| 1987                        | 160,772.64              | 122,444                      | 139,347                       | 21,426                         | 8.90                | 2,407                    |
| 1988                        | 175,315.37              | 130,259                      | 148,241                       | 27,074                         | 9.48                | 2,856                    |
| 1989                        | 145,310.01              | 105,568                      | 120,141                       | 25,169                         | 9.95                | 2,530                    |
| 1990                        | 142,228.97              | 100,855                      | 114,777                       | 27,452                         | 10.43               | 2,632                    |
| 1991                        | 135,142.11              | 93,059                       | 105,905                       | 29,237                         | 11.04               | 2,648                    |
| 1992                        | 132,043.34              | 88,126                       | 100,291                       | 31,752                         | 11.67               | 2,721                    |
| 1993                        | 112,250.88              | 72,469                       | 82,473                        | 29,778                         | 12.31               | 2,419                    |
| 1994                        | 183,968.70              | 114,649                      | 130,476                       | 53,493                         | 12.95               | 4,131                    |
| 1995                        | 147,476.46              | 88,515                       | 100,734                       | 46,742                         | 13.60               | 3,437                    |
| 1996                        | 122,299.49              | 70,286                       | 79,989                        | 42,310                         | 14.37               | 2,944                    |
| 1997                        | 182,246.23              | 100,017                      | 113,824                       | 68,422                         | 15.14               | 4,519                    |
| 1998                        | 181,143.04              | 94,647                       | 107,712                       | 73,431                         | 15.92               | 4,612                    |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 384 HOUSE REGULATOR INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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-S3                                       |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                           |                         |                              |                               |                                |                     |                          |
| 1999                                                              | 139,857.78              | 69,104                       | 78,643                        | 61,215                         | 16.81               | 3,642                    |
| 2000                                                              | 194,710.12              | 90,949                       | 103,504                       | 91,206                         | 17.59               | 5,185                    |
| 2001                                                              | 229,158.59              | 100,440                      | 114,305                       | 114,854                        | 18.48               | 6,215                    |
| 2002                                                              | 154,765.04              | 63,129                       | 71,844                        | 82,921                         | 19.48               | 4,257                    |
| 2003                                                              | 133,893.06              | 50,705                       | 57,705                        | 76,188                         | 20.37               | 3,740                    |
|                                                                   | 3,864,772.07            | 2,561,385                    | 2,904,820                     | 959,952                        |                     | 68,583                   |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 14.0 |                         |                              |                               |                                |                     | 1.77                     |

COLUMBIA GAS OF PENNSYLVANIA, INC.

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

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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       |                         |                              |                               |                                |                     |                          |
| 1890                          | 23.44                   | 23                           | 23                            |                                |                     |                          |
| 1893                          | 23.86                   | 24                           | 24                            |                                |                     |                          |
| 1902                          | 23.87                   | 24                           | 24                            |                                |                     |                          |
| 1922                          | 10.64                   | 11                           | 11                            |                                |                     |                          |
| 1928                          | 108.70                  | 109                          | 109                           |                                |                     |                          |
| 1929                          | 750.63                  | 751                          | 751                           |                                |                     |                          |
| 1930                          | 773.31                  | 773                          | 773                           |                                |                     |                          |
| 1931                          | 140.77                  | 141                          | 141                           |                                |                     |                          |
| 1933                          | 294.28                  | 294                          | 294                           |                                |                     |                          |
| 1934                          | 12.15                   | 12                           | 12                            |                                |                     |                          |
| 1935                          | 118.91                  | 119                          | 119                           |                                |                     |                          |
| 1937                          | 1,141.25                | 1,141                        | 1,141                         |                                |                     |                          |
| 1938                          | 280.27                  | 280                          | 280                           |                                |                     |                          |
| 1939                          | 267.70                  | 268                          | 268                           |                                |                     |                          |
| 1941                          | 369.64                  | 370                          | 370                           |                                |                     |                          |
| 1942                          | 665.90                  | 666                          | 666                           |                                |                     |                          |
| 1943                          | 4,209.10                | 4,209                        | 4,209                         |                                |                     |                          |
| 1944                          | 961.38                  | 961                          | 961                           |                                |                     |                          |
| 1945                          | 671.93                  | 672                          | 672                           |                                |                     |                          |
| 1946                          | 57.46                   | 57                           | 57                            |                                |                     |                          |
| 1947                          | 812.24                  | 812                          | 812                           |                                |                     |                          |
| 1948                          | 1,502.30                | 1,502                        | 1,502                         |                                |                     |                          |
| 1950                          | 2,344.49                | 2,344                        | 2,344                         |                                |                     |                          |
| 1951                          | 4,819.58                | 4,820                        | 4,820                         |                                |                     |                          |
| 1952                          | 4,073.49                | 4,073                        | 4,073                         |                                |                     |                          |
| 1953                          | 5,856.76                | 5,857                        | 5,857                         |                                |                     |                          |
| 1954                          | 13,876.77               | 13,877                       | 13,877                        |                                |                     |                          |
| 1955                          | 24,541.82               | 24,542                       | 24,542                        |                                |                     |                          |
| 1956                          | 24,122.67               | 23,889                       | 22,957                        | 1,166                          | 0.29                | 1,166                    |
| 1957                          | 28,315.38               | 27,579                       | 26,503                        | 1,812                          | 0.78                | 1,812                    |
| 1958                          | 30,950.02               | 29,650                       | 28,493                        | 2,457                          | 1.26                | 1,950                    |
| 1959                          | 23,916.08               | 22,537                       | 21,658                        | 2,258                          | 1.73                | 1,305                    |
| 1960                          | 36,466.32               | 33,804                       | 32,485                        | 3,981                          | 2.19                | 1,818                    |
| 1961                          | 36,712.25               | 33,482                       | 32,176                        | 4,536                          | 2.64                | 1,718                    |
| 1962                          | 13,842.62               | 12,421                       | 11,936                        | 1,907                          | 3.08                | 619                      |
| 1963                          | 38,991.31               | 34,429                       | 33,086                        | 5,905                          | 3.51                | 1,682                    |
| 1964                          | 35,172.86               | 30,577                       | 29,384                        | 5,789                          | 3.92                | 1,477                    |
| 1965                          | 36,763.30               | 31,457                       | 30,230                        | 6,533                          | 4.33                | 1,509                    |
| 1966                          | 28,308.77               | 23,836                       | 22,906                        | 5,403                          | 4.74                | 1,140                    |
| 1967                          | 64,039.94               | 53,068                       | 50,998                        | 13,042                         | 5.14                | 2,537                    |
| 1968                          | 58,830.62               | 47,966                       | 46,095                        | 12,736                         | 5.54                | 2,299                    |

COLUMBIA GAS OF PENNSYLVANIA, INC.

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

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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       |                         |                              |                               |                                |                     |                          |
| 1969                          | 58,606.14               | 47,021                       | 45,187                        | 13,419                         | 5.93                | 2,263                    |
| 1970                          | 54,770.76               | 43,214                       | 41,528                        | 13,243                         | 6.33                | 2,092                    |
| 1971                          | 115,962.80              | 89,987                       | 86,477                        | 29,486                         | 6.72                | 4,388                    |
| 1972                          | 91,878.39               | 70,073                       | 67,340                        | 24,538                         | 7.12                | 3,446                    |
| 1973                          | 45,101.01               | 33,796                       | 32,478                        | 12,623                         | 7.52                | 1,679                    |
| 1974                          | 28,114.62               | 20,683                       | 19,876                        | 8,239                          | 7.93                | 1,039                    |
| 1975                          | 28,712.26               | 20,730                       | 19,921                        | 8,791                          | 8.34                | 1,054                    |
| 1976                          | 735.55                  | 612                          | 588                           | 148                            | 7.98                | 19                       |
| 1977                          | 2,885.21                | 2,361                        | 2,269                         | 616                            | 8.53                | 72                       |
| 1978                          | 11,201.33               | 9,053                        | 8,700                         | 2,501                          | 8.88                | 282                      |
| 1979                          | 37,128.40               | 29,610                       | 28,455                        | 8,673                          | 9.25                | 938                      |
| 1980                          | 82,501.74               | 65,160                       | 62,618                        | 19,884                         | 9.43                | 2,109                    |
| 1981                          | 121,849.39              | 94,774                       | 91,077                        | 30,772                         | 9.83                | 3,130                    |
| 1982                          | 111,922.36              | 85,643                       | 82,302                        | 29,620                         | 10.25               | 2,890                    |
| 1983                          | 73,334.36               | 55,389                       | 53,228                        | 20,106                         | 10.50               | 1,915                    |
| 1984                          | 33,649.97               | 24,948                       | 23,975                        | 9,675                          | 10.96               | 883                      |
| 1985                          | 45,432.66               | 33,166                       | 31,872                        | 13,561                         | 11.25               | 1,205                    |
| 1986                          | 91,474.34               | 65,386                       | 62,836                        | 28,638                         | 11.74               | 2,439                    |
| 1987                          | 19,731.58               | 13,850                       | 13,310                        | 6,422                          | 12.07               | 532                      |
| 1988                          | 63,179.44               | 43,480                       | 41,784                        | 21,395                         | 12.42               | 1,723                    |
| 1989                          | 71,861.93               | 48,406                       | 46,518                        | 25,344                         | 12.80               | 1,980                    |
| 1990                          | 75,135.13               | 49,461                       | 47,532                        | 27,603                         | 13.19               | 2,093                    |
| 1991                          | 142,372.37              | 91,773                       | 88,193                        | 54,179                         | 13.46               | 4,025                    |
| 1992                          | 94,803.30               | 59,499                       | 57,178                        | 37,625                         | 13.90               | 2,707                    |
| 1993                          | 124,000.33              | 75,888                       | 72,928                        | 51,072                         | 14.21               | 3,594                    |
| 1994                          | 180,899.21              | 107,707                      | 103,506                       | 77,393                         | 14.55               | 5,319                    |
| 1995                          | 134,463.33              | 77,693                       | 74,662                        | 59,801                         | 14.92               | 4,008                    |
| 1996                          | 189,559.30              | 106,002                      | 101,867                       | 87,692                         | 15.31               | 5,728                    |
| 1997                          | 130,839.45              | 70,836                       | 68,073                        | 62,766                         | 15.60               | 4,023                    |
| 1998                          | 197,790.36              | 103,345                      | 99,314                        | 98,476                         | 15.92               | 6,186                    |
| 1999                          | 68,014.07               | 34,170                       | 32,837                        | 35,177                         | 16.26               | 2,163                    |
| 2000                          | 164,189.86              | 79,222                       | 76,132                        | 88,058                         | 16.53               | 5,327                    |
| 2001                          | 18,480.63               | 8,525                        | 8,192                         | 10,289                         | 16.83               | 611                      |
| 2002                          | 300,584.51              | 131,866                      | 126,722                       | 173,863                        | 17.17               | 10,126                   |
| 2003                          | 520,030.45              | 216,333                      | 207,895                       | 312,135                        | 17.43               | 17,908                   |
| 2004                          | 17,924.60               | 7,039                        | 6,764                         | 11,161                         | 17.65               | 632                      |
| 2005                          | 105,944.80              | 39,072                       | 37,548                        | 68,397                         | 17.83               | 3,836                    |
| 2006                          | 211,739.49              | 72,775                       | 69,936                        | 141,803                        | 17.98               | 7,887                    |
| 2007                          | 244,124.80              | 77,681                       | 74,651                        | 169,474                        | 18.04               | 9,394                    |
| 2008                          | 242,331.08              | 70,446                       | 67,698                        | 174,633                        | 18.09               | 9,654                    |
| 2009                          | 150,712.07              | 39,456                       | 37,917                        | 112,795                        | 18.09               | 6,235                    |



COLUMBIA GAS OF PENNSYLVANIA, INC.

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

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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                                           |                         |                              |                               |                                |                     |                          |
| 2010                                                              | 311,195.28              | 71,979                       | 69,172                        | 242,023                        | 18.00               | 13,446                   |
| 2011                                                              | 213,005.07              | 42,345                       | 40,693                        | 172,312                        | 17.80               | 9,680                    |
| 2012                                                              | 212,540.20              | 34,857                       | 33,498                        | 179,042                        | 17.42               | 10,278                   |
| 2013                                                              | 297,221.47              | 37,509                       | 36,046                        | 261,175                        | 16.74               | 15,602                   |
| 2014                                                              | 649,605.43              | 54,177                       | 52,064                        | 597,541                        | 15.56               | 38,402                   |
| 2015                                                              | 143,700.00              | 4,512                        | 4,336                         | 139,364                        | 12.85               | 10,845                   |
|                                                                   | 6,856,405.61            | 3,134,937                    | 3,015,332                     | 3,841,074                      |                     | 266,819                  |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 14.4 |                         |                              |                               |                                |                     | 3.89                     |

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.

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.

ACCOUNT 387 OTHER EQUIPMENT - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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                                                |                         |                              |                               |                                |                     |                          |
| 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               | 14,001                       | 13,685                        | 690                            | 0.78                | 690                      |
| 1959                                                                   | 188.29                  | 177                          | 173                           | 15                             | 1.73                | 9                        |
| 1962                                                                   | 7,626.48                | 6,843                        | 6,689                         | 937                            | 3.08                | 304                      |
| 1967                                                                   | 445.13                  | 369                          | 361                           | 84                             | 5.14                | 16                       |
| 1972                                                                   | 7,910.24                | 6,033                        | 5,897                         | 2,013                          | 7.12                | 283                      |
| 1981                                                                   | 13,548.93               | 10,538                       | 10,300                        | 3,249                          | 9.83                | 331                      |
| 1985                                                                   | 14,556.64               | 10,626                       | 10,387                        | 4,170                          | 11.25               | 371                      |
| 1992                                                                   | 2,228.63                | 1,399                        | 1,367                         | 862                            | 13.90               | 62                       |
| 2010                                                                   | 68,488.09               | 15,841                       | 15,484                        | 53,004                         | 18.00               | 2,945                    |
|                                                                        | 133,851.06              | 70,310                       | 68,826                        | 65,025                         |                     | 5,011                    |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 13.0 3.74 |                         |                              |                               |                                |                     |                          |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 387.4 OTHER EQUIPMENT - CUSTOMER INFORMATION SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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-R2.5 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0       |                         |                              |                               |                                |                     |                          |
| 1973                          | 917.13                  | 879                          | 813                           | 104                            | 1.05                | 99                       |
| 1974                          | 11,561.27               | 10,946                       | 10,119                        | 1,442                          | 1.33                | 1,084                    |
| 1975                          | 3,189.09                | 2,988                        | 2,762                         | 427                            | 1.58                | 270                      |
| 1976                          | 6,308.81                | 6,043                        | 5,587                         | 722                            | 1.74                | 415                      |
| 1980                          | 1,144.78                | 1,066                        | 985                           | 160                            | 2.60                | 62                       |
| 1983                          | 10,695.21               | 9,742                        | 9,006                         | 1,689                          | 3.17                | 533                      |
| 1984                          | 4,730.23                | 4,265                        | 3,943                         | 787                            | 3.43                | 229                      |
| 1985                          | 27,353.09               | 24,377                       | 22,536                        | 4,817                          | 3.71                | 1,298                    |
| 1986                          | 61,596.14               | 54,359                       | 50,253                        | 11,343                         | 3.92                | 2,894                    |
| 1987                          | 40,005.58               | 34,789                       | 32,161                        | 7,845                          | 4.26                | 1,842                    |
| 1989                          | 3,425.59                | 2,887                        | 2,669                         | 757                            | 4.93                | 154                      |
| 1990                          | 37,952.71               | 31,448                       | 29,073                        | 8,880                          | 5.26                | 1,688                    |
| 1991                          | 31,594.95               | 25,611                       | 23,677                        | 7,918                          | 5.70                | 1,389                    |
| 1992                          | 6,510.50                | 5,168                        | 4,778                         | 1,732                          | 6.08                | 285                      |
| 1993                          | 1,718.09                | 1,329                        | 1,229                         | 489                            | 6.57                | 74                       |
| 1994                          | 4,082.11                | 3,069                        | 2,837                         | 1,245                          | 7.07                | 176                      |
| 2000                          | 50,178.60               | 29,937                       | 27,676                        | 22,503                         | 10.42               | 2,160                    |
| 2001                          | 142,467.12              | 80,722                       | 74,625                        | 67,842                         | 11.03               | 6,151                    |
| 2003                          | 2,326.24                | 1,170                        | 1,082                         | 1,244                          | 12.27               | 101                      |
| 2004                          | 119,576.43              | 56,105                       | 51,867                        | 67,709                         | 12.91               | 5,245                    |
| 2005                          | 239,392.72              | 103,992                      | 96,138                        | 143,255                        | 13.56               | 10,565                   |
| 2006                          | 28,069.86               | 11,208                       | 10,361                        | 17,709                         | 14.17               | 1,250                    |
| 2007                          | 22,252.02               | 8,053                        | 7,445                         | 14,807                         | 14.84               | 998                      |
| 2008                          | 0.11                    |                              |                               |                                |                     |                          |
| 2009                          | 13,302.75               | 3,782                        | 3,496                         | 9,807                          | 16.16               | 607                      |
| 2010                          | 58,509.38               | 14,265                       | 13,188                        | 45,321                         | 16.80               | 2,698                    |
| 2011                          | 109,605.60              | 22,173                       | 20,498                        | 89,108                         | 17.42               | 5,115                    |
| 2012                          | 239,723.71              | 38,164                       | 35,282                        | 204,442                        | 18.04               | 11,333                   |
| 2013                          | 646,811.10              | 74,577                       | 68,944                        | 577,867                        | 18.55               | 31,152                   |
| 2014                          | 1,188,727.29            | 82,854                       | 76,596                        | 1,112,131                      | 18.91               | 58,812                   |
|                               | 3,113,728.21            | 745,968                      | 689,626                       | 2,424,102                      |                     | 148,679                  |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 16.3 4.77

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 390 STRUCTURES AND IMPROVEMENTS - COMMUNICATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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 40-R2.5 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0       |                         |                              |                               |                                |                     |                          |
| 1955                          | 1,170.54                | 1,068                        | 1,171                         |                                |                     |                          |
| 1958                          | 192.08                  | 172                          | 192                           |                                |                     |                          |
| 1959                          | 2,129.94                | 1,896                        | 2,130                         |                                |                     |                          |
| 1971                          | 17,971.09               | 14,494                       | 17,971                        |                                |                     |                          |
| 1983                          | 7,872.27                | 5,716                        | 7,872                         |                                |                     |                          |
| 1984                          | 3,449.87                | 2,449                        | 3,391                         | 59                             | 12.83               | 5                        |
| 1987                          | 6,786.87                | 4,494                        | 6,223                         | 564                            | 14.50               | 39                       |
| 1988                          | 9,428.54                | 6,100                        | 8,447                         | 982                            | 14.96               | 66                       |
| 1990                          | 820.22                  | 500                          | 692                           | 128                            | 16.25               | 8                        |
|                               | 49,821.42               | 36,889                       | 48,089                        | 1,732                          |                     | 118                      |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 14.7 0.24

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, 2015

| 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    |                         |                              |                               |                                |                     |                          |
| 1995                       | 101,036.27              | 101,036                      | 101,036                       |                                |                     |                          |
| 1996                       | 260,945.93              | 253,334                      | 260,946                       |                                |                     |                          |
| 1997                       | 470,390.27              | 433,149                      | 470,390                       |                                |                     |                          |
| 1998                       | 480,955.49              | 418,830                      | 456,161                       | 24,794                         | 2.58                | 9,610                    |
| 1999                       | 80,599.29               | 66,158                       | 72,055                        | 8,544                          | 3.58                | 2,387                    |
| 2000                       | 95,723.34               | 73,786                       | 80,363                        | 15,360                         | 4.58                | 3,354                    |
| 2001                       | 173,686.96              | 125,199                      | 136,358                       | 37,329                         | 5.58                | 6,690                    |
| 2002                       | 94,356.55               | 63,297                       | 68,939                        | 25,418                         | 6.58                | 3,863                    |
| 2003                       | 95,837.52               | 59,499                       | 64,802                        | 31,036                         | 7.58                | 4,094                    |
| 2004                       | 32,484.97               | 18,543                       | 20,196                        | 12,289                         | 8.58                | 1,432                    |
| 2005                       | 522.52                  | 272                          | 296                           | 227                            | 9.58                | 24                       |
| 2007                       | 4,181.56                | 1,760                        | 1,917                         | 2,265                          | 11.58               | 196                      |
| 2010                       | 7,734.00                | 2,095                        | 2,282                         | 5,452                          | 14.58               | 374                      |
| 2011                       | 12,031.56               | 2,657                        | 2,894                         | 9,138                          | 15.58               | 587                      |
| 2012                       | 1,550.11                | 265                          | 289                           | 1,261                          | 16.58               | 76                       |
| 2014                       | 9,693.70                | 687                          | 748                           | 8,946                          | 18.58               | 481                      |
| 2015                       | 135,000.00              | 2,812                        | 3,062                         | 131,938                        | 19.58               | 6,738                    |
|                            | 2,056,730.04            | 1,623,379                    | 1,742,734                     | 313,996                        |                     | 39,906                   |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 7.9 1.94

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, 2015

| 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               | 7,192                        | 11,382                        | 13,045                         | 10.58               | 1,233                    |
|                                                                   | 24,427.00               | 7,192                        | 11,382                        | 13,045                         |                     | 1,233                    |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 10.6 |                         |                              |                               |                                |                     | 5.05                     |



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, 2015

| 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                                          |                         |                              |                               |                                |                     |                          |
| 2011                                                             | 1,898,783.69            | 1,677,253                    | 1,658,249                     | 240,535                        | 0.58                | 240,535                  |
| 2013                                                             | 299,109.66              | 144,569                      | 142,931                       | 156,179                        | 2.58                | 60,534                   |
| 2014                                                             | 353,000.00              | 100,015                      | 98,882                        | 254,118                        | 3.58                | 70,983                   |
|                                                                  | 2,550,893.35            | 1,921,837                    | 1,900,062                     | 650,831                        |                     | 372,052                  |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 1.7 |                         |                              |                               |                                |                     | 14.59                    |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 392 TRANSPORTATION EQUIPMENT - TRAILERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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                                          |                         |                              |                               |                                |                     |                          |
| 2002                                                             | 5,208.71                | 4,659                        | 3,948                         | 1,261                          | 1.58                | 798                      |
| 2004                                                             | 70,904.01               | 53,966                       | 45,733                        | 25,171                         | 3.58                | 7,031                    |
| 2011                                                             | 3,781.00                | 1,113                        | 943                           | 2,838                          | 10.58               | 268                      |
| 2012                                                             | 14,849.79               | 3,382                        | 2,866                         | 11,984                         | 11.58               | 1,035                    |
| 2013                                                             | 2,789.00                | 449                          | 381                           | 2,408                          | 12.58               | 191                      |
|                                                                  | 97,532.51               | 63,569                       | 53,871                        | 43,662                         |                     | 9,323                    |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 4.7 |                         |                              |                               |                                |                     | 9.56                     |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 393 STORES EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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                                               |                         |                              |                               |                                |                     |                          |
| 1996                                                                  | 2,299.92                | 2,233                        | 2,300                         |                                |                     |                          |
| 1997                                                                  | 939.35                  | 865                          | 939                           |                                |                     |                          |
| 1998                                                                  | 13,435.25               | 11,700                       | 13,197                        | 238                            | 2.58                | 92                       |
|                                                                       | 16,674.52               | 14,798                       | 16,436                        | 239                            |                     | 92                       |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 2.6 0.55 |                         |                              |                               |                                |                     |                          |

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, 2015

| 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                                           |                         |                              |                               |                                |                     |                          |
| 1990                                                              | 209,079.28              | 209,079                      | 209,079                       |                                |                     |                          |
| 1991                                                              | 158,165.95              | 154,476                      | 158,166                       |                                |                     |                          |
| 1992                                                              | 186,713.88              | 174,889                      | 180,482                       | 6,232                          | 1.58                | 3,944                    |
| 1993                                                              | 413,416.69              | 370,698                      | 382,554                       | 30,863                         | 2.58                | 11,962                   |
| 1994                                                              | 566,669.51              | 485,449                      | 500,975                       | 65,695                         | 3.58                | 18,351                   |
| 1995                                                              | 162,417.47              | 132,641                      | 136,883                       | 25,534                         | 4.58                | 5,575                    |
| 1996                                                              | 552,198.39              | 428,876                      | 442,592                       | 109,606                        | 5.58                | 19,643                   |
| 1997                                                              | 1,161,874.46            | 855,918                      | 883,292                       | 278,582                        | 6.58                | 42,338                   |
| 1998                                                              | 383,704.26              | 267,315                      | 275,864                       | 107,840                        | 7.58                | 14,227                   |
| 1999                                                              | 191,341.50              | 125,648                      | 129,667                       | 61,674                         | 8.58                | 7,188                    |
| 2000                                                              | 296,716.81              | 182,976                      | 188,828                       | 107,889                        | 9.58                | 11,262                   |
| 2001                                                              | 186,888.81              | 107,773                      | 111,220                       | 75,669                         | 10.58               | 7,152                    |
| 2002                                                              | 307,053.93              | 164,787                      | 170,057                       | 136,997                        | 11.58               | 11,830                   |
| 2003                                                              | 266,861.99              | 132,542                      | 136,781                       | 130,081                        | 12.58               | 10,340                   |
| 2004                                                              | 366,999.55              | 167,598                      | 172,958                       | 194,042                        | 13.58               | 14,289                   |
| 2005                                                              | 79,725.36               | 33,219                       | 34,281                        | 45,444                         | 14.58               | 3,117                    |
| 2006                                                              | 179,958.05              | 67,785                       | 69,953                        | 110,005                        | 15.58               | 7,061                    |
| 2007                                                              | 847,845.86              | 285,444                      | 294,573                       | 553,273                        | 16.58               | 33,370                   |
| 2008                                                              | 1,181,797.10            | 350,604                      | 361,818                       | 819,979                        | 17.58               | 46,643                   |
| 2009                                                              | 278,442.30              | 71,468                       | 73,754                        | 204,688                        | 18.58               | 11,017                   |
| 2010                                                              | 746,136.58              | 161,665                      | 166,836                       | 579,301                        | 19.58               | 29,586                   |
| 2011                                                              | 626,616.50              | 110,704                      | 114,245                       | 512,372                        | 20.58               | 24,897                   |
| 2012                                                              | 870,830.41              | 119,016                      | 122,822                       | 748,008                        | 21.58               | 34,662                   |
| 2013                                                              | 784,168.63              | 75,806                       | 78,230                        | 705,939                        | 22.58               | 31,264                   |
| 2014                                                              | 1,190,507.07            | 67,466                       | 69,624                        | 1,120,883                      | 23.58               | 47,535                   |
| 2015                                                              | 489,699.00              | 8,163                        | 8,424                         | 481,275                        | 24.58               | 19,580                   |
|                                                                   | 12,685,829.34           | 5,312,005                    | 5,473,958                     | 7,211,871                      |                     | 466,833                  |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 15.4 |                         |                              |                               |                                |                     | 3.68                     |

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, 2015

| 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               | 94,851                       | 95,945                        |                                |                     |                          |
| 1994                                                                  | 117,928.20              | 114,921                      | 117,928                       |                                |                     |                          |
| 1995                                                                  | 1,135,467.56            | 1,091,866                    | 1,135,468                     |                                |                     |                          |
| 1996                                                                  | 280,092.23              | 265,387                      | 280,092                       |                                |                     |                          |
| 1998                                                                  | 98,401.65               | 90,323                       | 98,402                        |                                |                     |                          |
| 1999                                                                  | 18,450.18               | 16,598                       | 18,450                        |                                |                     |                          |
| 2001                                                                  | 80,747.15               | 69,378                       | 80,535                        | 212                            | 2.36                | 90                       |
|                                                                       | 1,953,497.84            | 1,869,790                    | 1,953,286                     | 212                            |                     | 90                       |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 2.4 0.00 |                         |                              |                               |                                |                     |                          |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 394.5 TOOLS, SHOP AND GARAGE EQUIPMENT - GPS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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.. 10-SQUARE                                       |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                          |                         |                              |                               |                                |                     |                          |
| 2014                                                             | 871,620.00              | 123,482                      | 75,879                        | 795,741                        | 8.58                | 92,744                   |
| 2015                                                             | 1,324,001.00            | 55,171                       | 33,902                        | 1,290,099                      | 9.58                | 134,666                  |
|                                                                  | 2,195,621.00            | 178,653                      | 109,781                       | 2,085,840                      |                     | 227,410                  |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 9.2 |                         |                              |                               |                                |                     | 10.36                    |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 395 LABORATORY EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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                                               |                         |                              |                               |                                |                     |                          |
| 1996                                                                  | 13,945.83               | 13,539                       | 13,003                        | 943                            | 0.58                | 943                      |
| 1997                                                                  | 8,811.95                | 8,114                        | 7,793                         | 1,019                          | 1.58                | 645                      |
| 1998                                                                  | 4,710.24                | 4,102                        | 3,940                         | 770                            | 2.58                | 298                      |
| 2000                                                                  | 2,990.39                | 2,305                        | 2,214                         | 776                            | 4.58                | 169                      |
| 2002                                                                  | 1,118.18                | 750                          | 720                           | 398                            | 6.58                | 60                       |
| 2011                                                                  | 19,084.33               | 4,214                        | 4,047                         | 15,037                         | 15.58               | 965                      |
|                                                                       | 50,660.92               | 33,024                       | 31,717                        | 18,944                         |                     | 3,080                    |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 6.2 6.08 |                         |                              |                               |                                |                     |                          |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 396 POWER OPERATED EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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-L3                                           |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                               |                         |                              |                               |                                |                     |                          |
| 1990                                                                  | 14,666.07               | 14,389                       | 14,666                        |                                |                     |                          |
| 1991                                                                  | 77,918.78               | 75,721                       | 77,919                        |                                |                     |                          |
| 1992                                                                  | 7,619.70                | 7,333                        | 7,620                         |                                |                     |                          |
| 1993                                                                  | 2,619.06                | 2,495                        | 2,619                         |                                |                     |                          |
| 1994                                                                  | 49,419.28               | 46,568                       | 49,419                        |                                |                     |                          |
| 1995                                                                  | 102,911.30              | 95,605                       | 102,911                       |                                |                     |                          |
| 1997                                                                  | 46,192.45               | 41,684                       | 46,192                        |                                |                     |                          |
| 1999                                                                  | 176,977.59              | 154,271                      | 176,237                       | 741                            | 2.42                | 306                      |
| 2000                                                                  | 424,416.34              | 362,494                      | 414,107                       | 10,309                         | 2.63                | 3,920                    |
| 2001                                                                  | 23,340.60               | 19,550                       | 22,334                        | 1,007                          | 2.80                | 360                      |
| 2002                                                                  | 21,599.55               | 17,707                       | 20,228                        | 1,372                          | 2.95                | 465                      |
| 2003                                                                  | 458,375.61              | 368,259                      | 420,693                       | 37,683                         | 3.04                | 12,396                   |
| 2011                                                                  | 25,036.41               | 10,140                       | 11,584                        | 13,452                         | 6.49                | 2,073                    |
| 2014                                                                  | 4,400.00                | 588                          | 672                           | 3,728                          | 9.19                | 406                      |
|                                                                       | 1,435,492.74            | 1,216,804                    | 1,367,201                     | 68,292                         |                     | 19,926                   |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 3.4 1.39 |                         |                              |                               |                                |                     |                          |



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 397.1 COMMUNICATION EQUIPMENT - TELEPHONE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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.. 10-SQUARE                                   |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                      |                         |                              |                               |                                |                     |                          |
| 2005                                                         | 173,475.92              | 173,476                      | 173,476                       |                                |                     |                          |
| 2006                                                         | 168,830.82              | 158,983                      | 139,430                       | 29,401                         | 0.58                | 29,401                   |
| 2014                                                         | 190,124.00              | 26,935                       | 23,622                        | 166,502                        | 8.58                | 19,406                   |
| 2015                                                         | 206,422.00              | 8,602                        | 7,544                         | 198,878                        | 9.58                | 20,760                   |
|                                                              | 738,852.74              | 367,996                      | 344,072                       | 394,781                        |                     | 69,567                   |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. |                         |                              |                               |                                |                     | 5.7 9.42                 |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 397.24 COMMUNICATION EQUIPMENT - RADIO

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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                                           |                         |                              |                               |                                |                     |                          |
| 2000                                                              | 1,696,857.81            | 1,696,858                    | 1,696,858                     |                                |                     |                          |
| 2003                                                              | 36,568.41               | 30,271                       | 13,420                        | 23,148                         | 2.58                | 8,972                    |
| 2014                                                              | 340,912.00              | 32,196                       | 14,274                        | 326,638                        | 13.58               | 24,053                   |
| 2015                                                              | 370,136.00              | 10,282                       | 4,558                         | 365,578                        | 14.58               | 25,074                   |
|                                                                   | 2,444,474.22            | 1,769,607                    | 1,729,110                     | 715,364                        |                     | 58,099                   |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 12.3 |                         |                              |                               |                                |                     | 2.38                     |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 397.5 COMMUNICATION EQUIPMENT - TELEMETERING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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 17-R3                                      |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                          |                         |                              |                               |                                |                     |                          |
| 1995                                                             | 11,233.39               | 10,229                       | 10,607                        | 626                            | 2.00                | 313                      |
| 1996                                                             | 163,883.53              | 146,692                      | 152,111                       | 11,773                         | 2.28                | 5,164                    |
| 1997                                                             | 36,505.23               | 31,935                       | 33,115                        | 3,390                          | 2.64                | 1,284                    |
| 1998                                                             | 6,171.79                | 5,267                        | 5,462                         | 710                            | 2.99                | 237                      |
| 1999                                                             | 94,169.90               | 77,916                       | 80,794                        | 13,376                         | 3.42                | 3,911                    |
| 2000                                                             | 235,196.49              | 187,828                      | 194,765                       | 40,431                         | 3.89                | 10,394                   |
| 2001                                                             | 115,329.34              | 88,285                       | 91,546                        | 23,783                         | 4.42                | 5,381                    |
| 2002                                                             | 104,739.40              | 76,449                       | 79,273                        | 25,466                         | 4.97                | 5,124                    |
| 2011                                                             | 42,994.18               | 12,172                       | 12,622                        | 30,372                         | 11.18               | 2,717                    |
| 2014                                                             | 124,564.00              | 11,809                       | 12,245                        | 112,319                        | 13.53               | 8,301                    |
| 2015                                                             | 135,242.00              | 3,854                        | 3,996                         | 131,246                        | 14.18               | 9,256                    |
|                                                                  | 1,070,029.25            | 652,436                      | 676,536                       | 393,493                        |                     | 52,082                   |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 7.6 |                         |                              |                               |                                |                     | 4.87                     |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 398 MISCELLANEOUS EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF NOVEMBER 30, 2015

| 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                                      |                         |                              |                               |                                |                     |                          |
| 2000                                                         | 18,639.93               | 18,640                       | 18,640                        |                                |                     |                          |
| 2001                                                         | 38,544.89               | 37,046                       | 34,478                        | 4,067                          | 0.58                | 4,067                    |
| 2002                                                         | 9,171.96                | 8,204                        | 7,635                         | 1,537                          | 1.58                | 973                      |
| 2003                                                         | 7,484.08                | 6,195                        | 5,766                         | 1,718                          | 2.58                | 666                      |
| 2004                                                         | 11,186.58               | 8,514                        | 7,924                         | 3,263                          | 3.58                | 911                      |
| 2005                                                         | 23,458.02               | 16,290                       | 15,161                        | 8,297                          | 4.58                | 1,812                    |
| 2006                                                         | 8,228.13                | 5,165                        | 4,807                         | 3,421                          | 5.58                | 613                      |
| 2007                                                         | 136.82                  | 77                           | 72                            | 65                             | 6.58                | 10                       |
| 2008                                                         | 2,264.03                | 1,119                        | 1,041                         | 1,223                          | 7.58                | 161                      |
| 2009                                                         | 11,311.50               | 4,839                        | 4,504                         | 6,808                          | 8.58                | 793                      |
| 2010                                                         | 4,537.40                | 1,639                        | 1,525                         | 3,012                          | 9.58                | 314                      |
| 2011                                                         | 66,158.60               | 19,480                       | 18,130                        | 48,029                         | 10.58               | 4,540                    |
| 2012                                                         | 129,294.07              | 29,451                       | 27,410                        | 101,884                        | 11.58               | 8,798                    |
| 2013                                                         | 7,172.00                | 1,155                        | 1,075                         | 6,097                          | 12.58               | 485                      |
| 2014                                                         | 228,080.79              | 21,540                       | 20,047                        | 208,034                        | 13.58               | 15,319                   |
| 2015                                                         | 67,800.00               | 1,883                        | 1,753                         | 66,047                         | 14.58               | 4,530                    |
|                                                              | 633,468.80              | 181,237                      | 169,968                       | 463,501                        |                     | 43,992                   |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. |                         |                              |                               |                                |                     | 10.5 6.94                |

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

SUMMARY OF COST OF REMOVAL AND GROSS SALVAGE AND  
AMORTIZATION OF EXPERIENCED AND ESTIMATED NET SALVAGE

| ACCT                  | REGULAR<br>RETIREMENTS | COST OF<br>REMOVAL | GROSS<br>SALVAGE | NET<br>SALVAGE |
|-----------------------|------------------------|--------------------|------------------|----------------|
| 2010 TRANSACTION YEAR |                        |                    |                  |                |
| 362.10                |                        | 3,038,278.56       |                  | 3,038,278.56-  |
| 374.40                | 2,451.03               | 300.47             |                  | 300.47-        |
| 374.50                |                        | 944.00             |                  | 944.00-        |
| 375.34                | 8,426.70               | 58,154.56          |                  | 58,154.56-     |
| 375.60                |                        | 360.62             |                  | 360.62-        |
| 375.70                | 4,917.10               | 212,334.93-        | 30,981.69        | 243,316.62     |
| 376.00                | 6,094,674.85           | 957,907.79         | 1,192.22-        | 959,100.01-    |
| 378.00                | 316,954.17             | 37,483.33          |                  | 37,483.33-     |
| 379.10                |                        | 1,881.54           |                  | 1,881.54-      |
| 380.00                | 4,301,280.30           | 1,409,210.77       |                  | 1,409,210.77-  |
| 381.00                | 688,641.33             |                    | 31,247.04        | 31,247.04      |
| 382.00                | 93,240.91              | 58.86-             |                  | 58.86          |
| 383.00                | 12,047.13              | 691.00             |                  | 691.00-        |
| 384.00                | 12,350.94              | 4.07               |                  | 4.07-          |
| 385.00                | 179,661.32             | 41,470.62          |                  | 41,470.62-     |
| 387.00                |                        | 2,340.16           |                  | 2,340.16-      |
| 387.40                |                        | 6,826.99           |                  | 6,826.99-      |
| 392.00                |                        |                    | 7,859.79         | 7,859.79       |
| 394.00                | 144,268.92             |                    | 5,383.50         | 5,383.50       |
| 396.00                |                        |                    | 50,040.21        | 50,040.21      |
| 397.10                | 242,932.81             | 23,463.90          | 21,000.00        | 2,463.90-      |
|                       | 12,101,847.51          | 5,366,924.59       | 145,320.01       | 5,221,604.58-  |
| 2011 TRANSACTION YEAR |                        |                    |                  |                |
| 362.10                | 2,955.95               | 11,780.05          |                  | 11,780.05-     |
| 374.40                | 2,451.03               |                    |                  |                |
| 375.34                | 8,426.70               | 12,279.55          |                  | 12,279.55-     |
| 375.70                | 4,917.10               |                    |                  |                |
| 376.00                | 6,094,674.85           | 1,269,063.41       | 1,541.00         | 1,267,522.41-  |
| 378.00                | 316,954.17             | 59,829.10          |                  | 59,829.10-     |
| 380.00                | 4,301,280.30           | 4,313,652.88       |                  | 4,313,652.88-  |
| 381.00                | 688,641.33             |                    | 759.60           | 759.60         |
| 382.00                | 93,240.91              |                    |                  |                |
| 383.00                | 12,047.13              |                    |                  |                |
| 384.00                | 12,350.94              |                    |                  |                |
| 385.00                | 179,661.32             | 31,592.63          |                  | 31,592.63-     |
| 387.00                |                        | 26,983.46          |                  | 26,983.46-     |
| 387.40                |                        | 208.04             |                  | 208.04-        |
| 392.00                |                        |                    | 7,201.42         | 7,201.42       |
| 394.00                | 144,268.92             |                    |                  |                |
| 396.00                |                        |                    | 43,731.96        | 43,731.96      |
| 397.10                | 242,932.81             |                    |                  |                |
|                       | 12,104,803.46          | 5,725,389.12       | 53,233.98        | 5,672,155.14-  |

COLUMBIA GAS OF PENNSYLVANIA, INC.

SUMMARY OF COST OF REMOVAL AND GROSS SALVAGE AND  
AMORTIZATION OF EXPERIENCED AND ESTIMATED NET SALVAGE

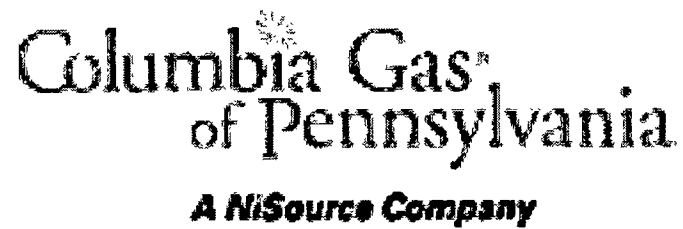
| ACCT                  | REGULAR<br>RETIREMENTS | COST OF<br>REMOVAL | GROSS<br>SALVAGE | NET<br>SALVAGE |
|-----------------------|------------------------|--------------------|------------------|----------------|
| 2012 TRANSACTION YEAR |                        |                    |                  |                |
| 362.10                |                        | 6,457.05           |                  | 6,457.05-      |
| 374.40                | 15,595.34              | 260.16             |                  | 260.16-        |
| 375.34                | 32,534.20              | 17,416.11          |                  | 17,416.11-     |
| 375.60                | 22.40                  |                    |                  |                |
| 375.70                | 6,691.59               | 5,103.09           |                  | 5,103.09-      |
| 376.00                | 6,717,810.62           | 886,996.12         |                  | 886,996.12-    |
| 378.00                | 261,314.24             | 18,887.95          |                  | 18,887.95-     |
| 380.00                | 5,021,027.74           | 2,192,533.99       |                  | 2,192,533.99-  |
| 381.00                | 574,916.43             | 305.85             | 25,333.32        | 25,027.47      |
| 382.00                | 71,791.00              |                    |                  |                |
| 383.00                | 12,740.78              |                    |                  |                |
| 385.00                | 129,670.47             | 23,198.35          |                  | 23,198.35-     |
| 387.40                | 18,518.39              | 55.60              |                  | 55.60-         |
| 396.00                | 61,173.74              |                    |                  |                |
| 397.10                | 379,511.34             |                    |                  |                |
|                       | 13,303,318.28          | 3,151,214.27       | 25,333.32        | 3,125,880.95-  |
| 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                | 4,573.73               | 4,911.96           |                  | 4,911.96-      |
| 375.34                | 21,986.97              | 22,427.70          |                  | 22,427.70-     |
| 375.60                |                        | 1,091.39           |                  | 1,091.39-      |
| 376.00                | 7,496,191.99           | 691,743.41         | 2,051.59         | 689,691.82-    |
| 378.00                | 216,579.21             | 216,795.76         |                  | 216,795.76-    |
| 380.00                | 5,734,991.74           | 1,750,826.78       |                  | 1,750,826.78-  |
| 381.00                | 421,072.33             | 23.20              | 6,554.08         | 6,530.88       |
| 382.00                | 91,732.07              |                    |                  |                |
| 383.00                | 9,962.93               |                    |                  |                |
| 385.00                | 250,693.05             | 51,158.61          |                  | 51,158.61-     |
| 387.00                | 4,694.90               |                    |                  |                |
| 387.40                | 7,558.85               | 392.50             |                  | 392.50-        |
| 392.00                | 118,202.85             |                    | 44,482.18        | 44,482.18      |
| 396.00                | 349,409.40             |                    | 104,669.48       | 104,669.48     |
|                       | 14,729,233.72          | 2,838,110.41       | 157,757.33       | 2,680,353.08-  |

COLUMBIA GAS OF PENNSYLVANIA, INC.

SUMMARY OF COST OF REMOVAL AND GROSS SALVAGE AND  
AMORTIZATION OF EXPERIENCED AND ESTIMATED NET SALVAGE

| ACCT                  | REGULAR<br>RETIREMENTS | COST OF<br>REMOVAL | GROSS<br>SALVAGE | NET<br>SALVAGE |
|-----------------------|------------------------|--------------------|------------------|----------------|
| 2014 TRANSACTION YEAR |                        |                    |                  |                |
| 362.10                |                        | 190,000.00         |                  | 190,000.00-    |
| 374.40                | 23,069.43              | 65.91              |                  | 65.91-         |
| 375.34                | 59,628.61              | 21,436.63          |                  | 21,436.63-     |
| 375.70                | 85,500.00              | 12,825.00          |                  | 12,825.00-     |
| 376.00                | 5,834,387.77           | 1,246,578.85       |                  | 1,246,578.85-  |
| 378.00                | 406,574.02             | 183,240.21         |                  | 183,240.21-    |
| 379.10                | 12,676.85              | 91.84              |                  | 91.84-         |
| 380.00                | 5,992,235.17           | 4,297,939.86       |                  | 4,297,939.86-  |
| 381.00                | 372,226.36             |                    | 623.00           | 623.00         |
| 382.00                | 113,987.26             |                    |                  |                |
| 383.00                | 21,591.65              | 139.00             |                  | 139.00-        |
| 385.00                | 226,203.18             | 60,963.56          |                  | 60,963.56-     |
| 387.40                | 27,680.85              | 933.57             |                  | 933.57-        |
| 392.00                | 23,449.34              |                    | 10,317.71        | 10,317.71      |
| 394.00                | 549,726.20             |                    |                  |                |
| 397.10                | 605,672.59             |                    |                  |                |
|                       | 14,354,609.28          | 6,014,214.43       | 10,940.71        | 6,003,273.72-  |
| TOTAL                 | 66,593,812.25          | 23,095,852.82      | 392,585.35       | 22,703,267.47- |





## **2016 DEPRECIATION STUDY**

CALCULATED ANNUAL DEPRECIATION  
ACCRUALS RELATED TO GAS PLANT  
AS OF DECEMBER 31, 2016

*Prepared by:*



***Gannett Fleming***

*Excellence Delivered As Promised*

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

**2016 DEPRECIATION STUDY**

**CALCULATED ANNUAL DEPRECIATION ACCRUALS  
RELATED TO GAS PLANT  
AS OF DECEMBER 31, 2016**

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



*Excellence Delivered As Promised*

March 6, 2015

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, 2016. The results of our study as of November 30, 2015 are presented in our report titled "2015 Depreciation Study - Calculated Annual Depreciation Accruals Related to Gas Plant as of November 30, 2015". The same methods, procedures and estimates are used in both studies.

The attached report sets forth a description of the methods and procedures upon which the studies were based, the estimates of survivor curves and the calculated annual depreciation rates at December 31, 2016.

Respectfully submitted,

GANNETT FLEMING VALUATION  
AND RATE CONSULTANTS, LLC

A handwritten signature in black ink, reading "John J. Spanos".

JOHN J. SPANOS  
Sr. Vice President

JJS:krm

059539

Gannett Fleming Valuation and Rate Consultants, LLC

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## PART I. RESULTS OF STUDY

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

### **PART I. RESULTS OF STUDY**

#### **DESCRIPTION OF SUMMARY TABULATIONS**

Tables 1 through 4 presented on pages 3 through 10 summarize the results of the depreciation study as of December 31, 2016. Table 1 sets forth, by depreciable group, the estimated survivor curve, original cost, book depreciation reserve as of December 31, 2016, future book accruals, calculated annual accrual amount and rate, and composite remaining life for plant in service. Table 2 presents the bringforward of the book reserve to December 31, 2016. Table 3 sets forth the calculations of the depreciation accruals for the thirteen months ended December 31, 2016. Table 4 presents the annual amortization of experienced and estimated net salvage based on the period 2011 through 2015.

#### **DESCRIPTION OF DETAILED TABULATIONS**

The supporting data for the depreciation calculations are presented in account sequence in the section beginning on page II-1. The original cost, calculated accrued depreciation, allocated book reserve, future accruals, remaining life and annual accrual are shown for each vintage of each account or subaccount. The amounts of regular retirements, gross salvage and cost of removal are set forth by account for the years 2011 through 2015, beginning on pages III-2 through III-4.

COLUMBIA GAS OF PENNSYLVANIA, INC.

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

| DEPRECIABLE GROUP<br>(1)                  | SURVIVOR<br>CURVE<br>(2) | ORIGINAL COST<br>AS OF<br>DECEMBER 31, 2016<br>(3) | BOOK<br>RESERVE<br>(4) | FUTURE<br>BOOK<br>ACCRUAL<br>(5) | CALCULATED<br>ANNUAL ACCRUAL<br>AMOUNT<br>(6) | RATE<br>(7)=(6)/(3) | COMPOSITE<br>REMAINING<br>LIFE<br>(8)=(6)/(7) |
|-------------------------------------------|--------------------------|----------------------------------------------------|------------------------|----------------------------------|-----------------------------------------------|---------------------|-----------------------------------------------|
| <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 *                | 3,133,154.50                                       | 992,754                | 2,140,400                        | 120,418                                       | 3.84                | 17.8                                          |
| <b>WELLS</b>                              |                          |                                                    |                        |                                  |                                               |                     |                                               |
| 352.01 CONSTRUCTION                       | SQUARE *                 | 798,133.73                                         | 798,118                | 16                               | 1                                             | 0.00                | 16.0                                          |
| 352.02 EQUIPMENT                          | 45-S2.5 *                | 189,879.87                                         | 188,680                | 0                                | 0                                             | -                   | -                                             |
| TOTAL ACCOUNT 352                         |                          | 987,813.40                                         | 986,798                | 16                               | 1                                             |                     |                                               |
| 352.1 STORAGE LEASEHOLDS AND RIGHTS       | SQUARE *                 | 206,940.78                                         | 206,932                | 9                                | 0                                             | 0.00                | 20.6                                          |
| 353 LINES                                 | 50-S1.5 *                | 405,287.78                                         | 405,288                | 0                                | 0                                             | -                   | -                                             |
| 354 COMPRESSOR STATION EQUIPMENT          | 50-R2.5 *                | 1,328,851.88                                       | 574,335                | 752,517                          | 44,433                                        | 3.35                | 16.9                                          |
| 355 MEASURING AND REGULATING EQUIPMENT    | 37-R1.5 *                | 123,010.01                                         | 123,010                | 0                                | 0                                             | -                   | -                                             |
| TOTAL UNDERGROUND STORAGE PLANT           |                          | 6,164,990.21                                       | 3,272,048              | 2,892,943                        | 184,852                                       | 2.67                |                                               |
| <b>DISTRIBUTION PLANT</b>                 |                          |                                                    |                        |                                  |                                               |                     |                                               |
| <b>LAND AND LAND RIGHTS</b>               |                          |                                                    |                        |                                  |                                               |                     |                                               |
| 374.4 LAND RIGHTS                         | 65-R3                    | 2,401,858.32                                       | 681,965                | 1,719,891                        | 40,965                                        | 1.71                | 42.0                                          |
| 374.5 RIGHTS-OF-WAY                       | 75-S4                    | 3,233,106.76                                       | 1,801,901              | 1,631,206                        | 42,159                                        | 1.30                | 38.7                                          |
| TOTAL ACCOUNT 374                         |                          | 5,634,965.08                                       | 2,283,866              | 3,351,087                        | 83,124                                        | 1.48                |                                               |
| <b>STRUCTURES AND IMPROVEMENTS</b>        |                          |                                                    |                        |                                  |                                               |                     |                                               |
| 375.34 MEASURING AND REGULATING           | 60-R1.5                  | 3,865,617.62                                       | 883,045                | 2,982,573                        | 85,582                                        | 2.21                | 34.9                                          |
| 375.6 INDUSTRIAL MEASURING AND REGULATING | 50-R1.5                  | 87,869.84                                          | 73,869                 | 13,001                           | 850                                           | 0.97                | 16.2                                          |
| 375.7 OTHER DISTRIBUTION SYSTEMS          | 90-R1 *                  | 6,519,307.59                                       | 1,155,979              | 5,363,328                        | 345,323                                       | 5.30                | 15.5                                          |
| DISTRIBUTION SYSTEM STRUCTURES            | 33-S1                    | 2,876,730.76                                       | 875,722                | 2,001,009                        | 104,982                                       | 3.65                | 19.1                                          |
| OTHER BUILDINGS                           |                          | 9,388,038.35                                       | 2,031,701              | 7,356,337                        | 450,305                                       | 4.79                | 16.4                                          |
| TOTAL ACCOUNT 375.70                      |                          | 18,515.17                                          | 6,540                  | 9,975                            | 331                                           | 2.00                | 30.1                                          |
| 375.8 COMMUNICATION STRUCTURES            | 50-R2                    | 13,365,840.98                                      | 2,995,155              | 10,370,686                       | 537,048                                       | 4.02                |                                               |
| TOTAL ACCOUNT 375                         |                          |                                                    |                        |                                  |                                               |                     |                                               |
| 376 MAINS                                 | 72-R1.5 *                | 454,390.43                                         | 342,363                | 112,027                          | 14,809                                        | 3.26                | 7.6                                           |
| CAST IRON                                 | 72-R1.5 *                | 55,084,152.80                                      | 38,408,488             | 15,655,665                       | 1,853,074                                     | 3.37                | 8.4                                           |
| BARE STEEL                                | 72-R1.5                  | 1,192,185,558.22                                   | 145,651,545            | 1,046,544,013                    | 23,804,782                                    | 2.00                | 44.0                                          |
| OTHER                                     |                          |                                                    |                        |                                  |                                               |                     |                                               |
| TOTAL ACCOUNT 376                         |                          | 1,247,714,101.45                                   | 185,402,396            | 1,062,311,705                    | 25,672,645                                    | 2.06                |                                               |

COLUMBIA GAS OF PENNSYLVANIA, INC.

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

|                      | DEPRECIABLE GROUP<br>(1)                                             | SURVIVOR<br>CURVE<br>(2) | ORIGINAL COST<br>AS OF<br>DECEMBER 31, 2016<br>(3) | BOOK<br>RESERVE<br>(4) | FUTURE<br>BOOK<br>ACCRUAL<br>(5) | CALCULATED                      |                     | COMPOSITE<br>REMAINING<br>LIFE<br>(8)=(5)/(6) |
|----------------------|----------------------------------------------------------------------|--------------------------|----------------------------------------------------|------------------------|----------------------------------|---------------------------------|---------------------|-----------------------------------------------|
|                      |                                                                      |                          |                                                    |                        |                                  | ANNUAL ACCRUAL<br>AMOUNT<br>(6) | RATE<br>(7)=(6)/(3) |                                               |
| 378                  | MEASURING AND REGULATING EQUIPMENT - GENERAL                         | 45-R0.5                  | 40,144,485.03                                      | 9,897,811              | 30,246,674                       | 1,247,179                       | 3.11                | 24.3                                          |
| 379.1                | MEASURING AND REGULATING EQUIPMENT - CITY GATE                       | 35-S2.5                  | 141,117.10                                         | 94,150                 | 46,967                           | 4,384                           | 3.11                | 10.7                                          |
| 380                  | SERVICES                                                             |                          |                                                    |                        |                                  |                                 |                     |                                               |
|                      | BARE STEEL                                                           | 50-R0.5                  | 773,969.41                                         | 674,065                | 99,904                           | 13,670                          | 1.77                | 7.3                                           |
|                      | OTHER                                                                | 50-R0.5                  | 454,253,179.39                                     | 112,383,099            | 341,870,080                      | 12,910,907                      | 2.84                | 26.5                                          |
|                      | TOTAL ACCOUNT 380                                                    |                          | 455,027,148.80                                     | 113,057,164            | 341,969,984                      | 12,924,577                      | 2.84                |                                               |
| 381                  | METERS                                                               |                          |                                                    |                        |                                  |                                 |                     |                                               |
| 381.1                | METERS - AMR                                                         | 43-S1.5                  | 36,182,184.44                                      | 15,981,682             | 20,200,502                       | 877,483                         | 2.43                | 23.0                                          |
| 382                  | METER INSTALLATIONS                                                  | 15-S2.5                  | 23,760,038.80                                      | 8,698,973              | 15,061,066                       | 1,748,019                       | 7.36                | 8.6                                           |
| 383                  | HOUSE REGULATORS                                                     | 55-R2.5                  | 36,486,289.60                                      | 11,922,861             | 24,563,429                       | 708,729                         | 1.94                | 34.7                                          |
| 384                  | HOUSE REGULATOR INSTALLATIONS                                        | 40-S2                    | 11,597,052.48                                      | 3,551,101              | 8,045,951                        | 300,138                         | 2.59                | 26.8                                          |
| 385                  | INDUSTRIAL MEASURING AND REGULATING EQUIPMENT -<br>OTHER THAN METERS | 35-S3                    | 3,864,772.07                                       | 2,978,927              | 885,845                          | 66,436                          | 1.72                | 13.3                                          |
|                      |                                                                      | 30-R0.5                  | 6,994,005.61                                       | 3,322,200              | 3,671,806                        | 246,457                         | 3.52                | 14.9                                          |
| 387                  | OTHER EQUIPMENT                                                      |                          |                                                    |                        |                                  |                                 |                     |                                               |
| 387.4                | GENERAL                                                              | 30-R0.5                  | 133,851.06                                         | 80,135                 | 53,718                           | 3,235                           | 2.42                | 16.8                                          |
|                      | CUSTOMER INFORMATION SERVICES                                        | 25-R2.5                  | 3,113,728.21                                       | 850,986                | 2,262,742                        | 141,598                         | 4.55                | 16.0                                          |
|                      | TOTAL ACCOUNT 387                                                    |                          | 3,247,579.27                                       | 931,121                | 2,316,458                        | 144,833                         | 4.46                |                                               |
|                      | TOTAL DISTRIBUTION PLANT                                             |                          | 1,884,169,578.71                                   | 361,117,407            | 1,523,042,170                    | 44,561,062                      | 2.37                |                                               |
| <b>GENERAL PLANT</b> |                                                                      |                          |                                                    |                        |                                  |                                 |                     |                                               |
| 390.1                | STRUCTURES AND IMPROVEMENTS - COMMUNICATIONS                         | 40-R2.5                  | 49,821.42                                          | 48,219                 | 1,602                            | 113                             | 0.23                | 14.2                                          |
| 391.1                | OFFICE FURNITURE AND EQUIPMENT                                       |                          |                                                    |                        |                                  |                                 |                     |                                               |
| 391.11               | FURNITURE                                                            | 20-SQ                    | 1,859,847.84                                       | 1,422,297              | 437,551                          | 49,500                          | 2.66                | 8.8                                           |
| 391.12               | EQUIPMENT                                                            | 15-SQ                    | 24,427.00                                          | 12,718                 | 11,709                           | 1,233                           | 5.05                | 9.5                                           |
| 391.12               | INFORMATION SYSTEMS                                                  | 5-SQ                     | 1,075,009.66                                       | 421,205                | 653,805                          | 258,998                         | 24.09               | 2.5                                           |
|                      | TOTAL ACCOUNT 391                                                    |                          | 2,959,284.50                                       | 1,856,220              | 1,103,065                        | 308,731                         | 10.47               |                                               |
| 392                  | TRANSPORTATION EQUIPMENT - TRAILERS                                  | 15-SQ                    | 92,323.80                                          | 47,470                 | 44,854                           | 12,854                          | 13.92               | 3.5                                           |
| 393                  | STORES EQUIPMENT                                                     | 20-SQ                    | 14,374.60                                          | 14,235                 | 140                              | 93                              | 0.65                | 1.5                                           |
| 394                  | TOOLS, SHOP AND GARAGE EQUIPMENT                                     |                          |                                                    |                        |                                  |                                 |                     |                                               |
| 394.12               | EQUIPMENT                                                            | 25-SQ                    | 12,773,966.11                                      | 5,608,356              | 7,165,610                        | 482,650                         | 3.78                | 14.8                                          |
| 394.12               | CNG FACILITIES                                                       | 12-S1.5                  | 1,953,497.84                                       | 1,953,286              | 212                              | 104                             | 0.01                | 2.0                                           |
| 394.5                | GPS                                                                  | 10-SQ                    | 3,426,839.00                                       | 388,538                | 3,038,301                        | 358,295                         | 10.40               | 8.5                                           |
|                      | TOTAL ACCOUNT 394                                                    |                          | 18,154,302.95                                      | 7,950,180              | 10,204,123                       | 839,049                         | 4.62                |                                               |
| 395                  | LABORATORY EQUIPMENT                                                 | 20-SQ                    | 36,715.09                                          | 21,073                 | 15,642                           | 1,854                           | 5.05                | 8.4                                           |
| 396                  | POWER OPERATED EQUIPMENT                                             | 12-L3                    | 1,435,492.74                                       | 1,355,830              | 79,663                           | 26,331                          | 1.83                | 3.0                                           |



COLUMBIA GAS OF PENNSYLVANIA, INC.

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

| DEPRECIABLE GROUP<br>(1)                    | SURVIVOR<br>CURVE<br>(2) | ORIGINAL COST<br>AS OF<br>DECEMBER 31, 2016<br>(3) | BOOK<br>RESERVE<br>(4) | FUTURE<br>BOOK<br>ACCRUAL<br>(5) | CALCULATED<br>ANNUAL ACCRUAL<br>AMOUNT<br>(6) | RATE<br>(7)=(6)/(3) | COMPOSITE<br>REMAINING<br>LIFE<br>(8)=(6)/(6) |
|---------------------------------------------|--------------------------|----------------------------------------------------|------------------------|----------------------------------|-----------------------------------------------|---------------------|-----------------------------------------------|
| COMMUNICATION EQUIPMENT                     |                          |                                                    |                        |                                  |                                               |                     |                                               |
| 397.1 TELEPHONE                             | 10-SQ                    | 798,153.00                                         | 67,903                 | 731,250                          | 84,357                                        | 10.56               | 8.7                                           |
| 397.24 RADIO                                | 15-SQ                    | 1,469,532.41                                       | 57,008                 | 1,412,524                        | 117,984                                       | 8.03                | 12.0                                          |
| 397.5 TELEMETERING                          | 17-R3                    | 1,333,806.25                                       | 735,828                | 597,978                          | 66,315                                        | 4.97                | 9.0                                           |
| TOTAL ACCOUNT 397                           |                          | 3,602,491.66                                       | 860,739                | 2,741,752                        | 268,656                                       | 7.46                |                                               |
| 398 MISCELLANEOUS EQUIPMENT                 | 15-SQ                    | 1,058,483.98                                       | 193,810                | 864,674                          | 74,092                                        | 7.00                | 11.7                                          |
| TOTAL GENERAL PLANT                         |                          | 27,403,290.74                                      | 12,347,776             | 15,055,515                       | 1,532,773                                     | 5.59                |                                               |
| SUBTOTAL DEPRECIABLE PLANT                  |                          | 1,917,727,869.66                                   | 376,737,231            | 1,540,980,628                    | 46,268,677                                    | 2.41                |                                               |
| AMORTIZABLE PLANT                           |                          |                                                    |                        |                                  |                                               |                     |                                               |
| 303 MISCELLANEOUS INTANGIBLE PLANT          |                          |                                                    |                        |                                  |                                               |                     |                                               |
| 305 STRUCTURES AND IMPROVEMENTS             |                          | 25,523,894.03                                      | 9,443,231              | 16,080,663                       | 3,857,309                                     | **                  |                                               |
| 362 GAS HOLDERS                             |                          |                                                    | (4,583)                |                                  |                                               |                     |                                               |
| 362.1 ENVIRONMENTAL REMEDIATION             |                          |                                                    | (1,609)                |                                  |                                               |                     |                                               |
| 374.2 LAND, OTHER DISTRIBUTION SYSTEMS      |                          | 479,275.40                                         | 235,240                |                                  |                                               |                     |                                               |
| 375.71 STRUCTURES AND IMPROVEMENTS - LEASED |                          | 1,125,910.63                                       | 1,125,911              |                                  |                                               |                     |                                               |
| 389.2 LAND AND LAND RIGHTS - LAND RIGHTS    |                          |                                                    | 39                     |                                  |                                               |                     |                                               |
| SUBTOTAL AMORTIZABLE PLANT                  |                          | 27,129,080.06                                      | 10,000,537             | 16,080,663                       | 3,857,309                                     |                     |                                               |
| NONDEPRECIABLE PLANT                        |                          |                                                    |                        |                                  |                                               |                     |                                               |
| TOTAL GAS PLANT                             |                          | 172,413.08                                         |                        |                                  |                                               |                     |                                               |
|                                             |                          | 1,945,029,352.80                                   | 386,737,768            | 1,557,071,291                    | 60,116,986                                    |                     |                                               |

\* 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, 2016, OF THE BOOK RESERVE AS OF NOVEMBER 30, 2015

| ACCOUNT<br>(1) | BOOK RESERVE<br>AS OF<br>NOVEMBER 30, 2016<br>(2) | DEPRECIATION<br>ACCURUALS<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 ADJUSTMENTS<br>(8) | RESERVE AT<br>END OF<br>PERIOD<br>(10) | BOOK RESERVE AS<br>A PERCENT OF<br>ORIGINAL COST<br>(11) |
|----------------|---------------------------------------------------|----------------------------------|------------------------------------------|---------------------------------|--------------------------------------|----------------------------------------|---------------------------------|----------------------------------------|----------------------------------------------------------|
| 350.20         | 1,931                                             |                                  |                                          |                                 |                                      |                                        |                                 | 1,931                                  | 99.94                                                    |
| 351.20         | 861,284                                           | 131,358                          | 132                                      |                                 |                                      |                                        |                                 | 992,754                                | 31.69                                                    |
| 352.01         | 799,118                                           |                                  |                                          |                                 |                                      |                                        |                                 | 799,118                                | 100.00                                                   |
| 352.02         | 168,680                                           |                                  |                                          |                                 |                                      |                                        |                                 | 168,680                                | 100.00                                                   |
| 352.10         | 208,932                                           |                                  |                                          |                                 |                                      |                                        |                                 | 208,932                                | 100.00                                                   |
| 353.00         | 405,288                                           |                                  |                                          |                                 |                                      |                                        |                                 | 405,288                                | 100.00                                                   |
| 354.00         | 569,716                                           | 35,519                           |                                          | 30,900                          |                                      |                                        |                                 | 574,335                                | 43.28                                                    |
| 355.00         | 123,010                                           |                                  |                                          |                                 |                                      |                                        |                                 | 123,010                                | 100.00                                                   |
| 374.40         | 651,055                                           | 43,609                           | 1,413                                    | 12,600                          |                                      | 1,512                                  |                                 | 681,965                                | 28.39                                                    |
| 374.50         | 1,555,652                                         | 46,233                           | 16                                       |                                 |                                      |                                        |                                 | 1,601,901                              | 49.55                                                    |
| 375.34         | 824,030                                           | 90,529                           | 22,704                                   | 31,900                          |                                      | 22,319                                 |                                 | 883,045                                | 22.84                                                    |
| 375.60         | 72,639                                            | 988                              | 242                                      |                                 |                                      |                                        |                                 | 73,869                                 | 84.26                                                    |
| 375.70         | 1,925,771                                         | 441,733                          | 11,879                                   | 209,900                         |                                      | 37,782                                 |                                 | 2,031,701                              | 21.62                                                    |
| 375.80         | 6,177                                             | 363                              |                                          |                                 |                                      |                                        |                                 | 6,540                                  | 39.60                                                    |
| 376.00         | 180,973,343                                       | 25,877,251                       | 1,386,054                                | 19,684,700                      |                                      | 3,149,552                              |                                 | 185,402,396                            | 14.86                                                    |
| 376.00         | 8,503,313                                         | 1,428,588                        | 172,763                                  | 151,300                         |                                      | 55,573                                 |                                 | 9,897,811                              | 24.66                                                    |
| 378.10         | 89,069                                            | 5,030                            | 51                                       |                                 |                                      |                                        |                                 | 94,150                                 | 66.72                                                    |
| 380.00         | 103,658,108                                       | 13,633,370                       | 3,233,051                                | 4,697,500                       |                                      | 2,767,865                              |                                 | 113,057,164                            | 24.85                                                    |
| 381.00         | 15,173,270                                        | 950,445                          | (6,165)                                  | 136,600                         | 2,732                                |                                        |                                 | 15,961,882                             | 44.17                                                    |
| 381.10         | 6,817,382                                         | 1,915,291                        | 33,700                                   | 33,700                          |                                      |                                        |                                 | 8,696,973                              | 36.61                                                    |
| 382.00         | 11,320,688                                        | 756,274                          | (1)                                      | 156,100                         |                                      |                                        |                                 | 11,922,861                             | 32.66                                                    |
| 383.00         | 3,318,441                                         | 314,278                          | 182                                      | 81,000                          |                                      | 810                                    |                                 | 3,551,101                              | 30.62                                                    |
| 384.00         | 2,804,820                                         | 74,107                           |                                          |                                 |                                      |                                        |                                 | 2,978,927                              | 77.08                                                    |
| 385.00         | 3,015,332                                         | 291,764                          | 37,617                                   | 18,600                          |                                      | 3,913                                  |                                 | 3,322,200                              | 47.50                                                    |
| 387.00         | 68,826                                            | 5,423                            | 5,866                                    |                                 |                                      |                                        |                                 | 80,135                                 | 59.87                                                    |
| 387.40         | 689,626                                           | 160,902                          | 458                                      |                                 |                                      |                                        |                                 | 850,986                                | 27.33                                                    |
| 390.10         | 48,089                                            | 130                              |                                          |                                 |                                      |                                        |                                 | 48,219                                 | 96.76                                                    |
| 391.10         | 1,742,734                                         | 41,545                           |                                          | 361,982                         |                                      |                                        |                                 | 1,422,287                              | 76.47                                                    |
| 391.11         | 11,362                                            | 1,336                            |                                          |                                 |                                      |                                        |                                 | 12,718                                 | 52.07                                                    |
| 391.12         | 1,900,062                                         | 419,927                          | (13,564)                                 | 1,868,784                       |                                      |                                        |                                 | 421,205                                | 39.16                                                    |
| 392.00         | 53,871                                            | 10,080                           |                                          | 5,209                           | 2,292                                |                                        |                                 | 47,470                                 | 51.42                                                    |
| 393.00         | 16,436                                            | 98                               | (90)                                     | 367,245                         |                                      |                                        |                                 | 14,235                                 | 89.03                                                    |
| 394.00         | 5,473,958                                         | 501,733                          |                                          |                                 |                                      |                                        |                                 | 5,608,356                              | 43.90                                                    |
| 394.12         | 1,953,286                                         | 278,757                          |                                          |                                 |                                      |                                        |                                 | 1,953,286                              | 99.99                                                    |
| 394.50         | 109,781                                           | 3,302                            |                                          | 13,846                          |                                      |                                        |                                 | 386,536                                | 11.34                                                    |
| 395.00         | 31,717                                            | 3,302                            |                                          |                                 |                                      |                                        |                                 | 21,073                                 | 57.40                                                    |
| 396.00         | 1,367,201                                         | 21,616                           | (32,867)                                 |                                 |                                      |                                        |                                 | 1,355,830                              | 94.45                                                    |
| 397.00         | 344,072                                           | 66,086                           | 41                                       | 342,307                         |                                      |                                        |                                 | 67,803                                 | 8.50                                                     |
| 397.24         | 1,729,110                                         | 24,756                           |                                          | 1,698,858                       |                                      |                                        |                                 | 57,008                                 | 3.88                                                     |
| 397.50         | 676,536                                           | 59,262                           |                                          |                                 |                                      |                                        |                                 | 735,828                                | 55.17                                                    |
| 398.00         | 169,868                                           | 61,026                           |                                          | 57,185                          |                                      |                                        |                                 | 193,810                                | 18.31                                                    |
|                | 360,229,684                                       | 47,714,751                       | 4,817,712                                | 29,990,615                      | 5,024                                | 6,039,326                              | 0                               | 376,737,231                            |                                                          |

COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 2. BRINGFORWARD TO DECEMBER 31, 2016, OF THE BOOK RESERVE AS OF NOVEMBER 30, 2015

| ACCOUNT<br>(1)              | BOOK RESERVE<br>AS OF<br>NOVEMBER 30, 2015<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 ADJUSTMENTS<br>(8) | RESERVE AT<br>END OF<br>PERIOD<br>(10) | BOOK RESERVE AS<br>A PERCENT OF<br>ORIGINAL COST<br>(11) |
|-----------------------------|---------------------------------------------------|---------------------------------|------------------------------------------|---------------------------------|--------------------------------------|----------------------------------------|---------------------------------|----------------------------------------|----------------------------------------------------------|
| <b>AMORTIZABLE PLANT</b>    |                                                   |                                 |                                          |                                 |                                      |                                        |                                 |                                        |                                                          |
| 303.00                      | 7,112,928                                         | 3,708,322                       |                                          | 1,378,019                       |                                      |                                        |                                 | 9,443,231                              | 37.00                                                    |
| 305.00                      | (4,583)                                           |                                 |                                          |                                 |                                      |                                        |                                 | (4,583)                                |                                                          |
| 362.00                      | (1,609)                                           |                                 |                                          |                                 |                                      |                                        |                                 | (1,609)                                |                                                          |
| 362.10                      | (958,223)                                         |                                 | 183,531                                  |                                 |                                      | 25,000                                 |                                 | (797,892)                              |                                                          |
| 374.20                      | 222,752                                           |                                 | 12,488                                   |                                 |                                      |                                        |                                 | 235,240                                |                                                          |
| 375.71                      | 1,088,950                                         | 26,981                          |                                          |                                 |                                      |                                        |                                 | 1,125,911                              | 100.00                                                   |
| 389.20                      | 39                                                |                                 |                                          |                                 |                                      |                                        |                                 | 39                                     |                                                          |
|                             | 7,472,254                                         | 3,735,283                       | 196,018                                  | 1,378,019                       | 0                                    | 25,000                                 | 0                               | 10,000,537                             |                                                          |
| <b>NONDEPRECIABLE PLANT</b> |                                                   |                                 |                                          |                                 |                                      |                                        |                                 |                                        |                                                          |
|                             | 0                                                 |                                 |                                          |                                 |                                      |                                        |                                 | 0                                      |                                                          |
| <b>TOTAL</b>                | <b>387,701,938</b>                                | <b>51,450,034</b>               | <b>5,013,730</b>                         | <b>31,368,634</b>               | <b>5,024</b>                         | <b>6,064,326</b>                       | <b>0</b>                        | <b>386,737,768</b>                     |                                                          |



COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 3. CALCULATION OF DEPRECIATION ACCRUALS FOR THE THIRTEEN MONTHS ENDED DECEMBER 31, 2016

| DEPRECIABLE GROUP                  |                                                                   | ORIGINAL COST<br>AS OF<br>NOVEMBER 30, 2015 | ORIGINAL COST<br>AS OF<br>DECEMBER 31, 2016 | COMPOSITE<br>ACCRUAL<br>RATE | ANNUAL<br>ACCRUAL<br>AMOUNT |
|------------------------------------|-------------------------------------------------------------------|---------------------------------------------|---------------------------------------------|------------------------------|-----------------------------|
| (1)                                |                                                                   | (2)                                         | (3)                                         | (4)                          | (5)*                        |
| <b>DEPRECIABLE PLANT</b>           |                                                                   |                                             |                                             |                              |                             |
| <b>UNDERGROUND STORAGE PLANT</b>   |                                                                   |                                             |                                             |                              |                             |
| 350.2                              | RIGHTS-OF-WAY                                                     | 1,932                                       | 1,932                                       | 0.00                         | 0                           |
| 351                                | COMPRESSOR STATION STRUCTURES                                     | 3,133,155                                   | 3,133,155                                   | 3.87                         | 131,358                     |
| <b>WELLS</b>                       |                                                                   |                                             |                                             |                              |                             |
| 352.01                             | CONSTRUCTION                                                      | 799,134                                     | 799,134                                     | 0.00                         | 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                                     | 0.00                         | 0                           |
| 353                                | LINES                                                             | 405,288                                     | 405,288                                     | -                            | 0                           |
| 354                                | COMPRESSOR STATION EQUIPMENT                                      | 1,087,852                                   | 1,328,852                                   | 2.71                         | 35,519                      |
| 355                                | MEASURING AND REGULATING EQUIPMENT                                | 123,010                                     | 123,010                                     | -                            | 0                           |
|                                    | <b>TOTAL UNDERGROUND STORAGE PLANT</b>                            | <b>5,935,990</b>                            | <b>6,164,990</b>                            | <b>2.55</b>                  | <b>166,877</b>              |
| <b>DISTRIBUTION PLANT</b>          |                                                                   |                                             |                                             |                              |                             |
| <b>LAND AND LAND RIGHTS</b>        |                                                                   |                                             |                                             |                              |                             |
| 374.4                              | LAND RIGHTS                                                       | 2,309,558                                   | 2,401,856                                   | 1.71                         | 43,609                      |
| 374.5                              | RIGHTS-OF-WAY                                                     | 3,233,107                                   | 3,233,107                                   | 1.32                         | 46,233                      |
|                                    | <b>TOTAL ACCOUNT 374</b>                                          | <b>5,542,663</b>                            | <b>5,634,963</b>                            | <b>1.48</b>                  | <b>89,842</b>               |
| <b>STRUCTURES AND IMPROVEMENTS</b> |                                                                   |                                             |                                             |                              |                             |
| 375.34                             | MEASURING AND REGULATING                                          | 3,830,618                                   | 3,865,618                                   | 2.23                         | 90,529                      |
| 375.6                              | INDUSTRIAL MEASURING AND REGULATING                               | 87,670                                      | 87,670                                      | 1.04                         | 988                         |
| 375.7                              | OTHER DISTRIBUTION SYSTEMS                                        |                                             |                                             |                              |                             |
|                                    | DISTRIBUTION SYSTEM STRUCTURES                                    | 5,007,833                                   | 6,256,308                                   | 5.79                         |                             |
|                                    | OTHER BUILDINGS                                                   | 2,893,206                                   | 3,139,731                                   | 3.58                         |                             |
|                                    | <b>TOTAL ACCOUNT 375.70</b>                                       | <b>7,901,038</b>                            | <b>9,396,038</b>                            | <b>4.98</b>                  | <b>441,733</b>              |
| 375.8                              | COMMUNICATION STRUCTURES                                          | 16,515                                      | 16,515                                      | 2.03                         | 363                         |
|                                    | <b>TOTAL ACCOUNT 375</b>                                          | <b>11,635,841</b>                           | <b>13,365,841</b>                           | <b>4.08</b>                  | <b>533,814</b>              |
| 376                                | MAINS                                                             |                                             |                                             |                              |                             |
|                                    | CAST IRON                                                         | 519,939                                     | 454,390                                     | 2.85                         |                             |
|                                    | BARE STEEL                                                        | 63,922,268                                  | 55,064,153                                  | 2.98                         |                             |
|                                    | OTHER                                                             | 1,038,113,894                               | 1,192,195,558                               | 1.98                         |                             |
|                                    | <b>TOTAL ACCOUNT 376</b>                                          | <b>1,102,556,101</b>                        | <b>1,247,714,101</b>                        | <b>2.04</b>                  | <b>25,877,251</b>           |
| 378                                | MEASURING AND REGULATING EQUIPMENT - GENERAL                      | 39,027,385                                  | 40,144,485                                  | 3.33                         | 1,428,588                   |
| 378.1                              | MEASURING AND REGULATING EQUIPMENT - CITY GATE                    | 141,117                                     | 141,117                                     | 3.29                         | 5,030                       |
| 380                                | SERVICES                                                          |                                             |                                             |                              |                             |
|                                    | BARE STEEL                                                        | 867,919                                     | 773,969                                     | 1.80                         |                             |
|                                    | OTHER                                                             | 419,556,629                                 | 454,253,179                                 | 2.88                         |                             |
|                                    | <b>TOTAL ACCOUNT 380</b>                                          | <b>420,424,549</b>                          | <b>455,027,149</b>                          | <b>2.88</b>                  | <b>13,633,370</b>           |
| 381                                | METERS                                                            | 35,175,284                                  | 36,182,184                                  | 2.46                         | 950,445                     |
| 381.1                              | METERS - AMR                                                      | 23,509,039                                  | 23,760,039                                  | 7.50                         | 1,915,291                   |
| 382                                | METER INSTALLATIONS                                               | 35,334,790                                  | 36,486,290                                  | 1.95                         | 758,274                     |
| 383                                | HOUSE REGULATORS                                                  | 10,998,752                                  | 11,597,052                                  | 2.57                         | 314,278                     |
| 384                                | HOUSE REGULATOR INSTALLATIONS                                     | 3,864,772                                   | 3,864,772                                   | 1.77                         | 74,107                      |
| 385                                | INDUSTRIAL MEASURING AND REGULATING EQUIPMENT - OTHER THAN METERS | 6,856,406                                   | 6,994,006                                   | 3.89                         | 291,764                     |
| <b>OTHER EQUIPMENT</b>             |                                                                   |                                             |                                             |                              |                             |
| 387                                | GENERAL                                                           | 133,851                                     | 133,851                                     | 3.74                         | 5,423                       |
| 387.4                              | CUSTOMER INFORMATION SERVICES                                     | 3,113,728                                   | 3,113,728                                   | 4.77                         | 180,902                     |
|                                    | <b>TOTAL ACCOUNT 387</b>                                          | <b>3,247,579</b>                            | <b>3,247,579</b>                            | <b>4.73</b>                  | <b>166,325</b>              |
|                                    | <b>TOTAL DISTRIBUTION PLANT</b>                                   | <b>1,698,314,279</b>                        | <b>1,884,159,579</b>                        | <b>2.39</b>                  | <b>46,038,179</b>           |

COLUMBIA GAS OF PENNSYLVANIA, INC.

TABLE 3. CALCULATION OF DEPRECIATION ACCRUALS FOR THE THIRTEEN MONTHS ENDED DECEMBER 31, 2016

| DEPRECIABLE GROUP<br>(1)    |                                              | ORIGINAL COST<br>AS OF<br>NOVEMBER 30, 2015<br>(2) | ORIGINAL COST<br>AS OF<br>DECEMBER 31, 2016<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 | 49,821                                             | 49,821                                             | 0.24                                | 130                                 |
|                             | OFFICE FURNITURE AND EQUIPMENT               |                                                    |                                                    |                                     |                                     |
| 391.1                       | FURNITURE                                    | 2,056,730                                          | 1,859,848                                          | 1.94                                | 41,545                              |
| 391.11                      | EQUIPMENT                                    | 24,427                                             | 24,427                                             | 5.05                                | 1,338                               |
| 391.12                      | INFORMATION SYSTEMS                          | 2,550,893                                          | 1,075,010                                          | 14.59                               | 419,927                             |
|                             | TOTAL ACCOUNT 391                            | 4,632,050                                          | 2,959,285                                          | 6.45                                | 462,809                             |
| 392                         | TRANSPORTATION EQUIPMENT - TRAILERS          | 97,533                                             | 92,324                                             | 9.56                                | 10,080                              |
| 393                         | STORES EQUIPMENT                             | 16,675                                             | 14,375                                             | 0.55                                | 99                                  |
|                             | TOOLS, SHOP AND GARAGE EQUIPMENT             |                                                    |                                                    |                                     |                                     |
| 394                         | EQUIPMENT                                    | 12,685,829                                         | 12,773,966                                         | 3.68                                | 501,733                             |
| 394.12                      | CNG FACILITIES                               | 1,953,498                                          | 1,953,498                                          | 0.00                                | 0                                   |
| 394.5                       | GPS                                          | 2,195,621                                          | 3,426,839                                          | 10.36                               | 278,757                             |
|                             | TOTAL ACCOUNT 394                            | 16,834,948                                         | 18,154,303                                         | 4.12                                | 780,489                             |
| 395                         | LABORATORY EQUIPMENT                         | 50,661                                             | 36,715                                             | 6.08                                | 3,302                               |
| 396                         | POWER OPERATED EQUIPMENT                     | 1,435,493                                          | 1,435,493                                          | 1.39                                | 21,616                              |
|                             | COMMUNICATION EQUIPMENT                      |                                                    |                                                    |                                     |                                     |
| 397.1                       | TELEPHONE                                    | 738,853                                            | 799,153                                            | 9.42                                | 66,096                              |
| 397.24                      | RADIO                                        | 2,444,474                                          | 1,469,532                                          | 2.38                                | 24,756                              |
| 397.5                       | TELEMETERING                                 | 1,070,029                                          | 1,333,808                                          | 4.87                                | 59,282                              |
|                             | TOTAL ACCOUNT 397                            | 4,253,356                                          | 3,602,492                                          | 4.23                                | 150,144                             |
| 398                         | MISCELLANEOUS EQUIPMENT                      | 633,469                                            | 1,058,484                                          | 6.94                                | 81,026                              |
|                             | TOTAL GENERAL PLANT                          | 28,004,006                                         | 27,403,291                                         | 4.44                                | 1,509,695                           |
|                             | SUBTOTAL DEPRECIABLE PLANT                   | 1,732,254,275                                      | 1,917,727,860                                      | 2.42                                | 47,714,751                          |
| <b>AMORTIZABLE PLANT</b>    |                                              |                                                    |                                                    |                                     |                                     |
| 303                         | MISCELLANEOUS INTANGIBLE PLANT               | 22,334,949                                         | 25,523,894                                         | **                                  | 3,708,322                           |
| 305                         | STRUCTURES AND IMPROVEMENTS                  |                                                    |                                                    |                                     |                                     |
| 362                         | GAS HOLDERS                                  |                                                    |                                                    |                                     |                                     |
| 362.1                       | ENVIRONMENTAL REMEDIATION                    |                                                    |                                                    |                                     |                                     |
| 374.2                       | LAND, OTHER DISTRIBUTION SYSTEMS             | 479,275                                            | 479,275                                            |                                     |                                     |
| 375.71                      | STRUCTURES AND IMPROVEMENTS - LEASED         | 1,125,911                                          | 1,125,911                                          | **                                  | 26,961                              |
| 389.2                       | LAND AND LAND RIGHTS - LAND RIGHTS           |                                                    |                                                    |                                     |                                     |
|                             | SUBTOTAL AMORTIZABLE PLANT                   | 23,940,135                                         | 27,129,080                                         |                                     | 3,735,283                           |
| <b>NONDEPRECIABLE PLANT</b> |                                              |                                                    |                                                    |                                     |                                     |
|                             |                                              | 172,413                                            | 172,413                                            |                                     |                                     |
|                             | TOTAL GAS PLANT                              | 1,756,366,823                                      | 1,945,029,353                                      |                                     | 51,460,034                          |

\* 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) | 2011                      |                         | 2012                      |                         | 2013                      |                         | 2014                      |                         | 2015                       |                          | NET<br>SALVAGE<br>(12) | SALVAGE<br>ACCRUAL<br>(13)=(12)/6 |
|----------------|---------------------------|-------------------------|---------------------------|-------------------------|---------------------------|-------------------------|---------------------------|-------------------------|----------------------------|--------------------------|------------------------|-----------------------------------|
|                | 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         | 11,780.05                 |                         | 6,457.05                  |                         | 40,486.89                 |                         | 190,000.00                |                         | 395,000.00                 |                          | (643,733.99)           | (126,747)                         |
| 374.20         |                           |                         |                           |                         | 57,833.75                 |                         |                           |                         |                            |                          | (57,833.75)            | (11,527)                          |
| 374.40         |                           |                         | 260.16                    |                         | 4,911.96                  |                         | 65.91                     |                         | 1,368.00                   |                          | (6,606.03)             | (1,321)                           |
| 375.34         | 12,278.55                 |                         | 17,416.11                 |                         | 22,427.70                 |                         | 21,436.83                 |                         | 26,987.00                  |                          | (102,546.99)           | (20,509)                          |
| 375.60         |                           |                         |                           |                         | 1,091.39                  |                         |                           |                         |                            |                          | (1,091.39)             | (218)                             |
| 375.70         |                           |                         | 5,103.09                  |                         |                           |                         | 12,825.00                 |                         | 80,246.00                  |                          | (78,174.09)            | (15,636)                          |
| 376.00         | 1,269,063.41              | 1,541.00                | 886,996.12                |                         | 691,743.41                | 2,051.59                | 1,246,578.85              |                         | 2,416,656.00               |                          | (6,509,445.20)         | (1,301,889)                       |
| 376.00         | 59,828.10                 |                         | 18,887.95                 |                         | 216,785.76                |                         | 163,240.21                |                         | 342,142.00                 |                          | (820,895.02)           | (164,179)                         |
| 379.10         |                           |                         |                           |                         |                           |                         | 91.84                     |                         |                            |                          | (91.84)                | (18)                              |
| 380.00         | 4,313,652.86              |                         | 2,192,533.99              |                         | 1,750,826.78              |                         | 4,297,839.86              |                         | 2,446,620.00               | 2,536.00                 | (15,001,573.51)        | (3,000,315)                       |
| 381.00         |                           | 759.60                  | 305.85                    |                         | 23.20                     | 6,554.06                |                           | 623.00                  |                            |                          | 35,476.95              | 7,095                             |
| 383.00         |                           |                         |                           |                         |                           |                         | 139.00                    |                         | 749.00                     |                          | (868.00)               | (178)                             |
| 385.00         | 31,592.63                 |                         | 23,198.35                 |                         | 51,156.61                 |                         | 60,963.56                 |                         | 3,806.00                   |                          | (170,719.15)           | (34,144)                          |
| 387.00         | 26,983.46                 |                         |                           |                         |                           |                         |                           |                         |                            |                          | (26,983.46)            | (5,397)                           |
| 387.40         | 208.04                    |                         | 55.80                     |                         | 392.50                    |                         | 933.57                    |                         |                            |                          | (1,586.71)             | (318)                             |
| 392.00         |                           | 7,201.42                |                           |                         |                           | 44,482.18               |                           | 10,317.71               |                            |                          | 62,001.31              | 12,400                            |
| 396.00         |                           | 43,731.96               |                           |                         |                           | 104,689.45              |                           |                         |                            |                          | 148,401.44             | 29,680                            |
| <b>TOTAL</b>   | <b>5,725,389.12</b>       | <b>63,233.98</b>        | <b>3,151,214.27</b>       | <b>25,333.32</b>        | <b>2,838,110.41</b>       | <b>157,787.33</b>       | <b>6,014,214.43</b>       | <b>10,940.71</b>        | <b>6,897,574.00</b>        | <b>2,536.00</b>          | <b>(23,176,700.89)</b> | <b>(4,636,342)</b>                |

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

**CUMULATIVE DEPRECIATED ORIGINAL COST**



COLUMBIA GAS OF PENNSYLVANIA, INC.

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| YEAR<br>INST<br>(1) | ORIGINAL<br>COST<br>(2) | ACCRUED<br>DEPRECIATION<br>(3) | DEPRECIATED |        | ORIGINAL COST | PCT OF |
|---------------------|-------------------------|--------------------------------|-------------|--------|---------------|--------|
|                     |                         |                                | AMOUNT      |        | CUMULATIVE    | COL 4  |
|                     |                         |                                | (2)         | (3)    | AMOUNT        | TOTAL  |
|                     |                         |                                |             | (4)    | (5)           | (6)    |
| 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                   | 6,578                          |             | 2      | 2             | 0.0    |
| 1889                | 6,551                   | 6,538                          |             | 13     | 15            | 0.0    |
| 1890                | 1,702                   | 1,696                          |             | 6      | 21            | 0.0    |
| 1891                | 8,350                   | 8,308                          |             | 42     | 63            | 0.0    |
| 1892                | 1,355                   | 1,345                          |             | 10     | 73            | 0.0    |
| 1893                | 675                     | 670                            |             | 5      | 78            | 0.0    |
| 1894                | 1,617                   | 1,603                          |             | 14     | 92            | 0.0    |
| 1895                | 1,133                   | 1,122                          |             | 11     | 103           | 0.0    |
| 1896                | 4,261                   | 4,212                          |             | 49     | 152           | 0.0    |
| 1897                | 2,268                   | 2,238                          |             | 30     | 182           | 0.0    |
| 1898                | 1,634                   | 1,610                          |             | 24     | 206           | 0.0    |
| 1899                | 934                     | 920                            |             | 14     | 220           | 0.0    |
| 1900                | 8,185                   | 8,045                          |             | 140    | 360           | 0.0    |
| 1901                | 15,228                  | 14,943                         |             | 285    | 645           | 0.0    |
| 1902                | 7,354                   | 7,208                          |             | 146    | 791           | 0.0    |
| 1903                | 15,446                  | 15,113                         |             | 333    | 1,124         | 0.0    |
| 1904                | 8,443                   | 8,247                          |             | 196    | 1,320         | 0.0    |
| 1905                | 13,257                  | 12,922                         |             | 335    | 1,655         | 0.0    |
| 1906                | 5,827                   | 5,674                          |             | 153    | 1,808         | 0.0    |
| 1907                | 4,319                   | 4,197                          |             | 122    | 1,930         | 0.0    |
| 1908                | 5,091                   | 4,939                          |             | 152    | 2,082         | 0.0    |
| 1909                | 5,578                   | 5,404                          |             | 174    | 2,256         | 0.0    |
| 1910                | 945                     | 913                            |             | 32     | 2,288         | 0.0    |
| 1911                | 2,295                   | 2,119                          |             | 176    | 2,464         | 0.0    |
| 1912                | 1,631                   | 1,563                          |             | 68     | 2,532         | 0.0    |
| 1913                | 7,739                   | 6,771                          |             | 968    | 3,500         | 0.0    |
| 1914                | 6,986                   | 6,630                          |             | 356    | 3,856         | 0.0    |
| 1915                | 9,624                   | 9,153                          |             | 471    | 4,327         | 0.0    |
| 1916                | 2,218                   | 2,115                          |             | 103    | 4,430         | 0.0    |
| 1917                | 3,849                   | 3,536                          |             | 313    | 4,743         | 0.0    |
| 1918                | 1,634                   | 1,579                          |             | 55     | 4,798         | 0.0    |
| 1919                | 1,174                   | 1,131                          |             | 43     | 4,841         | 0.0    |
| 1920                | 2,913                   | 2,512                          |             | 401    | 5,242         | 0.0    |
| 1921                | 21,646                  | 17,057                         |             | 4,589  | 9,831         | 0.0    |
| 1922                | 7,611                   | 7,160                          |             | 451    | 10,282        | 0.0    |
| 1923                | 26,050                  | 21,190                         |             | 4,860  | 15,142        | 0.0    |
| 1924                | 59,496                  | 46,046                         |             | 13,450 | 28,592        | 0.0    |
| 1925                | 43,612                  | 35,229                         |             | 8,383  | 36,975        | 0.0    |
| 1926                | 51,626                  | 40,575                         |             | 11,051 | 48,026        | 0.0    |
| 1927                | 27,556                  | 23,002                         |             | 4,554  | 52,580        | 0.0    |

COLUMBIA GAS OF PENNSYLVANIA, INC.

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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) |                                 |
| 1928                | 39,519                  | 32,611                         | 6,908                      | 59,488                      | 0.0                             |
| 1929                | 66,334                  | 53,956                         | 12,378                     | 71,866                      | 0.0                             |
| 1930                | 24,002                  | 19,702                         | 4,300                      | 76,166                      | 0.0                             |
| 1931                | 17,042                  | 14,080                         | 2,962                      | 79,128                      | 0.0                             |
| 1932                | 5,848                   | 4,962                          | 886                        | 80,014                      | 0.0                             |
| 1933                | 10,344                  | 8,764                          | 1,580                      | 81,594                      | 0.0                             |
| 1934                | 9,601                   | 8,554                          | 1,047                      | 82,641                      | 0.0                             |
| 1935                | 3,307                   | 2,984                          | 323                        | 82,964                      | 0.0                             |
| 1936                | 11,074                  | 9,671                          | 1,403                      | 84,367                      | 0.0                             |
| 1937                | 16,250                  | 15,024                         | 1,226                      | 85,593                      | 0.0                             |
| 1938                | 25,881                  | 23,418                         | 2,463                      | 88,056                      | 0.0                             |
| 1939                | 170,861                 | 131,462                        | 39,399                     | 127,455                     | 0.0                             |
| 1940                | 38,231                  | 33,733                         | 4,498                      | 131,953                     | 0.0                             |
| 1941                | 40,388                  | 35,349                         | 5,039                      | 136,992                     | 0.0                             |
| 1942                | 50,053                  | 43,250                         | 6,803                      | 143,795                     | 0.0                             |
| 1943                | 39,110                  | 32,208                         | 6,902                      | 150,697                     | 0.0                             |
| 1944                | 25,999                  | 21,736                         | 4,263                      | 154,960                     | 0.0                             |
| 1945                | 24,896                  | 20,454                         | 4,442                      | 159,402                     | 0.0                             |
| 1946                | 107,727                 | 84,561                         | 23,166                     | 182,568                     | 0.0                             |
| 1947                | 113,787                 | 91,427                         | 22,360                     | 204,928                     | 0.0                             |
| 1948                | 277,601                 | 216,304                        | 61,297                     | 266,225                     | 0.0                             |
| 1949                | 698,438                 | 530,308                        | 168,130                    | 434,355                     | 0.0                             |
| 1950                | 1,084,841               | 820,068                        | 264,773                    | 699,128                     | 0.0                             |
| 1951                | 918,921                 | 701,411                        | 217,510                    | 916,638                     | 0.1                             |
| 1952                | 1,813,186               | 1,341,285                      | 471,901                    | 1,388,539                   | 0.1                             |
| 1953                | 1,315,525               | 982,824                        | 332,701                    | 1,721,240                   | 0.1                             |
| 1954                | 1,650,345               | 1,234,368                      | 415,977                    | 2,137,217                   | 0.1                             |
| 1955                | 3,828,232               | 2,784,501                      | 1,043,731                  | 3,180,948                   | 0.2                             |
| 1956                | 2,610,487               | 1,882,725                      | 727,762                    | 3,908,710                   | 0.3                             |
| 1957                | 3,321,958               | 2,416,662                      | 905,296                    | 4,814,006                   | 0.3                             |
| 1958                | 4,064,642               | 2,941,542                      | 1,123,100                  | 5,937,106                   | 0.4                             |
| 1959                | 3,595,224               | 2,573,441                      | 1,021,783                  | 6,958,889                   | 0.5                             |
| 1960                | 3,786,433               | 2,702,533                      | 1,083,900                  | 8,042,789                   | 0.5                             |
| 1961                | 4,043,109               | 2,881,939                      | 1,161,170                  | 9,203,959                   | 0.6                             |
| 1962                | 3,740,830               | 2,628,691                      | 1,112,139                  | 10,316,098                  | 0.7                             |
| 1963                | 4,591,842               | 3,214,008                      | 1,377,834                  | 11,693,932                  | 0.8                             |
| 1964                | 4,664,900               | 3,240,308                      | 1,424,592                  | 13,118,524                  | 0.9                             |
| 1965                | 3,992,117               | 2,778,807                      | 1,213,310                  | 14,331,834                  | 0.9                             |
| 1966                | 5,580,626               | 3,851,337                      | 1,729,289                  | 16,061,123                  | 1.0                             |
| 1967                | 5,332,399               | 3,668,599                      | 1,663,800                  | 17,724,923                  | 1.2                             |
| 1968                | 4,662,053               | 3,103,264                      | 1,558,789                  | 19,283,712                  | 1.3                             |
| 1969                | 4,215,902               | 2,701,865                      | 1,514,037                  | 20,797,749                  | 1.3                             |
| 1970                | 4,027,953               | 2,895,095                      | 1,132,858                  | 21,930,607                  | 1.4                             |
| 1971                | 5,964,670               | 3,872,360                      | 2,092,310                  | 24,022,917                  | 1.6                             |
| 1972                | 3,642,185               | 2,183,367                      | 1,458,818                  | 25,481,735                  | 1.7                             |

COLUMBIA GAS OF PENNSYLVANIA, INC.

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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) |                                 |
| 1973                | 4,192,636               | 2,045,600                      | 2,147,036                  | 27,628,771                  | 1.8                             |
| 1974                | 3,489,921               | 1,462,555                      | 2,027,366                  | 29,656,137                  | 1.9                             |
| 1975                | 3,676,120               | 1,543,066                      | 2,133,054                  | 31,789,191                  | 2.1                             |
| 1976                | 4,074,603               | 2,128,139                      | 1,946,464                  | 33,735,655                  | 2.2                             |
| 1977                | 8,267,373               | 4,308,080                      | 3,959,293                  | 37,694,948                  | 2.4                             |
| 1978                | 7,565,686               | 3,851,281                      | 3,714,405                  | 41,409,353                  | 2.7                             |
| 1979                | 9,314,983               | 4,701,594                      | 4,613,389                  | 46,022,742                  | 3.0                             |
| 1980                | 12,552,206              | 6,406,305                      | 6,145,901                  | 52,168,643                  | 3.4                             |
| 1981                | 14,662,519              | 7,378,401                      | 7,284,118                  | 59,452,761                  | 3.9                             |
| 1982                | 13,639,931              | 6,544,362                      | 7,095,569                  | 66,548,330                  | 4.3                             |
| 1983                | 11,162,438              | 5,297,801                      | 5,864,637                  | 72,412,967                  | 4.7                             |
| 1984                | 12,914,815              | 5,993,476                      | 6,921,339                  | 79,334,306                  | 5.1                             |
| 1985                | 13,029,531              | 6,037,116                      | 6,992,415                  | 86,326,721                  | 5.6                             |
| 1986                | 14,461,697              | 6,597,895                      | 7,863,802                  | 94,190,523                  | 6.1                             |
| 1987                | 14,904,654              | 6,745,787                      | 8,158,867                  | 102,349,390                 | 6.6                             |
| 1988                | 17,365,646              | 7,646,294                      | 9,719,352                  | 112,068,742                 | 7.3                             |
| 1989                | 16,581,383              | 7,288,644                      | 9,292,739                  | 121,361,481                 | 7.9                             |
| 1990                | 14,992,934              | 6,455,593                      | 8,537,341                  | 129,898,822                 | 8.4                             |
| 1991                | 14,616,458              | 6,146,096                      | 8,470,362                  | 138,369,184                 | 9.0                             |
| 1992                | 16,345,419              | 6,740,072                      | 9,605,347                  | 147,974,531                 | 9.6                             |
| 1993                | 17,756,347              | 7,240,363                      | 10,515,984                 | 158,490,515                 | 10.3                            |
| 1994                | 20,897,096              | 8,195,977                      | 12,701,119                 | 171,191,634                 | 11.1                            |
| 1995                | 21,154,676              | 8,365,904                      | 12,788,772                 | 183,980,406                 | 11.9                            |
| 1996                | 21,897,571              | 8,373,986                      | 13,523,585                 | 197,503,991                 | 12.8                            |
| 1997                | 24,540,677              | 8,956,504                      | 15,584,173                 | 213,088,164                 | 13.8                            |
| 1998                | 22,843,391              | 8,023,677                      | 14,819,714                 | 227,907,878                 | 14.8                            |
| 1999                | 21,960,891              | 7,201,875                      | 14,759,016                 | 242,666,894                 | 15.7                            |
| 2000                | 22,115,937              | 7,430,972                      | 14,684,965                 | 257,351,859                 | 16.7                            |
| 2001                | 22,523,311              | 6,758,051                      | 15,765,260                 | 273,117,119                 | 17.7                            |
| 2002                | 18,408,683              | 5,447,049                      | 12,961,634                 | 286,078,753                 | 18.6                            |
| 2003                | 22,753,654              | 6,315,294                      | 16,438,360                 | 302,517,113                 | 19.6                            |
| 2004                | 32,833,497              | 7,931,274                      | 24,902,223                 | 327,419,336                 | 21.2                            |
| 2005                | 37,295,012              | 7,893,351                      | 29,401,661                 | 356,820,997                 | 23.2                            |
| 2006                | 27,786,259              | 5,950,577                      | 21,835,682                 | 378,656,679                 | 24.6                            |
| 2007                | 56,957,651              | 10,243,988                     | 46,713,663                 | 425,370,342                 | 27.6                            |
| 2008                | 81,855,742              | 13,268,347                     | 68,587,395                 | 493,957,737                 | 32.1                            |
| 2009                | 57,053,748              | 8,676,929                      | 48,376,819                 | 542,334,556                 | 35.2                            |
| 2010                | 71,243,631              | 9,584,368                      | 61,659,263                 | 603,993,819                 | 39.2                            |
| 2011                | 127,637,216             | 16,953,471                     | 110,683,745                | 714,677,564                 | 46.4                            |
| 2012                | 140,963,295             | 15,099,988                     | 125,863,307                | 840,540,871                 | 54.5                            |
| 2013                | 167,793,200             | 12,941,338                     | 154,851,862                | 995,392,733                 | 64.6                            |
| 2014                | 179,609,147             | 11,516,424                     | 168,092,723                | 1,163,485,456               | 75.5                            |

COLUMBIA GAS OF PENNSYLVANIA, INC.

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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) |                                 |
| 2015                    | 181,589,278             | 6,966,267                      | 174,623,011                | 1,338,108,467               | 86.8                            |
| 2016                    | 205,759,700             | 2,877,542                      | 202,882,158                | 1,540,990,625               | 100.0                           |
| SUBTOTAL                | 1,917,727,860           | 376,737,231                    | 1,540,990,625              |                             |                                 |
| AMORTIZABLE<br>PLANT    | 27,129,080              | 10,000,537                     | 17,128,543                 |                             |                                 |
| NONDEPRECIABLE<br>PLANT | 172,413                 | -                              | 172,413                    |                             |                                 |
| TOTAL                   | 1,945,029,353           | 386,737,768                    | 1,558,291,581              |                             |                                 |

## 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, 2016

| 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)               |
| INTERIM SURVIVOR CURVE.. SQUARE                                       |                  |                       |                        |                         |              |                   |
| PROBABLE RETIREMENT YEAR.. 6-2035                                     |                  |                       |                        |                         |              |                   |
| NET SALVAGE PERCENT.. 0                                               |                  |                       |                        |                         |              |                   |
| 1972                                                                  | 1,896.43         | 1,340                 | 1,896                  |                         |              |                   |
| 1973                                                                  | 35.65            | 25                    | 35                     |                         | 1            | 18.50             |
|                                                                       | 1,932.08         | 1,365                 | 1,931                  | 1                       |              |                   |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 0.0 0.00 |                  |                       |                        |                         |              |                   |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 351 COMPRESSOR STATION STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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.. 6-2035                                 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                           |                         |                              |                               |                                |                     |                          |
| 1970                                                              | 124,246.77              | 89,620                       | 101,949                       | 22,298                         | 15.76               | 1,415                    |
| 1971                                                              | 44,955.88               | 32,200                       | 36,630                        | 8,326                          | 15.89               | 524                      |
| 1972                                                              | 23,833.95               | 16,946                       | 19,277                        | 4,557                          | 16.02               | 284                      |
| 1973                                                              | 1,046.90                | 739                          | 841                           | 206                            | 16.14               | 13                       |
| 1996                                                              | 107,318.16              | 57,866                       | 65,827                        | 41,491                         | 17.52               | 2,368                    |
| 1997                                                              | 932.86                  | 491                          | 559                           | 374                            | 17.54               | 21                       |
| 1998                                                              | 7,804.72                | 3,999                        | 4,549                         | 3,256                          | 17.60               | 185                      |
| 2001                                                              | 87,639.68               | 40,893                       | 46,519                        | 41,121                         | 17.72               | 2,321                    |
| 2003                                                              | 212,167.85              | 91,657                       | 104,266                       | 107,902                        | 17.75               | 6,079                    |
| 2004                                                              | 195,419.81              | 80,611                       | 91,701                        | 103,719                        | 17.80               | 5,827                    |
| 2008                                                              | 673,302.63              | 217,477                      | 247,396                       | 425,907                        | 17.82               | 23,901                   |
| 2009                                                              | 4,140.12                | 1,223                        | 1,391                         | 2,749                          | 17.88               | 154                      |
| 2010                                                              | 4,750.10                | 1,269                        | 1,444                         | 3,306                          | 17.83               | 185                      |
| 2012                                                              | 59,116.96               | 11,894                       | 13,530                        | 45,587                         | 17.87               | 2,551                    |
| 2013                                                              | 744,499.19              | 122,247                      | 139,065                       | 605,434                        | 17.82               | 33,975                   |
| 2014                                                              | 841,978.92              | 103,563                      | 117,810                       | 724,169                        | 17.83               | 40,615                   |
|                                                                   | 3,133,154.50            | 872,695                      | 992,754                       | 2,140,400                      |                     | 120,418                  |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 17.8 |                         |                              |                               |                                |                     | 3.84                     |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 352 WELLS - CONSTRUCTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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.. 6-2035                                      |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                                |                         |                              |                               |                                |                     |                          |
| 1970                                                                   | 326,259.85              | 233,400                      | 326,260                       |                                |                     |                          |
| 1971                                                                   | 246,359.45              | 175,147                      | 246,359                       |                                |                     |                          |
| 1972                                                                   | 166,322.06              | 117,482                      | 166,322                       |                                |                     |                          |
| 1978                                                                   | 60,192.37               | 40,656                       | 60,177                        | 15                             | 18.50               | 1                        |
|                                                                        | 799,133.73              | 566,685                      | 799,118                       | 16                             |                     | 1                        |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 16.0 0.00 |                         |                              |                               |                                |                     |                          |



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 352 WELLS - EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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 45-S2.5                                 |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 6-2035                                     |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                               |                         |                              |                               |                                |                     |                          |
| 1970                                                                  | 62,707.48               | 50,076                       | 62,707                        |                                |                     |                          |
| 1971                                                                  | 61,403.78               | 48,647                       | 61,404                        |                                |                     |                          |
| 1972                                                                  | 42,286.87               | 33,223                       | 42,287                        |                                |                     |                          |
| 1978                                                                  | 2,281.54                | 1,792                        | 2,282                         |                                |                     |                          |
|                                                                       | 168,679.67              | 133,738                      | 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, 2016

| 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.. 6-2035                            |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                      |                         |                              |                               |                                |                     |                          |
| 1970                                                         | 206,940.78              | 148,041                      | 206,932                       | 9                              | 18.50               |                          |
|                                                              | 206,940.78              | 148,041                      | 206,932                       | 9                              |                     |                          |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. |                         |                              |                               |                                |                     | 0.0 0.00                 |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 353 LINES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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.. 6-2035                                     |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                               |                         |                              |                               |                                |                     |                          |
| 1971                                                                  | 260,327.01              | 191,762                      | 260,327                       |                                |                     |                          |
| 1972                                                                  | 62,624.57               | 45,810                       | 62,625                        |                                |                     |                          |
| 1973                                                                  | 54,831.76               | 39,824                       | 54,832                        |                                |                     |                          |
| 1984                                                                  | 13,885.22               | 9,703                        | 13,885                        |                                |                     |                          |
| 1989                                                                  | 13,619.22               | 8,839                        | 13,619                        |                                |                     |                          |
|                                                                       | 405,287.78              | 295,938                      | 405,288                       |                                |                     |                          |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 0.0 0.00 |                         |                              |                               |                                |                     |                          |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 354 COMPRESSOR STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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-R2.5 |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 6-2035     |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0               |                         |                              |                               |                                |                     |                          |
| 1950                                  | 3,726.25                | 3,251                        | 3,726                         |                                |                     |                          |
| 1952                                  | 17,412.75               | 15,033                       | 17,413                        |                                |                     |                          |
| 1957                                  | 284.68                  | 239                          | 285                           |                                |                     |                          |
| 1967                                  | 1,029.20                | 803                          | 979                           | 50                             | 10.82               | 5                        |
| 1969                                  | 1,933.87                | 1,482                        | 1,807                         | 127                            | 11.44               | 11                       |
| 1970                                  | 442,228.57              | 335,842                      | 409,445                       | 32,784                         | 11.74               | 2,793                    |
| 1971                                  | 19,278.69               | 14,500                       | 17,678                        | 1,601                          | 12.05               | 133                      |
| 1972                                  | 3,769.66                | 2,808                        | 3,423                         | 347                            | 12.35               | 28                       |
| 1979                                  | 1,767.75                | 1,299                        | 1,584                         | 184                            | 13.52               | 14                       |
| 1987                                  | 19,142.32               | 12,592                       | 15,352                        | 3,790                          | 15.35               | 247                      |
| 1991                                  | 10,919.20               | 6,711                        | 8,182                         | 2,737                          | 15.99               | 171                      |
| 1993                                  | 1,481.66                | 877                          | 1,069                         | 413                            | 16.18               | 26                       |
| 2013                                  | 279,828.19              | 46,619                       | 56,836                        | 222,992                        | 17.51               | 12,735                   |
| 2014                                  | 24,564.54               | 3,071                        | 3,744                         | 20,821                         | 17.50               | 1,190                    |
| 2015                                  | 249,584.33              | 19,817                       | 24,160                        | 225,424                        | 17.40               | 12,955                   |
| 2016                                  | 249,900.00              | 7,097                        | 8,652                         | 241,248                        | 17.08               | 14,125                   |
|                                       | 1,326,851.66            | 472,041                      | 574,335                       | 752,517                        |                     | 44,433                   |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 16.9 3.35

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 355 MEASURING AND REGULATING EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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.. 6-2035                                     |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                               |                         |                              |                               |                                |                     |                          |
| 1970                                                                  | 74,761.84               | 58,838                       | 74,762                        |                                |                     |                          |
| 1975                                                                  | 2,685.09                | 1,999                        | 2,685                         |                                |                     |                          |
| 1981                                                                  | 13,738.52               | 10,632                       | 13,739                        |                                |                     |                          |
| 1986                                                                  | 29,489.73               | 21,315                       | 29,490                        |                                |                     |                          |
| 1987                                                                  | 2,334.83                | 1,660                        | 2,334                         |                                |                     |                          |
|                                                                       | 123,010.01              | 94,444                       | 123,010                       |                                |                     |                          |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 0.0 0.00 |                         |                              |                               |                                |                     |                          |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 374.4 LAND AND LAND RIGHTS - LAND RIGHTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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 65-R3 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0     |                         |                              |                               |                                |                     |                          |
| 1957                        | 2,875.61                | 2,171                        | 2,082                         | 794                            | 15.92               | 50                       |
| 1961                        | 757.88                  | 545                          | 523                           | 235                            | 18.23               | 13                       |
| 1962                        | 297.70                  | 211                          | 202                           | 96                             | 18.84               | 5                        |
| 1963                        | 5,293.90                | 3,709                        | 3,557                         | 1,737                          | 19.46               | 89                       |
| 1964                        | 3,444.88                | 2,380                        | 2,282                         | 1,163                          | 20.10               | 58                       |
| 1965                        | 1,072.99                | 730                          | 700                           | 373                            | 20.75               | 18                       |
| 1966                        | 2,232.98                | 1,497                        | 1,436                         | 797                            | 21.41               | 37                       |
| 1967                        | 10,826.28               | 7,149                        | 6,856                         | 3,970                          | 22.08               | 180                      |
| 1968                        | 1,892.29                | 1,230                        | 1,180                         | 712                            | 22.76               | 31                       |
| 1969                        | 11,727.61               | 7,497                        | 7,189                         | 4,539                          | 23.45               | 194                      |
| 1970                        | 8,181.28                | 5,140                        | 4,929                         | 3,252                          | 24.16               | 135                      |
| 1971                        | 20,126.92               | 12,426                       | 11,916                        | 8,211                          | 24.87               | 330                      |
| 1972                        | 11,209.56               | 6,796                        | 6,517                         | 4,693                          | 25.59               | 183                      |
| 1973                        | 5,289.23                | 3,147                        | 3,018                         | 2,271                          | 26.33               | 86                       |
| 1974                        | 16,138.66               | 9,418                        | 9,032                         | 7,107                          | 27.07               | 263                      |
| 1975                        | 24,502.69               | 14,016                       | 13,441                        | 11,062                         | 27.82               | 398                      |
| 1976                        | 25,158.66               | 15,387                       | 14,756                        | 10,403                         | 25.72               | 404                      |
| 1977                        | 53,082.42               | 31,871                       | 30,563                        | 22,519                         | 26.29               | 857                      |
| 1978                        | 20,675.56               | 12,178                       | 11,678                        | 8,998                          | 26.86               | 335                      |
| 1979                        | 35,734.21               | 20,637                       | 19,790                        | 15,944                         | 27.44               | 581                      |
| 1980                        | 22,516.91               | 12,657                       | 12,138                        | 10,379                         | 28.44               | 365                      |
| 1981                        | 39,206.41               | 21,571                       | 20,686                        | 18,520                         | 29.02               | 638                      |
| 1982                        | 61,809.76               | 33,266                       | 31,901                        | 29,909                         | 29.60               | 1,010                    |
| 1983                        | 39,550.14               | 20,803                       | 19,949                        | 19,601                         | 30.19               | 649                      |
| 1984                        | 44,091.77               | 22,496                       | 21,573                        | 22,519                         | 31.20               | 722                      |
| 1985                        | 68,313.25               | 34,000                       | 32,605                        | 35,708                         | 31.79               | 1,123                    |
| 1986                        | 41,482.10               | 20,119                       | 19,293                        | 22,189                         | 32.39               | 685                      |
| 1987                        | 63,098.41               | 29,593                       | 28,379                        | 34,719                         | 33.40               | 1,039                    |
| 1988                        | 97,724.58               | 44,562                       | 42,733                        | 54,992                         | 34.00               | 1,617                    |
| 1989                        | 129,780.60              | 57,467                       | 55,109                        | 74,672                         | 34.61               | 2,158                    |
| 1990                        | 83,252.62               | 35,740                       | 34,273                        | 48,980                         | 35.23               | 1,390                    |
| 1991                        | 48,809.81               | 20,163                       | 19,336                        | 29,474                         | 36.23               | 814                      |
| 1992                        | 13,355.87               | 5,334                        | 5,115                         | 8,241                          | 36.85               | 224                      |
| 1993                        | 42,996.96               | 16,571                       | 15,891                        | 27,106                         | 37.48               | 723                      |
| 1994                        | 35,054.83               | 12,935                       | 12,404                        | 22,651                         | 38.48               | 589                      |
| 1995                        | 19,150.88               | 6,795                        | 6,516                         | 12,635                         | 39.10               | 323                      |
| 1996                        | 45,761.10               | 15,476                       | 14,841                        | 30,920                         | 40.11               | 771                      |
| 1997                        | 41,125.95               | 13,312                       | 12,766                        | 28,360                         | 40.74               | 696                      |
| 1998                        | 9,140.33                | 2,824                        | 2,708                         | 6,432                          | 41.38               | 155                      |
| 1999                        | 6,002.29                | 1,754                        | 1,682                         | 4,320                          | 42.38               | 102                      |
| 2000                        | 14,163.94               | 3,926                        | 3,765                         | 10,399                         | 43.02               | 242                      |
| 2001                        | 14,556.68               | 3,814                        | 3,657                         | 10,900                         | 43.67               | 250                      |

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, 2016

| 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 65-R3                                       |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                           |                         |                              |                               |                                |                     |                          |
| 2002                                                              | 3,017.15                | 739                          | 709                           | 2,308                          | 44.67               | 52                       |
| 2003                                                              | 43,541.97               | 9,993                        | 9,583                         | 33,959                         | 45.32               | 749                      |
| 2004                                                              | 76,835.89               | 16,328                       | 15,658                        | 61,178                         | 46.32               | 1,321                    |
| 2005                                                              | 26,726.31               | 5,254                        | 5,038                         | 21,688                         | 46.98               | 462                      |
| 2006                                                              | 37,288.04               | 6,734                        | 6,458                         | 30,830                         | 47.64               | 647                      |
| 2007                                                              | 66,859.23               | 10,925                       | 10,477                        | 56,382                         | 48.64               | 1,159                    |
| 2008                                                              | 28,085.66               | 4,129                        | 3,959                         | 24,127                         | 49.31               | 489                      |
| 2009                                                              | 92,580.78               | 12,017                       | 11,524                        | 81,057                         | 50.30               | 1,611                    |
| 2010                                                              | 122,360.63              | 13,839                       | 13,271                        | 109,090                        | 50.97               | 2,140                    |
| 2011                                                              | 76,492.39               | 7,359                        | 7,057                         | 69,435                         | 51.65               | 1,344                    |
| 2012                                                              | 184,070.63              | 14,578                       | 13,979                        | 170,092                        | 52.32               | 3,251                    |
| 2013                                                              | 191,230.73              | 11,856                       | 11,370                        | 179,861                        | 52.99               | 3,394                    |
| 2014                                                              | 10,931.33               | 486                          | 466                           | 10,465                         | 53.68               | 195                      |
| 2015                                                              | 100,169.08              | 2,685                        | 2,575                         | 97,594                         | 54.37               | 1,795                    |
| 2016                                                              | 100,200.00              | 912                          | 874                           | 99,326                         | 54.45               | 1,824                    |
|                                                                   | 2,401,856.32            | 711,147                      | 681,965                       | 1,719,891                      |                     | 40,965                   |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 42.0 |                         |                              |                               |                                |                     | 1.71                     |

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, 2016

| 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 75-S4 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0     |                         |                              |                               |                                |                     |                          |
| 1883                        | 866.25                  | 866                          | 866                           |                                |                     |                          |
| 1884                        | 2,319.40                | 2,319                        | 2,319                         |                                |                     |                          |
| 1885                        | 952.00                  | 952                          | 952                           |                                |                     |                          |
| 1886                        | 9,401.15                | 9,401                        | 9,401                         |                                |                     |                          |
| 1887                        | 4,690.00                | 4,658                        | 4,690                         |                                |                     |                          |
| 1888                        | 6,579.75                | 6,493                        | 6,578                         | 2                              | 0.99                | 2                        |
| 1889                        | 6,551.18                | 6,453                        | 6,538                         | 13                             | 1.12                | 12                       |
| 1890                        | 1,679.50                | 1,652                        | 1,674                         | 6                              | 1.23                | 5                        |
| 1891                        | 8,350.23                | 8,200                        | 8,308                         | 42                             | 1.35                | 31                       |
| 1892                        | 1,354.95                | 1,328                        | 1,345                         | 10                             | 1.48                | 7                        |
| 1893                        | 650.85                  | 638                          | 646                           | 5                              | 1.53                | 3                        |
| 1894                        | 1,616.78                | 1,582                        | 1,603                         | 14                             | 1.63                | 9                        |
| 1895                        | 1,133.20                | 1,107                        | 1,122                         | 11                             | 1.76                | 6                        |
| 1896                        | 4,260.56                | 4,157                        | 4,212                         | 49                             | 1.83                | 27                       |
| 1897                        | 2,267.65                | 2,209                        | 2,238                         | 30                             | 1.93                | 16                       |
| 1898                        | 1,633.73                | 1,589                        | 1,610                         | 24                             | 2.05                | 12                       |
| 1899                        | 934.25                  | 908                          | 920                           | 14                             | 2.13                | 7                        |
| 1900                        | 8,185.42                | 7,941                        | 8,045                         | 140                            | 2.24                | 62                       |
| 1901                        | 15,227.76               | 14,749                       | 14,943                        | 285                            | 2.36                | 121                      |
| 1902                        | 7,330.74                | 7,091                        | 7,184                         | 147                            | 2.45                | 60                       |
| 1903                        | 15,446.32               | 14,917                       | 15,113                        | 333                            | 2.57                | 130                      |
| 1904                        | 8,443.31                | 8,140                        | 8,247                         | 196                            | 2.69                | 73                       |
| 1905                        | 13,211.32               | 12,718                       | 12,885                        | 326                            | 2.80                | 116                      |
| 1906                        | 5,826.89                | 5,600                        | 5,674                         | 153                            | 2.92                | 52                       |
| 1907                        | 4,318.72                | 4,143                        | 4,197                         | 122                            | 3.05                | 40                       |
| 1908                        | 5,084.82                | 4,871                        | 4,935                         | 150                            | 3.16                | 47                       |
| 1909                        | 5,578.23                | 5,334                        | 5,404                         | 174                            | 3.29                | 53                       |
| 1910                        | 944.58                  | 901                          | 913                           | 32                             | 3.43                | 9                        |
| 1911                        | 1,805.52                | 1,720                        | 1,743                         | 63                             | 3.55                | 18                       |
| 1912                        | 1,590.08                | 1,512                        | 1,532                         | 58                             | 3.69                | 16                       |
| 1913                        | 4,199.64                | 3,985                        | 4,037                         | 163                            | 3.84                | 42                       |
| 1914                        | 6,522.34                | 6,176                        | 6,257                         | 265                            | 3.98                | 67                       |
| 1915                        | 9,299.36                | 8,787                        | 8,903                         | 396                            | 4.13                | 96                       |
| 1916                        | 2,133.53                | 2,011                        | 2,037                         | 97                             | 4.29                | 23                       |
| 1917                        | 2,947.27                | 2,773                        | 2,809                         | 138                            | 4.44                | 31                       |
| 1918                        | 969.85                  | 910                          | 922                           | 48                             | 4.60                | 10                       |
| 1919                        | 713.16                  | 668                          | 677                           | 36                             | 4.78                | 8                        |
| 1920                        | 1,116.43                | 1,043                        | 1,057                         | 59                             | 4.94                | 12                       |
| 1921                        | 2,386.50                | 2,224                        | 2,253                         | 134                            | 5.12                | 26                       |
| 1922                        | 5,478.84                | 5,091                        | 5,158                         | 321                            | 5.31                | 60                       |
| 1923                        | 5,748.64                | 5,328                        | 5,398                         | 351                            | 5.49                | 64                       |
| 1924                        | 2,962.36                | 2,738                        | 2,774                         | 188                            | 5.68                | 33                       |



COLUMBIA GAS OF PENNSYLVANIA, INC.

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

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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 75-S4 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0     |                         |                              |                               |                                |                     |                          |
| 1925                        | 8,085.67                | 7,451                        | 7,549                         | 537                            | 5.89                | 91                       |
| 1926                        | 3,690.49                | 3,391                        | 3,436                         | 254                            | 6.09                | 42                       |
| 1927                        | 3,441.21                | 3,152                        | 3,193                         | 248                            | 6.31                | 39                       |
| 1928                        | 3,616.30                | 3,301                        | 3,344                         | 272                            | 6.53                | 42                       |
| 1929                        | 9,736.71                | 8,859                        | 8,976                         | 761                            | 6.76                | 113                      |
| 1930                        | 3,705.73                | 3,360                        | 3,404                         | 302                            | 7.00                | 43                       |
| 1931                        | 4,695.61                | 4,242                        | 4,298                         | 398                            | 7.25                | 55                       |
| 1932                        | 2,031.20                | 1,828                        | 1,852                         | 179                            | 7.50                | 24                       |
| 1933                        | 2,540.95                | 2,278                        | 2,308                         | 233                            | 7.77                | 30                       |
| 1934                        | 4,020.82                | 3,589                        | 3,636                         | 385                            | 8.05                | 48                       |
| 1935                        | 866.62                  | 770                          | 780                           | 87                             | 8.33                | 10                       |
| 1936                        | 4,994.63                | 4,420                        | 4,478                         | 517                            | 8.63                | 60                       |
| 1937                        | 3,607.79                | 3,178                        | 3,220                         | 388                            | 8.94                | 43                       |
| 1938                        | 1,245.49                | 1,092                        | 1,106                         | 139                            | 9.26                | 15                       |
| 1939                        | 956.06                  | 834                          | 845                           | 111                            | 9.59                | 12                       |
| 1940                        | 13,850.45               | 12,015                       | 12,173                        | 1,677                          | 9.94                | 169                      |
| 1941                        | 4,887.61                | 4,216                        | 4,271                         | 617                            | 10.30               | 60                       |
| 1942                        | 8,169.68                | 7,006                        | 7,098                         | 1,072                          | 10.68               | 100                      |
| 1943                        | 1,693.42                | 1,443                        | 1,462                         | 231                            | 11.07               | 21                       |
| 1944                        | 978.40                  | 829                          | 840                           | 138                            | 11.48               | 12                       |
| 1945                        | 1,004.81                | 845                          | 856                           | 149                            | 11.90               | 13                       |
| 1946                        | 344.00                  | 287                          | 291                           | 53                             | 12.34               | 4                        |
| 1947                        | 142.29                  | 118                          | 120                           | 22                             | 12.80               | 2                        |
| 1948                        | 3,080.71                | 2,536                        | 2,569                         | 512                            | 13.27               | 39                       |
| 1949                        | 16,198.32               | 13,226                       | 13,400                        | 2,798                          | 13.76               | 203                      |
| 1950                        | 20,911.66               | 16,930                       | 17,153                        | 3,759                          | 14.28               | 263                      |
| 1951                        | 11,956.42               | 9,595                        | 9,721                         | 2,235                          | 14.81               | 151                      |
| 1952                        | 8,038.39                | 6,391                        | 6,475                         | 1,563                          | 15.37               | 102                      |
| 1953                        | 5,949.87                | 4,685                        | 4,747                         | 1,203                          | 15.94               | 75                       |
| 1954                        | 21,585.01               | 16,825                       | 17,046                        | 4,539                          | 16.54               | 274                      |
| 1955                        | 32,149.56               | 24,794                       | 25,120                        | 7,030                          | 17.16               | 410                      |
| 1956                        | 51,558.51               | 39,322                       | 39,839                        | 11,720                         | 17.80               | 658                      |
| 1957                        | 19,916.61               | 15,015                       | 15,213                        | 4,704                          | 18.46               | 255                      |
| 1958                        | 63,499.25               | 47,294                       | 47,916                        | 15,583                         | 19.14               | 814                      |
| 1959                        | 28,371.09               | 20,862                       | 21,136                        | 7,235                          | 19.85               | 364                      |
| 1960                        | 26,305.63               | 19,087                       | 19,338                        | 6,968                          | 20.58               | 339                      |
| 1961                        | 15,768.03               | 11,286                       | 11,434                        | 4,334                          | 21.32               | 203                      |
| 1962                        | 18,087.78               | 12,760                       | 12,928                        | 5,160                          | 22.09               | 234                      |
| 1963                        | 27,374.57               | 19,023                       | 19,273                        | 8,102                          | 22.88               | 354                      |
| 1964                        | 40,027.79               | 27,384                       | 27,744                        | 12,284                         | 23.69               | 519                      |
| 1965                        | 17,574.04               | 11,829                       | 11,985                        | 5,589                          | 24.52               | 228                      |
| 1966                        | 18,597.25               | 12,306                       | 12,468                        | 6,129                          | 25.37               | 242                      |

COLUMBIA GAS OF PENNSYLVANIA, INC.

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

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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 75-S4 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0     |                         |                              |                               |                                |                     |                          |
| 1967                        | 96,910.77               | 63,018                       | 63,847                        | 33,064                         | 26.23               | 1,261                    |
| 1968                        | 82,637.79               | 52,767                       | 53,461                        | 29,177                         | 27.11               | 1,076                    |
| 1969                        | 46,057.56               | 28,856                       | 29,236                        | 16,822                         | 28.01               | 601                      |
| 1970                        | 45,097.36               | 27,708                       | 28,072                        | 17,025                         | 28.92               | 589                      |
| 1971                        | 54,600.87               | 32,877                       | 33,310                        | 21,291                         | 29.84               | 714                      |
| 1972                        | 80,841.70               | 47,664                       | 48,291                        | 32,551                         | 30.78               | 1,058                    |
| 1973                        | 31,060.02               | 17,924                       | 18,160                        | 12,900                         | 31.72               | 407                      |
| 1974                        | 42,716.26               | 24,109                       | 24,426                        | 18,290                         | 32.67               | 560                      |
| 1975                        | 53,203.52               | 29,340                       | 29,726                        | 23,478                         | 33.64               | 698                      |
| 1976                        | 46,796.87               | 25,963                       | 26,305                        | 20,492                         | 32.50               | 631                      |
| 1977                        | 50,016.13               | 27,069                       | 27,425                        | 22,591                         | 33.49               | 675                      |
| 1978                        | 27,600.77               | 14,664                       | 14,857                        | 12,744                         | 33.96               | 375                      |
| 1979                        | 28,364.25               | 14,678                       | 14,871                        | 13,493                         | 34.96               | 386                      |
| 1980                        | 24,054.08               | 12,116                       | 12,275                        | 11,779                         | 35.96               | 328                      |
| 1981                        | 55,235.53               | 27,060                       | 27,416                        | 27,820                         | 36.96               | 753                      |
| 1982                        | 47,534.94               | 22,631                       | 22,929                        | 24,606                         | 37.96               | 648                      |
| 1983                        | 27,148.25               | 12,551                       | 12,716                        | 14,432                         | 38.96               | 370                      |
| 1984                        | 30,306.87               | 13,593                       | 13,772                        | 16,535                         | 39.96               | 414                      |
| 1985                        | 72,105.59               | 31,344                       | 31,756                        | 40,350                         | 40.96               | 985                      |
| 1986                        | 17,533.91               | 7,380                        | 7,477                         | 10,057                         | 41.96               | 240                      |
| 1987                        | 27,416.83               | 11,161                       | 11,308                        | 16,109                         | 42.96               | 375                      |
| 1988                        | 11,339.22               | 4,460                        | 4,519                         | 6,820                          | 43.96               | 155                      |
| 1989                        | 70,082.23               | 26,596                       | 26,946                        | 43,136                         | 44.96               | 959                      |
| 1990                        | 44,760.66               | 16,369                       | 16,584                        | 28,177                         | 45.96               | 613                      |
| 1991                        | 35,224.46               | 12,395                       | 12,558                        | 22,666                         | 46.96               | 483                      |
| 1992                        | 54,141.31               | 18,305                       | 18,546                        | 35,595                         | 47.96               | 742                      |
| 1993                        | 58,993.43               | 19,132                       | 19,384                        | 39,609                         | 48.96               | 809                      |
| 1994                        | 184,531.84              | 57,297                       | 58,051                        | 126,481                        | 49.96               | 2,532                    |
| 1995                        | 584,928.49              | 173,548                      | 175,830                       | 409,098                        | 50.96               | 8,028                    |
| 1996                        | 126,940.88              | 35,912                       | 36,384                        | 90,557                         | 51.96               | 1,743                    |
| 1997                        | 68,030.65               | 18,307                       | 18,548                        | 49,483                         | 52.96               | 934                      |
| 1998                        | 40,132.45               | 10,246                       | 10,381                        | 29,751                         | 53.96               | 551                      |
| 2000                        | 15,568.19               | 3,545                        | 3,592                         | 11,976                         | 55.96               | 214                      |
| 2001                        | 39,714.12               | 8,495                        | 8,607                         | 31,107                         | 56.96               | 546                      |
| 2002                        | 181,571.19              | 36,332                       | 36,809                        | 144,762                        | 57.96               | 2,498                    |
| 2003                        | 1,938.28                | 361                          | 366                           | 1,572                          | 58.96               | 27                       |
|                             | 3,233,106.76            | 1,581,310                    | 1,601,901                     | 1,631,206                      |                     | 42,159                   |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 38.7 1.30

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, 2016

| 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-R1.5 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0       |                         |                              |                               |                                |                     |                          |
| 1905                          | 19.71                   | 19                           | 17                            | 3                              | 3.03                | 1                        |
| 1913                          | 302.61                  | 277                          | 250                           | 53                             | 5.11                | 10                       |
| 1914                          | 310.73                  | 283                          | 255                           | 56                             | 5.34                | 10                       |
| 1916                          | 32.62                   | 29                           | 26                            | 7                              | 5.79                | 1                        |
| 1922                          | 277.07                  | 243                          | 219                           | 58                             | 7.29                | 8                        |
| 1925                          | 172.88                  | 150                          | 135                           | 38                             | 8.10                | 5                        |
| 1927                          | 187.05                  | 160                          | 144                           | 43                             | 8.66                | 5                        |
| 1928                          | 470.41                  | 400                          | 360                           | 110                            | 8.94                | 12                       |
| 1929                          | 3,819.41                | 3,232                        | 2,912                         | 907                            | 9.23                | 98                       |
| 1930                          | 3,874.50                | 3,260                        | 2,937                         | 938                            | 9.52                | 99                       |
| 1931                          | 1,050.74                | 879                          | 792                           | 259                            | 9.82                | 26                       |
| 1932                          | 2,149.95                | 1,787                        | 1,610                         | 540                            | 10.12               | 53                       |
| 1933                          | 2,382.42                | 1,969                        | 1,774                         | 608                            | 10.42               | 58                       |
| 1934                          | 955.19                  | 784                          | 706                           | 249                            | 10.73               | 23                       |
| 1935                          | 84.65                   | 69                           | 62                            | 23                             | 11.04               | 2                        |
| 1936                          | 1,749.45                | 1,419                        | 1,278                         | 471                            | 11.35               | 41                       |
| 1938                          | 546.46                  | 437                          | 394                           | 152                            | 12.00               | 13                       |
| 1939                          | 4,152.19                | 3,299                        | 2,972                         | 1,180                          | 12.33               | 96                       |
| 1940                          | 494.01                  | 390                          | 351                           | 143                            | 12.67               | 11                       |
| 1941                          | 803.32                  | 629                          | 567                           | 236                            | 13.01               | 18                       |
| 1942                          | 1,155.33                | 898                          | 809                           | 346                            | 13.36               | 26                       |
| 1943                          | 676.80                  | 522                          | 470                           | 207                            | 13.72               | 15                       |
| 1945                          | 581.38                  | 441                          | 397                           | 184                            | 14.45               | 13                       |
| 1946                          | 934.61                  | 704                          | 634                           | 301                            | 14.83               | 20                       |
| 1947                          | 2,536.52                | 1,894                        | 1,706                         | 831                            | 15.21               | 55                       |
| 1948                          | 6,169.22                | 4,564                        | 4,112                         | 2,057                          | 15.61               | 132                      |
| 1949                          | 1,066.21                | 782                          | 705                           | 361                            | 16.01               | 23                       |
| 1950                          | 4,662.55                | 3,387                        | 3,051                         | 1,612                          | 16.42               | 98                       |
| 1951                          | 11,442.68               | 8,231                        | 7,415                         | 4,028                          | 16.84               | 239                      |
| 1952                          | 17,962.79               | 12,795                       | 11,527                        | 6,436                          | 17.26               | 373                      |
| 1953                          | 21,443.45               | 15,118                       | 13,620                        | 7,823                          | 17.70               | 442                      |
| 1954                          | 17,910.93               | 12,496                       | 11,258                        | 6,653                          | 18.14               | 367                      |
| 1955                          | 11,391.39               | 7,862                        | 7,083                         | 4,308                          | 18.59               | 232                      |
| 1956                          | 31,657.12               | 21,606                       | 19,465                        | 12,192                         | 19.05               | 640                      |
| 1957                          | 28,458.77               | 19,200                       | 17,297                        | 11,162                         | 19.52               | 572                      |
| 1958                          | 40,990.70               | 27,327                       | 24,619                        | 16,372                         | 20.00               | 819                      |
| 1959                          | 24,226.35               | 15,953                       | 14,372                        | 9,854                          | 20.49               | 481                      |
| 1960                          | 28,334.81               | 18,422                       | 16,597                        | 11,738                         | 20.99               | 559                      |
| 1961                          | 37,941.31               | 24,352                       | 21,939                        | 16,002                         | 21.49               | 745                      |
| 1962                          | 43,443.92               | 27,514                       | 24,788                        | 18,656                         | 22.00               | 848                      |
| 1963                          | 29,170.03               | 18,222                       | 16,416                        | 12,754                         | 22.52               | 566                      |
| 1964                          | 45,248.25               | 27,858                       | 25,098                        | 20,150                         | 23.06               | 874                      |

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, 2016

| 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-R1.5 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0       |                         |                              |                               |                                |                     |                          |
| 1965                          | 30,075.24               | 18,251                       | 16,442                        | 13,633                         | 23.59               | 578                      |
| 1966                          | 26,145.37               | 15,626                       | 14,078                        | 12,067                         | 24.14               | 500                      |
| 1967                          | 18,744.53               | 11,028                       | 9,935                         | 8,810                          | 24.70               | 357                      |
| 1968                          | 9,802.26                | 5,676                        | 5,114                         | 4,688                          | 25.26               | 186                      |
| 1969                          | 17,647.44               | 10,050                       | 9,054                         | 8,593                          | 25.83               | 333                      |
| 1970                          | 5,731.21                | 3,209                        | 2,891                         | 2,840                          | 26.41               | 108                      |
| 1971                          | 19,995.11               | 10,997                       | 9,907                         | 10,088                         | 27.00               | 374                      |
| 1972                          | 11,564.76               | 6,245                        | 5,626                         | 5,939                          | 27.60               | 215                      |
| 1973                          | 13,835.62               | 7,333                        | 6,606                         | 7,230                          | 28.20               | 256                      |
| 1974                          | 12,258.22               | 6,372                        | 5,741                         | 6,517                          | 28.81               | 226                      |
| 1975                          | 16,421.12               | 8,367                        | 7,538                         | 8,883                          | 29.43               | 302                      |
| 1976                          | 25,644.81               | 15,684                       | 14,130                        | 11,515                         | 25.72               | 448                      |
| 1977                          | 22,017.52               | 13,219                       | 11,909                        | 10,109                         | 26.29               | 385                      |
| 1978                          | 20,535.27               | 12,095                       | 10,896                        | 9,639                          | 26.86               | 359                      |
| 1979                          | 32,320.96               | 18,665                       | 16,815                        | 15,506                         | 27.44               | 565                      |
| 1980                          | 12,110.49               | 6,896                        | 6,213                         | 5,897                          | 27.60               | 214                      |
| 1981                          | 27,125.88               | 15,120                       | 13,622                        | 13,504                         | 28.19               | 479                      |
| 1982                          | 40,351.53               | 21,996                       | 19,816                        | 20,536                         | 28.79               | 713                      |
| 1983                          | 17,829.76               | 9,496                        | 8,555                         | 9,275                          | 29.40               | 315                      |
| 1984                          | 14,276.72               | 7,470                        | 6,730                         | 7,547                          | 29.61               | 255                      |
| 1985                          | 12,564.65               | 6,412                        | 5,777                         | 6,788                          | 30.23               | 225                      |
| 1986                          | 25,940.37               | 12,898                       | 11,620                        | 14,320                         | 30.85               | 464                      |
| 1987                          | 11,084.11               | 5,396                        | 4,861                         | 6,223                          | 31.10               | 200                      |
| 1988                          | 40,504.33               | 19,163                       | 17,264                        | 23,240                         | 31.74               | 732                      |
| 1989                          | 14,241.63               | 6,580                        | 5,928                         | 8,314                          | 32.02               | 260                      |
| 1990                          | 10,240.47               | 4,586                        | 4,132                         | 6,108                          | 32.67               | 187                      |
| 1991                          | 35,268.40               | 15,377                       | 13,853                        | 21,415                         | 32.98               | 649                      |
| 1992                          | 128.01                  | 54                           | 49                            | 79                             | 33.64               | 2                        |
| 1993                          | 23,194.54               | 9,484                        | 8,544                         | 14,651                         | 33.97               | 431                      |
| 1994                          | 1,493.05                | 588                          | 530                           | 963                            | 34.64               | 28                       |
| 1995                          | 13,436.58               | 5,114                        | 4,607                         | 8,830                          | 34.99               | 252                      |
| 1996                          | 15,503.80               | 5,690                        | 5,126                         | 10,378                         | 35.36               | 293                      |
| 1997                          | 25,435.42               | 8,979                        | 8,089                         | 17,346                         | 35.75               | 485                      |
| 1998                          | 63,296.30               | 21,432                       | 19,308                        | 43,988                         | 36.14               | 1,217                    |
| 1999                          | 4,497.55                | 1,456                        | 1,312                         | 3,186                          | 36.55               | 87                       |
| 2000                          | 29,280.10               | 9,036                        | 8,141                         | 21,139                         | 36.97               | 572                      |
| 2001                          | 30,387.66               | 8,904                        | 8,022                         | 22,366                         | 37.41               | 598                      |
| 2002                          | 23,992.91               | 6,646                        | 5,987                         | 18,006                         | 37.85               | 476                      |
| 2003                          | 65,407.92               | 17,130                       | 15,433                        | 49,975                         | 38.05               | 1,313                    |
| 2004                          | 33,838.44               | 8,290                        | 7,469                         | 26,369                         | 38.52               | 685                      |
| 2005                          | 65,602.44               | 15,010                       | 13,523                        | 52,079                         | 38.75               | 1,344                    |
| 2006                          | 198,707.50              | 42,146                       | 37,970                        | 160,738                        | 39.00               | 4,121                    |

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, 2016

| 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-R1.5                                     |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                           |                         |                              |                               |                                |                     |                          |
| 2007                                                              | 99,455.28               | 19,374                       | 17,454                        | 82,001                         | 39.28               | 2,088                    |
| 2008                                                              | 413,770.73              | 73,486                       | 66,204                        | 347,567                        | 39.35               | 8,833                    |
| 2009                                                              | 41,962.51               | 6,706                        | 6,041                         | 35,922                         | 39.45               | 911                      |
| 2010                                                              | 179,458.67              | 25,304                       | 22,797                        | 156,662                        | 39.59               | 3,957                    |
| 2011                                                              | 222,747.21              | 27,309                       | 24,603                        | 198,144                        | 39.35               | 5,035                    |
| 2012                                                              | 254,084.00              | 26,171                       | 23,577                        | 230,507                        | 39.17               | 5,885                    |
| 2013                                                              | 379,685.88              | 31,514                       | 28,391                        | 351,295                        | 38.69               | 9,080                    |
| 2014                                                              | 205,071.15              | 12,673                       | 11,417                        | 193,654                        | 37.98               | 5,099                    |
| 2015                                                              | 249,461.70              | 9,829                        | 8,855                         | 240,607                        | 36.52               | 6,588                    |
| 2016                                                              | 250,200.00              | 3,778                        | 3,404                         | 246,796                        | 32.61               | 7,568                    |
|                                                                   | 3,865,617.62            | 980,173                      | 883,045                       | 2,982,573                      |                     | 85,562                   |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 34.9 |                         |                              |                               |                                |                     | 2.21                     |

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, 2016

| 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-R1.5 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0       |                         |                              |                               |                                |                     |                          |
| 1922                          | 114.31                  | 110                          | 114                           |                                |                     |                          |
| 1928                          | 87.15                   | 81                           | 87                            |                                |                     |                          |
| 1930                          | 127.57                  | 117                          | 128                           |                                |                     |                          |
| 1931                          | 263.40                  | 240                          | 263                           |                                |                     |                          |
| 1934                          | 783.68                  | 703                          | 784                           |                                |                     |                          |
| 1935                          | 147.25                  | 131                          | 147                           |                                |                     |                          |
| 1936                          | 21.46                   | 19                           | 21                            |                                |                     |                          |
| 1937                          | 618.76                  | 546                          | 619                           |                                |                     |                          |
| 1938                          | 1,463.03                | 1,283                        | 1,463                         |                                |                     |                          |
| 1940                          | 440.04                  | 381                          | 440                           |                                |                     |                          |
| 1942                          | 1,018.37                | 871                          | 1,018                         |                                |                     |                          |
| 1944                          | 2,850.41                | 2,405                        | 2,818                         | 32                             | 7.81                | 4                        |
| 1946                          | 377.07                  | 314                          | 368                           | 9                              | 8.41                | 1                        |
| 1947                          | 568.77                  | 470                          | 551                           | 18                             | 8.71                | 2                        |
| 1948                          | 482.71                  | 396                          | 464                           | 19                             | 9.02                | 2                        |
| 1950                          | 1,857.60                | 1,499                        | 1,756                         | 102                            | 9.65                | 11                       |
| 1951                          | 3,131.90                | 2,507                        | 2,937                         | 195                            | 9.97                | 20                       |
| 1952                          | 3,969.07                | 3,151                        | 3,692                         | 277                            | 10.30               | 27                       |
| 1953                          | 4,259.74                | 3,353                        | 3,929                         | 331                            | 10.64               | 31                       |
| 1955                          | 4,904.63                | 3,792                        | 4,443                         | 462                            | 11.34               | 41                       |
| 1956                          | 2,507.83                | 1,921                        | 2,251                         | 257                            | 11.70               | 22                       |
| 1957                          | 14,375.38               | 10,905                       | 12,777                        | 1,598                          | 12.07               | 132                      |
| 1958                          | 1,667.93                | 1,253                        | 1,468                         | 200                            | 12.45               | 16                       |
| 1959                          | 5,902.55                | 4,387                        | 5,140                         | 763                            | 12.84               | 59                       |
| 1960                          | 1,345.00                | 989                          | 1,159                         | 186                            | 13.24               | 14                       |
| 1961                          | 1,954.81                | 1,421                        | 1,665                         | 290                            | 13.65               | 21                       |
| 1963                          | 3,416.99                | 2,427                        | 2,844                         | 573                            | 14.49               | 40                       |
| 1964                          | 1,441.97                | 1,011                        | 1,185                         | 257                            | 14.93               | 17                       |
| 1967                          | 1,614.49                | 1,088                        | 1,275                         | 339                            | 16.31               | 21                       |
| 1970                          | 2,450.11                | 1,579                        | 1,850                         | 600                            | 17.78               | 34                       |
| 1971                          | 7,721.50                | 4,897                        | 5,738                         | 1,984                          | 18.29               | 108                      |
| 1972                          | 1.00                    | 1                            | 1                             |                                |                     |                          |
| 1980                          | 3,885.67                | 2,496                        | 2,925                         | 961                            | 20.32               | 47                       |
| 1988                          | 11,897.69               | 6,443                        | 7,549                         | 4,349                          | 24.13               | 180                      |
|                               | 87,669.84               | 63,187                       | 73,869                        | 13,801                         |                     | 850                      |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 16.2 0.97

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, 2016

| 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                   |                         |                              |                               |                                |                     |                          |
| INTERIM SURVIVOR CURVE.. IOWA 90-R1 |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 6-2007   |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0             |                         |                              |                               |                                |                     |                          |
| 1934                                | 778.19                  | 778                          | 778                           |                                |                     |                          |
| 1955                                | 80.00                   | 80                           | 80                            |                                |                     |                          |
| 1957                                | 860.20                  | 860                          | 860                           |                                |                     |                          |
| 1971                                | 1,426.78                | 1,427                        | 1,427                         |                                |                     |                          |
|                                     | 3,145.17                | 3,145                        | 3,145                         |                                |                     |                          |
| WARREN SERVICE CENTER               |                         |                              |                               |                                |                     |                          |
| INTERIM SURVIVOR CURVE.. IOWA 90-R1 |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 6-2028   |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0             |                         |                              |                               |                                |                     |                          |
| 1985                                | 5,198.85                | 3,848                        | 3,474                         | 1,724                          | 11.06               | 156                      |
| 1987                                | 3,293.46                | 2,390                        | 2,158                         | 1,136                          | 11.15               | 102                      |
| 1995                                | 6,287.71                | 4,137                        | 3,735                         | 2,552                          | 11.18               | 228                      |
| 1998                                | 12,180.48               | 7,593                        | 6,856                         | 5,325                          | 11.18               | 476                      |
| 1999                                | 4,431.96                | 2,707                        | 2,444                         | 1,988                          | 11.15               | 178                      |
| 2003                                | 15,462.71               | 8,475                        | 7,652                         | 7,811                          | 11.13               | 702                      |
| 2007                                | 4,272.04                | 1,969                        | 1,778                         | 2,494                          | 11.12               | 224                      |
| 2010                                | 1,324.77                | 489                          | 442                           | 883                            | 11.11               | 79                       |
| 2012                                | 15,315.53               | 4,432                        | 4,002                         | 11,314                         | 11.05               | 1,024                    |
| 2014                                | 82,447.60               | 15,319                       | 13,832                        | 68,616                         | 10.96               | 6,261                    |
| 2015                                | 428,207.34              | 51,984                       | 46,936                        | 381,271                        | 10.86               | 35,108                   |
| 2016                                | 27,735.00               | 1,259                        | 1,137                         | 26,598                         | 10.52               | 2,528                    |
|                                     | 606,157.45              | 104,602                      | 94,445                        | 511,712                        |                     | 47,066                   |
| WASHINGTON SERVICE CENTER           |                         |                              |                               |                                |                     |                          |
| INTERIM SURVIVOR CURVE.. IOWA 90-R1 |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 6-2030   |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0             |                         |                              |                               |                                |                     |                          |
| 1978                                | 146.28                  | 110                          | 99                            | 47                             | 12.78               | 4                        |
| 1982                                | 654.18                  | 476                          | 430                           | 224                            | 12.89               | 17                       |
| 1984                                | 3,213.68                | 2,298                        | 2,075                         | 1,139                          | 12.95               | 88                       |
| 1985                                | 645.74                  | 458                          | 414                           | 232                            | 12.94               | 18                       |
| 1987                                | 137,676.81              | 95,851                       | 86,544                        | 51,133                         | 12.87               | 3,973                    |
| 1995                                | 172,702.42              | 107,680                      | 97,224                        | 75,478                         | 12.98               | 5,815                    |

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, 2016

| 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 |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 6-2030   |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0             |                         |                              |                               |                                |                     |                          |
| 1996                                | 37,427.65               | 22,943                       | 20,715                        | 16,712                         | 12.94               | 1,291                    |
| 1997                                | 46,354.86               | 27,841                       | 25,138                        | 21,217                         | 12.97               | 1,636                    |
| 1998                                | 25,457.67               | 14,977                       | 13,523                        | 11,935                         | 12.95               | 922                      |
| 2005                                | 145,491.61              | 68,439                       | 61,793                        | 83,698                         | 12.95               | 6,463                    |
| 2006                                | 8,461.69                | 3,785                        | 3,417                         | 5,044                          | 12.97               | 389                      |
| 2008                                | 7,509.60                | 2,975                        | 2,686                         | 4,823                          | 12.96               | 372                      |
| 2010                                | 83,277.24               | 27,881                       | 25,174                        | 58,104                         | 12.92               | 4,497                    |
| 2011                                | 15,261.54               | 4,566                        | 4,123                         | 11,139                         | 12.88               | 865                      |
| 2013                                | 99,799.78               | 21,417                       | 19,337                        | 80,462                         | 12.81               | 6,281                    |
| 2014                                | 161,865.59              | 26,578                       | 23,997                        | 137,868                        | 12.72               | 10,839                   |
| 2015                                | 858,493.22              | 91,515                       | 82,629                        | 775,865                        | 12.57               | 61,724                   |
| 2016                                | 55,470.00               | 2,197                        | 1,984                         | 53,486                         | 12.13               | 4,409                    |
|                                     | 1,859,909.56            | 521,987                      | 471,301                       | 1,388,609                      |                     | 109,603                  |

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

|      |           |        |        |
|------|-----------|--------|--------|
| 1958 | 20,999.60 | 21,000 | 21,000 |
| 1959 | 135.56    | 136    | 136    |
| 1960 | 720.61    | 721    | 721    |
| 1964 | 300.54    | 301    | 301    |
| 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  
PROBABLE RETIREMENT YEAR.. 6-2029  
NET SALVAGE PERCENT.. 0

|      |           |        |        |        |       |       |
|------|-----------|--------|--------|--------|-------|-------|
| 1979 | 73,300.65 | 55,525 | 49,943 | 23,357 | 12.00 | 1,946 |
| 1983 | 4,902.54  | 3,613  | 3,250  | 1,653  | 11.95 | 138   |
| 1991 | 1,525.38  | 1,035  | 931    | 594    | 12.09 | 49    |



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, 2016

| 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) |
|-------------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| HANOVER SERVICE CENTER              |                         |                              |                               |                                |                     |                          |
| INTERIM SURVIVOR CURVE.. IOWA 90-R1 |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 6-2029   |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0             |                         |                              |                               |                                |                     |                          |
| 1992                                | 2,909.82                | 1,953                        | 1,757                         | 1,153                          | 12.00               | 96                       |
| 1998                                | 239,353.26              | 144,809                      | 130,252                       | 109,101                        | 12.08               | 9,032                    |
| 2000                                | 1,902.72                | 1,099                        | 989                           | 914                            | 12.07               | 76                       |
| 2007                                | 8,426.95                | 3,715                        | 3,342                         | 5,085                          | 12.05               | 422                      |
| 2009                                | 8,710.98                | 3,345                        | 3,009                         | 5,702                          | 12.03               | 474                      |
| 2013                                | 75,451.54               | 17,143                       | 15,420                        | 60,032                         | 11.91               | 5,040                    |
| 2014                                | 108,840.89              | 18,960                       | 17,054                        | 91,787                         | 11.85               | 7,746                    |
| 2015                                | 576,414.52              | 65,365                       | 58,794                        | 517,620                        | 11.73               | 44,128                   |
| 2016                                | 36,980.00               | 1,561                        | 1,404                         | 35,576                         | 11.33               | 3,140                    |
|                                     | 1,138,719.25            | 318,123                      | 286,143                       | 852,576                        |                     | 72,287                   |
| JEANNETTE SERVICE CENTER            |                         |                              |                               |                                |                     |                          |
| INTERIM SURVIVOR CURVE.. IOWA 90-R1 |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 6-2036   |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0             |                         |                              |                               |                                |                     |                          |
| 1996                                | 2,700.01                | 1,428                        | 1,284                         | 1,416                          | 18.26               | 78                       |
| 1997                                | 7,912.22                | 4,089                        | 3,678                         | 4,234                          | 18.23               | 232                      |
| 2006                                | 122,192.82              | 44,649                       | 40,161                        | 82,032                         | 18.24               | 4,497                    |
| 2007                                | 83,513.69               | 28,645                       | 25,765                        | 57,748                         | 18.20               | 3,173                    |
| 2013                                | 779,903.37              | 127,748                      | 114,906                       | 664,998                        | 17.87               | 37,213                   |
| 2014                                | 82,200.00               | 10,193                       | 9,168                         | 73,032                         | 17.66               | 4,135                    |
| 2015                                | 435,000.00              | 34,582                       | 31,106                        | 403,894                        | 17.37               | 23,252                   |
| 2016                                | 27,735.00               | 815                          | 733                           | 27,002                         | 16.48               | 1,638                    |
|                                     | 1,541,157.11            | 252,149                      | 226,801                       | 1,314,356                      |                     | 74,218                   |
| BEAVER COUNTY TRAINING CENTER       |                         |                              |                               |                                |                     |                          |
| INTERIM SURVIVOR CURVE.. IOWA 90-R1 |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 12-2066  |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0             |                         |                              |                               |                                |                     |                          |
| 2016                                | 1,315,000.00            | 21,040                       | 18,925                        | 1,296,075                      | 30.75               | 42,149                   |
|                                     | 1,315,000.00            | 21,040                       | 18,925                        | 1,296,075                      |                     | 42,149                   |



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, 2016

| 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-R2                                       |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                           |                         |                              |                               |                                |                     |                          |
| 2001                                                              | 16,515.17               | 5,605                        | 6,540                         | 9,975                          | 30.16               | 331                      |
|                                                                   | 16,515.17               | 5,605                        | 6,540                         | 9,975                          |                     | 331                      |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 30.1 |                         |                              |                               |                                |                     | 2.00                     |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 376.1 MAINS - CAST IRON

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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)               |
| INTERIM SURVIVOR CURVE.. IOWA 72-R1.5 |                  |                       |                        |                         |              |                   |
| PROBABLE RETIREMENT YEAR.. 12-2025    |                  |                       |                        |                         |              |                   |
| NET SALVAGE PERCENT.. 0               |                  |                       |                        |                         |              |                   |
| 1905                                  | 26.22            | 24                    | 20                     | 6                       | 6.23         | 1                 |
| 1908                                  | 5.94             | 5                     | 4                      | 2                       | 6.45         |                   |
| 1911                                  | 489.42           | 444                   | 376                    | 113                     | 6.64         | 17                |
| 1912                                  | 41.18            | 37                    | 31                     | 10                      | 6.70         | 1                 |
| 1913                                  | 3,237.01         | 2,930                 | 2,484                  | 753                     | 6.76         | 111               |
| 1914                                  | 153.35           | 139                   | 118                    | 35                      | 6.82         | 5                 |
| 1915                                  | 320.92           | 290                   | 246                    | 75                      | 6.87         | 11                |
| 1917                                  | 743.38           | 670                   | 568                    | 175                     | 6.97         | 25                |
| 1918                                  | 26.86            | 24                    | 20                     | 7                       | 7.02         | 1                 |
| 1919                                  | 27.45            | 25                    | 21                     | 6                       | 7.07         | 1                 |
| 1920                                  | 1,436.20         | 1,291                 | 1,095                  | 341                     | 7.12         | 48                |
| 1921                                  | 18,697.61        | 16,796                | 14,242                 | 4,456                   | 7.16         | 622               |
| 1922                                  | 297.83           | 267                   | 226                    | 72                      | 7.21         | 10                |
| 1923                                  | 18,803.07        | 16,858                | 14,294                 | 4,509                   | 7.25         | 622               |
| 1924                                  | 55,111.90        | 49,357                | 41,851                 | 13,261                  | 7.30         | 1,817             |
| 1925                                  | 32,350.17        | 28,944                | 24,542                 | 7,808                   | 7.34         | 1,064             |
| 1926                                  | 44,600.41        | 39,867                | 33,804                 | 10,796                  | 7.38         | 1,463             |
| 1927                                  | 16,565.59        | 14,793                | 12,543                 | 4,023                   | 7.42         | 542               |
| 1928                                  | 25,194.21        | 22,476                | 19,058                 | 6,136                   | 7.46         | 823               |
| 1929                                  | 41,840.69        | 37,287                | 31,616                 | 10,225                  | 7.50         | 1,363             |
| 1930                                  | 10,994.78        | 9,788                 | 8,299                  | 2,696                   | 7.54         | 358               |
| 1931                                  | 8,488.94         | 7,549                 | 6,401                  | 2,088                   | 7.58         | 275               |
| 1932                                  | 59.11            | 53                    | 45                     | 14                      | 7.62         | 2                 |
| 1933                                  | 1,666.43         | 1,478                 | 1,253                  | 413                     | 7.66         | 54                |
| 1934                                  | 797.65           | 707                   | 599                    | 199                     | 7.70         | 26                |
| 1937                                  | 118.45           | 105                   | 89                     | 29                      | 7.80         | 4                 |
| 1938                                  | 2,944.68         | 2,597                 | 2,202                  | 743                     | 7.84         | 95                |
| 1939                                  | 142,430.25       | 125,457               | 106,379                | 36,051                  | 7.87         | 4,581             |
| 1940                                  | 3,064.30         | 2,695                 | 2,285                  | 779                     | 7.91         | 98                |
| 1941                                  | 6,716.56         | 5,900                 | 5,003                  | 1,714                   | 7.94         | 216               |
| 1942                                  | 687.78           | 603                   | 511                    | 177                     | 7.97         | 22                |
| 1943                                  | 1,739.33         | 1,524                 | 1,292                  | 447                     | 8.00         | 56                |
| 1944                                  | 2,257.88         | 1,975                 | 1,675                  | 583                     | 8.03         | 73                |
| 1945                                  | 1,688.25         | 1,475                 | 1,251                  | 437                     | 8.06         | 54                |
| 1946                                  | 1,343.01         | 1,171                 | 993                    | 350                     | 8.09         | 43                |
| 1947                                  | 641.95           | 559                   | 474                    | 168                     | 8.12         | 21                |
| 1948                                  | 8,282.08         | 7,200                 | 6,105                  | 2,177                   | 8.15         | 267               |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 376.1 MAINS - CAST IRON

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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 72-R1.5                                 |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 12-2025                                    |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                               |                         |                              |                               |                                |                     |                          |
| 1949                                                                  | 101.38                  | 88                           | 75                            | 26                             | 8.17                | 3                        |
| 1951                                                                  | 68.56                   | 59                           | 50                            | 19                             | 8.22                | 2                        |
| 1982                                                                  | 329.65                  | 264                          | 223                           | 107                            | 8.60                | 12                       |
|                                                                       | 454,390.43              | 403,771                      | 342,363                       | 112,027                        |                     | 14,809                   |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 7.6 3.26 |                         |                              |                               |                                |                     |                          |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 376.3 MAINS - BARE STEEL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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 72-R1.5 |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 12-2025    |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0               |                         |                              |                               |                                |                     |                          |
| 1942                                  | 7,654.77                | 6,715                        | 5,694                         | 1,961                          | 7.97                | 246                      |
| 1943                                  | 18,983.98               | 16,631                       | 14,102                        | 4,882                          | 8.00                | 610                      |
| 1944                                  | 10,055.34               | 8,797                        | 7,459                         | 2,596                          | 8.03                | 323                      |
| 1945                                  | 9,302.84                | 8,126                        | 6,890                         | 2,413                          | 8.06                | 299                      |
| 1946                                  | 73,922.45               | 64,472                       | 54,667                        | 19,255                         | 8.09                | 2,380                    |
| 1947                                  | 61,159.41               | 53,256                       | 45,157                        | 16,002                         | 8.12                | 1,971                    |
| 1948                                  | 184,081.97              | 160,032                      | 135,693                       | 48,389                         | 8.15                | 5,937                    |
| 1949                                  | 581,426.46              | 504,696                      | 427,939                       | 153,487                        | 8.17                | 18,787                   |
| 1950                                  | 918,622.46              | 795,977                      | 674,920                       | 243,702                        | 8.20                | 29,720                   |
| 1951                                  | 706,677.89              | 611,326                      | 518,352                       | 188,326                        | 8.22                | 22,911                   |
| 1952                                  | 1,512,216.70            | 1,305,693                    | 1,107,116                     | 405,101                        | 8.25                | 49,103                   |
| 1953                                  | 1,092,404.64            | 941,554                      | 798,357                       | 294,048                        | 8.27                | 35,556                   |
| 1954                                  | 1,338,125.85            | 1,151,029                    | 975,974                       | 362,152                        | 8.30                | 43,633                   |
| 1955                                  | 3,288,063.78            | 2,822,901                    | 2,393,578                     | 894,486                        | 8.32                | 107,510                  |
| 1956                                  | 2,014,744.75            | 1,726,274                    | 1,463,732                     | 551,013                        | 8.34                | 66,069                   |
| 1957                                  | 2,560,698.77            | 2,189,551                    | 1,856,551                     | 704,148                        | 8.36                | 84,228                   |
| 1958                                  | 3,120,892.33            | 2,662,870                    | 2,257,885                     | 863,007                        | 8.38                | 102,984                  |
| 1959                                  | 2,529,604.60            | 2,153,579                    | 1,826,050                     | 703,555                        | 8.40                | 83,757                   |
| 1960                                  | 2,647,085.29            | 2,248,355                    | 1,906,412                     | 740,673                        | 8.42                | 87,966                   |
| 1961                                  | 2,970,733.17            | 2,517,162                    | 2,134,337                     | 836,396                        | 8.44                | 99,099                   |
| 1962                                  | 2,523,427.91            | 2,132,877                    | 1,808,497                     | 714,931                        | 8.46                | 84,507                   |
| 1963                                  | 3,357,213.46            | 2,830,198                    | 2,399,765                     | 957,448                        | 8.48                | 112,907                  |
| 1964                                  | 3,263,184.40            | 2,744,077                    | 2,326,742                     | 936,442                        | 8.49                | 110,299                  |
| 1965                                  | 2,623,456.49            | 2,199,899                    | 1,865,325                     | 758,131                        | 8.51                | 89,087                   |
| 1966                                  | 3,821,288.67            | 3,194,941                    | 2,709,036                     | 1,112,253                      | 8.53                | 130,393                  |
| 1967                                  | 3,616,569.34            | 3,015,206                    | 2,556,636                     | 1,059,933                      | 8.54                | 124,114                  |
| 1968                                  | 2,731,708.86            | 2,270,214                    | 1,924,946                     | 806,763                        | 8.56                | 94,248                   |
| 1969                                  | 2,165,367.31            | 1,794,007                    | 1,521,164                     | 644,203                        | 8.57                | 75,170                   |
| 1970                                  | 982,947.70              | 811,738                      | 688,284                       | 294,664                        | 8.58                | 34,343                   |
| 1971                                  | 2,389,070.65            | 1,965,799                    | 1,666,829                     | 722,242                        | 8.60                | 83,982                   |
| 1972                                  | 881,639.68              | 722,900                      | 612,957                       | 268,683                        | 8.61                | 31,206                   |
| 1973                                  | 575,558.91              | 470,180                      | 398,672                       | 176,887                        | 8.62                | 20,521                   |
| 1974                                  | 1,290.13                | 1,050                        | 890                           | 400                            | 8.63                | 46                       |
| 1975                                  | 1,409.66                | 1,142                        | 968                           | 442                            | 8.65                | 51                       |
| 1976                                  | 239.11                  | 198                          | 168                           | 71                             | 8.52                | 8                        |
| 1977                                  | 2,154.51                | 1,770                        | 1,501                         | 654                            | 8.58                | 76                       |
| 1978                                  | 163,498.02              | 133,447                      | 113,152                       | 50,346                         | 8.67                | 5,807                    |
| 1979                                  | 17,121.39               | 13,933                       | 11,814                        | 5,307                          | 8.58                | 619                      |
| 1980                                  | 198,587.39              | 160,181                      | 135,820                       | 62,767                         | 8.75                | 7,173                    |
| 1981                                  | 56.59                   | 45                           | 38                            | 19                             | 8.75                | 2                        |
| 1982                                  | 243.57                  | 195                          | 165                           | 79                             | 8.60                | 9                        |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 376.3 MAINS - BARE STEEL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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 72-R1.5                                 |                         |                              |                               |                                |                     |                          |
| PROBABLE RETIREMENT YEAR.. 12-2025                                    |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                               |                         |                              |                               |                                |                     |                          |
| 1983                                                                  | 7,390.67                | 5,868                        | 4,976                         | 2,415                          | 8.69                | 278                      |
| 1984                                                                  | 319.37                  | 252                          | 214                           | 105                            | 8.65                | 12                       |
| 1985                                                                  | 34.53                   | 27                           | 23                            | 12                             | 8.66                | 1                        |
| 1986                                                                  | 80.27                   | 62                           | 53                            | 27                             | 8.71                | 3                        |
| 1988                                                                  | 0.10                    |                              |                               |                                |                     |                          |
| 1989                                                                  | 878.67                  | 667                          | 566                           | 313                            | 8.73                | 36                       |
| 1990                                                                  | 11,504.79               | 8,659                        | 7,342                         | 4,163                          | 8.71                | 478                      |
| 1992                                                                  | 44,487.53               | 32,805                       | 27,815                        | 16,673                         | 8.72                | 1,912                    |
| 1997                                                                  | 3,970.76                | 2,741                        | 2,324                         | 1,647                          | 8.75                | 188                      |
| 1998                                                                  | 656.67                  | 446                          | 378                           | 279                            | 8.75                | 32                       |
| 2008                                                                  | 77.49                   | 38                           | 32                            | 45                             | 8.80                | 5                        |
| 2011                                                                  | 32,260.75               | 12,420                       | 10,531                        | 21,730                         | 8.79                | 2,472                    |
|                                                                       | 55,064,152.80           | 46,476,978                   | 39,408,488                    | 15,655,665                     |                     | 1,853,074                |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 8.4 3.37 |                         |                              |                               |                                |                     |                          |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 376.45 MAINS - OTHER

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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 72-R1.5 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0       |                         |                              |                               |                                |                     |                          |
| 1952                          | 75,066.02               | 47,052                       | 39,896                        | 35,170                         | 26.87               | 1,309                    |
| 1954                          | 22,098.32               | 13,526                       | 11,469                        | 10,629                         | 27.93               | 381                      |
| 1955                          | 84,206.11               | 50,898                       | 43,157                        | 41,049                         | 28.48               | 1,441                    |
| 1956                          | 79,644.19               | 47,543                       | 40,312                        | 39,332                         | 29.02               | 1,355                    |
| 1957                          | 85,333.72               | 50,276                       | 42,630                        | 42,704                         | 29.58               | 1,444                    |
| 1958                          | 68,557.03               | 39,858                       | 33,796                        | 34,761                         | 30.14               | 1,153                    |
| 1959                          | 80,322.47               | 46,063                       | 39,057                        | 41,265                         | 30.71               | 1,344                    |
| 1960                          | 57,464.01               | 32,491                       | 27,550                        | 29,914                         | 31.29               | 956                      |
| 1961                          | 30,979.00               | 17,266                       | 14,640                        | 16,339                         | 31.87               | 513                      |
| 1962                          | 81,389.93               | 44,697                       | 37,899                        | 43,491                         | 32.46               | 1,340                    |
| 1963                          | 79,847.07               | 43,184                       | 36,616                        | 43,231                         | 33.06               | 1,308                    |
| 1964                          | 153,474.44              | 81,725                       | 69,296                        | 84,178                         | 33.66               | 2,501                    |
| 1965                          | 79,845.37               | 41,841                       | 35,478                        | 44,367                         | 34.27               | 1,295                    |
| 1966                          | 109,376.56              | 56,390                       | 47,814                        | 61,563                         | 34.88               | 1,765                    |
| 1967                          | 76,624.09               | 38,844                       | 32,936                        | 43,688                         | 35.50               | 1,231                    |
| 1968                          | 290,060.23              | 144,505                      | 122,528                       | 167,532                        | 36.13               | 4,637                    |
| 1969                          | 642,134.72              | 314,286                      | 266,488                       | 375,647                        | 36.76               | 10,219                   |
| 1970                          | 659,191.04              | 316,781                      | 268,603                       | 390,588                        | 37.40               | 10,444                   |
| 1971                          | 1,334,057.25            | 629,048                      | 533,379                       | 800,678                        | 38.05               | 21,043                   |
| 1972                          | 1,105,653.40            | 511,365                      | 433,594                       | 672,059                        | 38.70               | 17,366                   |
| 1973                          | 2,544,529.72            | 1,153,512                    | 978,079                       | 1,566,451                      | 39.36               | 39,798                   |
| 1974                          | 2,891,114.69            | 1,284,146                    | 1,088,846                     | 1,802,269                      | 40.02               | 45,034                   |
| 1975                          | 2,876,626.92            | 1,250,930                    | 1,060,681                     | 1,815,946                      | 40.69               | 44,629                   |
| 1976                          | 2,856,662.73            | 1,538,599                    | 1,304,600                     | 1,552,063                      | 34.69               | 44,741                   |
| 1977                          | 5,298,738.57            | 2,783,957                    | 2,360,557                     | 2,938,182                      | 35.68               | 82,348                   |
| 1978                          | 5,184,989.37            | 2,674,936                    | 2,268,116                     | 2,916,873                      | 36.13               | 80,733                   |
| 1979                          | 6,186,269.48            | 3,131,490                    | 2,655,235                     | 3,531,034                      | 36.58               | 96,529                   |
| 1980                          | 7,699,751.79            | 3,822,157                    | 3,240,861                     | 4,458,891                      | 37.03               | 120,413                  |
| 1981                          | 9,058,152.64            | 4,405,885                    | 3,735,812                     | 5,322,341                      | 37.49               | 141,967                  |
| 1982                          | 9,013,573.44            | 4,291,362                    | 3,638,707                     | 5,374,866                      | 37.96               | 141,593                  |
| 1983                          | 7,199,862.19            | 3,352,256                    | 2,842,425                     | 4,357,437                      | 38.45               | 113,327                  |
| 1984                          | 8,339,028.58            | 3,794,258                    | 3,217,205                     | 5,121,824                      | 38.93               | 131,565                  |
| 1985                          | 7,841,444.09            | 3,483,169                    | 2,953,428                     | 4,888,016                      | 39.42               | 123,998                  |
| 1986                          | 8,626,875.19            | 3,736,300                    | 3,168,062                     | 5,458,813                      | 39.92               | 136,744                  |
| 1987                          | 8,302,365.70            | 3,501,938                    | 2,969,343                     | 5,333,023                      | 40.43               | 131,908                  |
| 1988                          | 9,592,517.34            | 3,936,769                    | 3,338,042                     | 6,254,475                      | 40.94               | 152,772                  |
| 1989                          | 8,617,824.84            | 3,460,057                    | 2,933,831                     | 5,683,994                      | 40.99               | 138,668                  |
| 1990                          | 7,365,395.65            | 2,869,558                    | 2,433,139                     | 4,932,257                      | 41.52               | 118,792                  |
| 1991                          | 7,306,501.54            | 2,757,474                    | 2,338,101                     | 4,968,401                      | 42.07               | 118,098                  |
| 1992                          | 8,109,535.19            | 2,959,980                    | 2,509,809                     | 5,599,726                      | 42.62               | 131,387                  |
| 1993                          | 8,762,136.56            | 3,088,653                    | 2,618,913                     | 6,143,224                      | 43.17               | 142,303                  |
| 1994                          | 10,675,887.80           | 3,651,154                    | 3,095,865                     | 7,580,023                      | 43.29               | 175,099                  |



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 376.45 MAINS - OTHER

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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 72-R1.5                                |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                      |                         |                              |                               |                                |                     |                          |
| 1995                                                         | 10,734,156.51           | 3,531,537                    | 2,994,440                     | 7,739,717                      | 43.86               | 176,464                  |
| 1996                                                         | 10,605,843.73           | 3,370,537                    | 2,857,926                     | 7,747,918                      | 44.01               | 176,049                  |
| 1997                                                         | 13,309,508.47           | 4,048,752                    | 3,432,994                     | 9,876,514                      | 44.60               | 221,447                  |
| 1998                                                         | 11,444,933.97           | 3,345,354                    | 2,836,573                     | 8,608,361                      | 44.79               | 192,194                  |
| 1999                                                         | 10,834,099.18           | 3,014,046                    | 2,555,652                     | 8,278,447                      | 45.40               | 182,345                  |
| 2000                                                         | 9,976,954.59            | 2,649,879                    | 2,246,870                     | 7,730,085                      | 45.61               | 169,482                  |
| 2001                                                         | 11,823,843.40           | 2,986,703                    | 2,532,468                     | 9,291,375                      | 45.85               | 202,647                  |
| 2002                                                         | 7,658,557.76            | 1,831,927                    | 1,553,317                     | 6,105,241                      | 46.11               | 132,406                  |
| 2003                                                         | 11,526,150.38           | 2,583,010                    | 2,190,171                     | 9,335,979                      | 46.74               | 199,743                  |
| 2004                                                         | 18,362,047.34           | 3,878,064                    | 3,288,265                     | 15,073,782                     | 46.67               | 322,987                  |
| 2005                                                         | 24,549,238.70           | 4,826,380                    | 4,092,356                     | 20,456,883                     | 46.98               | 435,438                  |
| 2006                                                         | 13,442,824.16           | 2,441,217                    | 2,069,943                     | 11,372,881                     | 47.31               | 240,391                  |
| 2007                                                         | 38,099,324.29           | 6,370,207                    | 5,401,389                     | 32,697,935                     | 47.32               | 690,996                  |
| 2008                                                         | 58,232,059.14           | 8,862,919                    | 7,514,995                     | 50,717,064                     | 47.36               | 1,070,884                |
| 2009                                                         | 35,868,836.83           | 4,896,096                    | 4,151,469                     | 31,717,368                     | 47.45               | 668,438                  |
| 2010                                                         | 47,172,299.44           | 5,703,131                    | 4,835,766                     | 42,336,533                     | 47.26               | 895,822                  |
| 2011                                                         | 85,867,428.72           | 8,973,146                    | 7,608,457                     | 78,258,972                     | 47.13               | 1,660,492                |
| 2012                                                         | 94,593,348.80           | 8,305,296                    | 7,042,178                     | 87,551,171                     | 46.78               | 1,871,551                |
| 2013                                                         | 120,871,259.30          | 8,545,598                    | 7,245,934                     | 113,625,325                    | 46.00               | 2,470,116                |
| 2014                                                         | 109,030,578.12          | 5,724,105                    | 4,853,549                     | 104,177,029                    | 45.12               | 2,308,888                |
| 2015                                                         | 130,947,456.40          | 4,373,645                    | 3,708,476                     | 127,238,980                    | 43.35               | 2,935,155                |
| 2016                                                         | 157,699,700.00          | 2,018,556                    | 1,711,562                     | 155,988,138                    | 38.56               | 4,045,336                |
| 1,192,195,558.22                                             |                         | 171,776,284                  | 145,651,545                   | 1,046,544,013                  |                     | 23,804,762               |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. |                         |                              |                               |                                |                     | 44.0 2.00                |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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-R0.5 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0       |                         |                              |                               |                                |                     |                          |
| 1924                          | 124.94                  | 125                          | 125                           |                                |                     |                          |
| 1925                          | 297.18                  | 297                          | 297                           |                                |                     |                          |
| 1926                          | 140.61                  | 141                          | 141                           |                                |                     |                          |
| 1933                          | 1,039.09                | 967                          | 950                           | 89                             | 3.12                | 29                       |
| 1934                          | 40.13                   | 37                           | 36                            | 4                              | 3.57                | 1                        |
| 1935                          | 157.79                  | 144                          | 141                           | 17                             | 4.02                | 4                        |
| 1938                          | 62.74                   | 55                           | 54                            | 9                              | 5.31                | 2                        |
| 1939                          | 120.54                  | 105                          | 103                           | 18                             | 5.73                | 3                        |
| 1941                          | 17.43                   | 15                           | 15                            | 2                              | 6.55                |                          |
| 1942                          | 5,054.55                | 4,273                        | 4,196                         | 859                            | 6.96                | 123                      |
| 1943                          | 189.89                  | 159                          | 156                           | 34                             | 7.36                | 5                        |
| 1944                          | 174.79                  | 145                          | 142                           | 33                             | 7.76                | 4                        |
| 1945                          | 1,009.08                | 826                          | 811                           | 198                            | 8.15                | 24                       |
| 1946                          | 563.01                  | 456                          | 448                           | 115                            | 8.55                | 13                       |
| 1947                          | 208.23                  | 167                          | 164                           | 44                             | 8.95                | 5                        |
| 1948                          | 519.51                  | 412                          | 405                           | 115                            | 9.34                | 12                       |
| 1949                          | 218.37                  | 171                          | 168                           | 50                             | 9.74                | 5                        |
| 1950                          | 46.45                   | 36                           | 35                            | 11                             | 10.14               | 1                        |
| 1951                          | 7,381.58                | 5,654                        | 5,552                         | 1,830                          | 10.53               | 174                      |
| 1952                          | 10,309.58               | 7,805                        | 7,664                         | 2,646                          | 10.93               | 242                      |
| 1953                          | 37,750.66               | 28,237                       | 27,728                        | 10,023                         | 11.34               | 884                      |
| 1954                          | 3,188.39                | 2,357                        | 2,315                         | 873                            | 11.74               | 74                       |
| 1955                          | 50,978.50               | 37,214                       | 36,543                        | 14,436                         | 12.15               | 1,188                    |
| 1956                          | 49,278.08               | 35,524                       | 34,884                        | 14,394                         | 12.56               | 1,146                    |
| 1957                          | 79,233.49               | 56,397                       | 55,381                        | 23,852                         | 12.97               | 1,839                    |
| 1958                          | 152,348.94              | 107,016                      | 105,087                       | 47,262                         | 13.39               | 3,530                    |
| 1959                          | 185,768.09              | 128,758                      | 126,438                       | 59,330                         | 13.81               | 4,296                    |
| 1960                          | 237,721.85              | 162,549                      | 159,620                       | 78,102                         | 14.23               | 5,489                    |
| 1961                          | 125,698.49              | 84,748                       | 83,221                        | 42,477                         | 14.66               | 2,897                    |
| 1962                          | 212,442.90              | 141,204                      | 138,659                       | 73,784                         | 15.09               | 4,890                    |
| 1963                          | 153,332.12              | 100,416                      | 98,606                        | 54,726                         | 15.53               | 3,524                    |
| 1964                          | 93,787.03               | 60,503                       | 59,413                        | 34,374                         | 15.97               | 2,152                    |
| 1965                          | 80,647.11               | 51,220                       | 50,297                        | 30,350                         | 16.42               | 1,848                    |
| 1966                          | 137,329.89              | 85,846                       | 84,299                        | 53,031                         | 16.87               | 3,144                    |
| 1967                          | 55,707.61               | 34,266                       | 33,648                        | 22,060                         | 17.32               | 1,274                    |
| 1968                          | 59,191.85               | 35,805                       | 35,160                        | 24,032                         | 17.78               | 1,352                    |
| 1969                          | 74,646.69               | 44,373                       | 43,573                        | 31,074                         | 18.25               | 1,703                    |
| 1970                          | 41,484.55               | 24,227                       | 23,790                        | 17,695                         | 18.72               | 945                      |
| 1971                          | 179,754.25              | 103,100                      | 101,242                       | 78,512                         | 19.19               | 4,091                    |
| 1972                          | 143,146.46              | 80,576                       | 79,124                        | 64,022                         | 19.67               | 3,255                    |
| 1973                          | 139,743.31              | 77,169                       | 75,778                        | 63,965                         | 20.15               | 3,174                    |
| 1974                          | 124,398.19              | 67,340                       | 66,126                        | 58,272                         | 20.64               | 2,823                    |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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-R0.5 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0       |                         |                              |                               |                                |                     |                          |
| 1975                          | 81,057.34               | 42,978                       | 42,203                        | 38,854                         | 21.14               | 1,838                    |
| 1976                          | 90,914.12               | 62,222                       | 61,101                        | 29,813                         | 18.67               | 1,597                    |
| 1977                          | 81,089.25               | 54,451                       | 53,470                        | 27,619                         | 19.32               | 1,430                    |
| 1978                          | 69,107.17               | 45,763                       | 44,938                        | 24,169                         | 19.64               | 1,231                    |
| 1979                          | 109,516.41              | 71,459                       | 70,171                        | 39,345                         | 19.97               | 1,970                    |
| 1980                          | 177,414.27              | 113,971                      | 111,917                       | 65,497                         | 20.32               | 3,223                    |
| 1981                          | 186,174.91              | 117,644                      | 115,524                       | 70,651                         | 20.68               | 3,416                    |
| 1982                          | 496,963.86              | 308,615                      | 303,053                       | 193,911                        | 21.06               | 9,208                    |
| 1983                          | 180,449.86              | 110,020                      | 108,037                       | 72,413                         | 21.45               | 3,376                    |
| 1984                          | 198,281.59              | 118,572                      | 116,435                       | 81,847                         | 21.85               | 3,746                    |
| 1985                          | 242,065.16              | 142,576                      | 140,007                       | 102,058                        | 21.98               | 4,643                    |
| 1986                          | 225,861.36              | 130,186                      | 127,840                       | 98,021                         | 22.41               | 4,374                    |
| 1987                          | 202,296.83              | 113,974                      | 111,920                       | 90,377                         | 22.86               | 3,953                    |
| 1988                          | 378,892.55              | 209,490                      | 205,715                       | 173,178                        | 23.05               | 7,513                    |
| 1989                          | 413,374.96              | 222,809                      | 218,794                       | 194,581                        | 23.52               | 8,273                    |
| 1990                          | 298,897.34              | 157,638                      | 154,797                       | 144,100                        | 23.75               | 6,067                    |
| 1991                          | 284,683.15              | 145,929                      | 143,299                       | 141,384                        | 24.25               | 5,830                    |
| 1992                          | 156,920.67              | 78,429                       | 77,016                        | 79,905                         | 24.52               | 3,259                    |
| 1993                          | 222,646.73              | 108,295                      | 106,343                       | 116,304                        | 24.81               | 4,688                    |
| 1994                          | 382,475.01              | 180,719                      | 177,462                       | 205,013                        | 25.12               | 8,161                    |
| 1995                          | 235,992.60              | 108,085                      | 106,137                       | 129,856                        | 25.45               | 5,102                    |
| 1996                          | 538,345.38              | 239,456                      | 235,141                       | 303,204                        | 25.59               | 11,849                   |
| 1997                          | 468,634.29              | 201,044                      | 197,421                       | 271,213                        | 25.95               | 10,451                   |
| 1998                          | 389,221.54              | 161,293                      | 158,386                       | 230,836                        | 26.14               | 8,831                    |
| 1999                          | 782,391.55              | 312,174                      | 306,548                       | 475,844                        | 26.36               | 18,052                   |
| 2000                          | 1,121,254.22            | 429,216                      | 421,481                       | 699,773                        | 26.60               | 26,307                   |
| 2001                          | 322,940.11              | 118,648                      | 116,510                       | 206,430                        | 26.69               | 7,734                    |
| 2002                          | 475,747.25              | 166,940                      | 163,931                       | 311,816                        | 26.82               | 11,626                   |
| 2003                          | 676,124.12              | 225,420                      | 221,358                       | 454,766                        | 26.99               | 16,849                   |
| 2004                          | 443,980.91              | 139,854                      | 137,334                       | 306,647                        | 27.18               | 11,282                   |
| 2005                          | 547,533.02              | 163,055                      | 160,116                       | 387,417                        | 27.11               | 14,291                   |
| 2006                          | 1,326,956.52            | 369,159                      | 362,506                       | 964,451                        | 27.24               | 35,406                   |
| 2007                          | 411,148.23              | 106,652                      | 104,730                       | 306,418                        | 27.13               | 11,294                   |
| 2008                          | 1,897,510.88            | 453,126                      | 444,960                       | 1,452,551                      | 27.09               | 53,619                   |
| 2009                          | 1,361,267.86            | 297,029                      | 291,676                       | 1,069,592                      | 26.87               | 39,806                   |
| 2010                          | 1,502,598.18            | 294,960                      | 289,644                       | 1,212,954                      | 26.61               | 45,583                   |
| 2011                          | 1,961,898.73            | 338,820                      | 332,714                       | 1,629,185                      | 26.35               | 61,829                   |
| 2012                          | 1,917,078.78            | 284,686                      | 279,555                       | 1,637,524                      | 25.80               | 63,470                   |
| 2013                          | 3,200,696.59            | 392,085                      | 385,019                       | 2,815,678                      | 25.07               | 112,313                  |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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-R0.5                                |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                      |                         |                              |                               |                                |                     |                          |
| 2014                                                         | 11,342,762.98           | 1,068,488                    | 1,049,233                     | 10,293,530                     | 24.03               | 428,362                  |
| 2015                                                         | 1,146,264.81            | 72,215                       | 70,913                        | 1,075,352                      | 22.31               | 48,200                   |
| 2016                                                         | 1,149,800.00            | 30,470                       | 29,921                        | 1,119,879                      | 18.37               | 60,962                   |
|                                                              | 40,144,485.03           | 10,079,450                   | 9,897,811                     | 30,246,674                     |                     | 1,247,179                |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. |                         |                              |                               |                                |                     | 24.3 3.11                |

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, 2016

| 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-S2.5                                          |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                                |                         |                              |                               |                                |                     |                          |
| 1976                                                                   | 591.42                  | 520                          | 489                           | 102                            | 5.59                | 18                       |
| 1983                                                                   | 32,512.26               | 26,465                       | 24,896                        | 7,616                          | 7.65                | 996                      |
| 1984                                                                   | 1,528.08                | 1,227                        | 1,154                         | 374                            | 7.98                | 47                       |
| 1987                                                                   | 7,476.62                | 5,690                        | 5,353                         | 2,124                          | 9.26                | 229                      |
| 1988                                                                   | 15,907.49               | 11,878                       | 11,174                        | 4,733                          | 9.67                | 489                      |
| 1989                                                                   | 35,024.29               | 25,620                       | 24,101                        | 10,923                         | 10.09               | 1,083                    |
| 1996                                                                   | 48,076.94               | 28,683                       | 26,983                        | 21,094                         | 13.86               | 1,522                    |
|                                                                        | 141,117.10              | 100,083                      | 94,150                        | 46,967                         |                     | 4,384                    |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 10.7 3.11 |                         |                              |                               |                                |                     |                          |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 380.3 SERVICES - BARE STEEL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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.. 12-2025    |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0               |                         |                              |                               |                                |                     |                          |
| 1927                                  | 3,338.32                | 3,015                        | 3,098                         | 240                            | 4.84                | 50                       |
| 1928                                  | 4,999.67                | 4,487                        | 4,611                         | 389                            | 5.13                | 76                       |
| 1929                                  | 5,846.57                | 5,217                        | 5,361                         | 486                            | 5.38                | 90                       |
| 1930                                  | 4,192.98                | 3,724                        | 3,827                         | 366                            | 5.59                | 65                       |
| 1931                                  | 2,381.98                | 2,107                        | 2,165                         | 217                            | 5.77                | 38                       |
| 1932                                  | 1,607.54                | 1,416                        | 1,455                         | 153                            | 5.93                | 26                       |
| 1933                                  | 2,421.69                | 2,127                        | 2,186                         | 236                            | 6.07                | 39                       |
| 1934                                  | 2,099.64                | 1,839                        | 1,890                         | 210                            | 6.19                | 34                       |
| 1935                                  | 1,909.16                | 1,667                        | 1,713                         | 196                            | 6.31                | 31                       |
| 1936                                  | 3,894.28                | 3,392                        | 3,486                         | 408                            | 6.41                | 64                       |
| 1937                                  | 5,575.48                | 4,844                        | 4,978                         | 597                            | 6.51                | 92                       |
| 1938                                  | 8,543.42                | 7,405                        | 7,610                         | 933                            | 6.60                | 141                      |
| 1939                                  | 14,682.70               | 12,696                       | 13,047                        | 1,636                          | 6.69                | 245                      |
| 1940                                  | 13,418.01               | 11,578                       | 11,898                        | 1,520                          | 6.77                | 225                      |
| 1941                                  | 15,623.25               | 13,453                       | 13,825                        | 1,798                          | 6.84                | 263                      |
| 1942                                  | 15,108.73               | 12,984                       | 13,343                        | 1,766                          | 6.91                | 256                      |
| 1943                                  | 6,497.69                | 5,572                        | 5,726                         | 772                            | 6.98                | 111                      |
| 1944                                  | 5,151.29                | 4,409                        | 4,531                         | 620                            | 7.05                | 88                       |
| 1945                                  | 5,374.86                | 4,591                        | 4,718                         | 657                            | 7.11                | 92                       |
| 1946                                  | 15,045.19               | 12,826                       | 13,181                        | 1,864                          | 7.17                | 260                      |
| 1947                                  | 29,122.62               | 24,783                       | 25,468                        | 3,655                          | 7.22                | 506                      |
| 1948                                  | 37,821.16               | 32,118                       | 33,006                        | 4,815                          | 7.28                | 661                      |
| 1949                                  | 56,259.65               | 47,686                       | 49,005                        | 7,255                          | 7.33                | 990                      |
| 1950                                  | 73,366.43               | 62,065                       | 63,781                        | 9,585                          | 7.38                | 1,299                    |
| 1951                                  | 93,816.96               | 79,203                       | 81,393                        | 12,424                         | 7.43                | 1,672                    |
| 1952                                  | 101,746.19              | 85,720                       | 88,090                        | 13,656                         | 7.48                | 1,826                    |
| 1953                                  | 94,626.18               | 79,569                       | 81,769                        | 12,857                         | 7.52                | 1,710                    |
| 1954                                  | 149,497.77              | 125,435                      | 128,904                       | 20,594                         | 7.57                | 2,720                    |
|                                       | 773,969.41              | 655,928                      | 674,065                       | 99,904                         |                     | 13,670                   |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 7.3 1.77

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 380.45 SERVICES - OTHER

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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                          | 220,309.83              | 148,224                      | 152,322                       | 67,988                         | 16.36               | 4,156                    |
| 1956                          | 278,229.55              | 184,744                      | 189,852                       | 88,378                         | 16.80               | 5,261                    |
| 1957                          | 261,421.62              | 171,336                      | 176,073                       | 85,349                         | 17.23               | 4,954                    |
| 1958                          | 332,755.59              | 215,160                      | 221,109                       | 111,647                        | 17.67               | 6,318                    |
| 1959                          | 468,388.86              | 298,645                      | 306,903                       | 161,486                        | 18.12               | 8,912                    |
| 1960                          | 485,193.33              | 304,993                      | 313,426                       | 171,767                        | 18.57               | 9,250                    |
| 1961                          | 534,637.19              | 331,261                      | 340,420                       | 194,217                        | 19.02               | 10,211                   |
| 1962                          | 547,202.93              | 334,013                      | 343,249                       | 203,954                        | 19.48               | 10,470                   |
| 1963                          | 666,746.35              | 400,848                      | 411,932                       | 254,814                        | 19.94               | 12,779                   |
| 1964                          | 682,941.02              | 404,301                      | 415,480                       | 267,461                        | 20.40               | 13,111                   |
| 1965                          | 668,404.06              | 389,412                      | 400,179                       | 268,225                        | 20.87               | 12,852                   |
| 1966                          | 914,556.57              | 524,041                      | 538,531                       | 376,026                        | 21.35               | 17,612                   |
| 1967                          | 911,411.81              | 513,489                      | 527,687                       | 383,725                        | 21.83               | 17,578                   |
| 1968                          | 983,042.19              | 544,409                      | 559,462                       | 423,580                        | 22.31               | 18,986                   |
| 1969                          | 735,958.55              | 400,361                      | 411,431                       | 324,528                        | 22.80               | 14,234                   |
| 1970                          | 552,678.13              | 295,241                      | 303,404                       | 249,274                        | 23.29               | 10,703                   |
| 1971                          | 618,060.85              | 323,987                      | 332,945                       | 285,116                        | 23.79               | 11,985                   |
| 1972                          | 618,943.97              | 318,137                      | 326,934                       | 292,010                        | 24.30               | 12,017                   |
| 1973                          | 503,149.39              | 253,587                      | 260,599                       | 242,550                        | 24.80               | 9,780                    |
| 1974                          | 140,306.64              | 69,255                       | 71,170                        | 69,137                         | 25.32               | 2,731                    |
| 1975                          | 294,340.90              | 142,284                      | 146,218                       | 148,123                        | 25.83               | 5,735                    |
| 1976                          | 834,202.94              | 537,227                      | 552,081                       | 282,122                        | 22.39               | 12,600                   |
| 1977                          | 2,504,752.61            | 1,583,004                    | 1,626,774                     | 877,979                        | 23.00               | 38,173                   |
| 1978                          | 1,748,864.31            | 1,090,767                    | 1,120,927                     | 627,937                        | 23.23               | 27,031                   |
| 1979                          | 2,282,614.23            | 1,403,808                    | 1,442,624                     | 839,990                        | 23.48               | 35,775                   |
| 1980                          | 3,243,795.79            | 1,953,414                    | 2,007,426                     | 1,236,370                      | 24.11               | 51,280                   |
| 1981                          | 3,433,711.00            | 2,035,504                    | 2,091,786                     | 1,341,925                      | 24.38               | 55,042                   |
| 1982                          | 2,922,163.94            | 1,703,622                    | 1,750,728                     | 1,171,436                      | 24.67               | 47,484                   |
| 1983                          | 2,706,323.59            | 1,550,182                    | 1,593,045                     | 1,113,279                      | 24.98               | 44,567                   |
| 1984                          | 3,130,970.58            | 1,760,232                    | 1,808,903                     | 1,322,068                      | 25.31               | 52,235                   |
| 1985                          | 3,495,867.06            | 1,926,922                    | 1,980,202                     | 1,515,665                      | 25.65               | 59,090                   |
| 1986                          | 3,981,755.99            | 2,149,352                    | 2,208,782                     | 1,772,974                      | 26.00               | 68,191                   |
| 1987                          | 4,573,002.09            | 2,414,545                    | 2,481,308                     | 2,091,694                      | 26.37               | 79,321                   |
| 1988                          | 5,477,620.08            | 2,825,356                    | 2,903,478                     | 2,574,142                      | 26.75               | 96,230                   |
| 1989                          | 5,278,340.73            | 2,656,061                    | 2,729,502                     | 2,548,839                      | 27.15               | 93,880                   |
| 1990                          | 5,493,645.99            | 2,707,818                    | 2,782,690                     | 2,710,956                      | 27.26               | 99,448                   |
| 1991                          | 5,131,367.12            | 2,459,977                    | 2,527,996                     | 2,603,371                      | 27.69               | 94,018                   |
| 1992                          | 5,838,573.58            | 2,732,452                    | 2,808,005                     | 3,030,569                      | 27.85               | 108,818                  |
| 1993                          | 6,175,650.04            | 2,801,275                    | 2,878,731                     | 3,296,919                      | 28.31               | 116,458                  |
| 1994                          | 7,270,999.57            | 3,206,511                    | 3,295,172                     | 3,975,828                      | 28.52               | 139,405                  |
| 1995                          | 6,920,844.43            | 2,960,737                    | 3,042,602                     | 3,878,242                      | 28.75               | 134,895                  |
| 1996                          | 6,457,876.18            | 2,674,207                    | 2,748,149                     | 3,709,727                      | 29.00               | 127,922                  |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 380.45 SERVICES - OTHER

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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                                      |                         |                              |                               |                                |                     |                          |
| 1997                                                         | 6,933,559.91            | 2,772,037                    | 2,848,684                     | 4,084,876                      | 29.28               | 139,511                  |
| 1998                                                         | 7,451,971.35            | 2,867,519                    | 2,946,806                     | 4,505,165                      | 29.58               | 152,304                  |
| 1999                                                         | 7,768,850.77            | 2,882,244                    | 2,961,939                     | 4,806,912                      | 29.67               | 162,013                  |
| 2000                                                         | 7,630,784.18            | 2,719,611                    | 2,794,809                     | 4,835,975                      | 29.80               | 162,281                  |
| 2001                                                         | 7,311,432.52            | 2,493,198                    | 2,562,135                     | 4,749,298                      | 29.95               | 158,574                  |
| 2002                                                         | 6,480,222.58            | 2,104,776                    | 2,162,973                     | 4,317,250                      | 30.14               | 143,240                  |
| 2003                                                         | 6,154,914.52            | 1,903,100                    | 1,955,721                     | 4,199,194                      | 30.17               | 139,184                  |
| 2004                                                         | 9,885,466.59            | 2,891,499                    | 2,971,450                     | 6,914,017                      | 30.24               | 228,638                  |
| 2005                                                         | 9,080,487.99            | 2,506,215                    | 2,575,512                     | 6,504,976                      | 30.17               | 215,611                  |
| 2006                                                         | 9,680,379.57            | 2,500,442                    | 2,569,580                     | 7,110,800                      | 30.15               | 235,847                  |
| 2007                                                         | 13,683,812.03           | 3,289,588                    | 3,380,546                     | 10,303,266                     | 30.02               | 343,213                  |
| 2008                                                         | 15,492,793.20           | 3,423,907                    | 3,518,579                     | 11,974,214                     | 29.96               | 399,673                  |
| 2009                                                         | 14,448,837.50           | 2,915,775                    | 2,996,397                     | 11,452,440                     | 29.67               | 385,994                  |
| 2010                                                         | 16,852,244.47           | 3,056,997                    | 3,141,524                     | 13,710,720                     | 29.34               | 467,305                  |
| 2011                                                         | 23,856,545.07           | 3,805,119                    | 3,910,331                     | 19,946,214                     | 28.98               | 688,275                  |
| 2012                                                         | 29,979,531.46           | 4,113,192                    | 4,226,922                     | 25,752,609                     | 28.29               | 910,308                  |
| 2013                                                         | 35,717,418.85           | 4,036,068                    | 4,147,666                     | 31,569,753                     | 27.46               | 1,149,663                |
| 2014                                                         | 48,685,707.92           | 4,225,919                    | 4,342,767                     | 44,342,941                     | 26.32               | 1,684,762                |
| 2015                                                         | 38,336,497.73           | 2,219,683                    | 2,281,057                     | 36,055,441                     | 24.41               | 1,477,077                |
| 2016                                                         | 38,500,100.00           | 931,702                      | 957,464                       | 37,542,636                     | 20.12               | 1,865,936                |
|                                                              | 454,253,179.39          | 109,359,292                  | 112,383,099                   | 341,870,080                    |                     | 12,910,907               |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. |                         |                              |                               |                                |                     | 26.5 2.84                |



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 381 METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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 43-S1.5 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0       |                         |                              |                               |                                |                     |                          |
| 1915                          | 3.97                    | 4                            | 4                             |                                |                     |                          |
| 1916                          | 52.25                   | 52                           | 52                            |                                |                     |                          |
| 1917                          | 158.59                  | 159                          | 159                           |                                |                     |                          |
| 1918                          | 637.21                  | 637                          | 637                           |                                |                     |                          |
| 1919                          | 433.39                  | 433                          | 433                           |                                |                     |                          |
| 1920                          | 360.02                  | 360                          | 360                           |                                |                     |                          |
| 1921                          | 562.26                  | 562                          | 562                           |                                |                     |                          |
| 1922                          | 1,432.22                | 1,432                        | 1,432                         |                                |                     |                          |
| 1923                          | 1,497.93                | 1,498                        | 1,498                         |                                |                     |                          |
| 1924                          | 1,296.33                | 1,296                        | 1,296                         |                                |                     |                          |
| 1925                          | 2,706.07                | 2,706                        | 2,706                         |                                |                     |                          |
| 1926                          | 3,194.21                | 3,194                        | 3,194                         |                                |                     |                          |
| 1927                          | 4,024.27                | 4,024                        | 4,024                         |                                |                     |                          |
| 1928                          | 5,042.94                | 5,043                        | 5,043                         |                                |                     |                          |
| 1929                          | 4,343.21                | 4,343                        | 4,343                         |                                |                     |                          |
| 1930                          | 336.75                  | 337                          | 337                           |                                |                     |                          |
| 1931                          | 21.55                   | 21                           | 21                            | 1                              | 0.16                | 1                        |
| 1934                          | 113.51                  | 111                          | 113                           | 1                              | 0.93                | 1                        |
| 1935                          | 23.54                   | 23                           | 23                            | 1                              | 1.18                | 1                        |
| 1936                          | 414.22                  | 400                          | 408                           | 6                              | 1.44                | 4                        |
| 1937                          | 68.13                   | 65                           | 66                            | 2                              | 1.70                | 1                        |
| 1938                          | 206.29                  | 197                          | 201                           | 5                              | 1.96                | 3                        |
| 1939                          | 378.49                  | 359                          | 367                           | 11                             | 2.21                | 5                        |
| 1941                          | 1,979.42                | 1,854                        | 1,893                         | 86                             | 2.72                | 32                       |
| 1942                          | 2,978.48                | 2,773                        | 2,832                         | 146                            | 2.97                | 49                       |
| 1943                          | 1,721.27                | 1,592                        | 1,626                         | 95                             | 3.23                | 29                       |
| 1944                          | 107.42                  | 99                           | 101                           | 6                              | 3.48                | 2                        |
| 1945                          | 640.12                  | 585                          | 597                           | 43                             | 3.73                | 12                       |
| 1946                          | 3,874.30                | 3,515                        | 3,590                         | 284                            | 3.99                | 71                       |
| 1947                          | 2,097.96                | 1,891                        | 1,931                         | 167                            | 4.24                | 39                       |
| 1948                          | 14,587.88               | 13,065                       | 13,342                        | 1,246                          | 4.49                | 278                      |
| 1949                          | 15,819.88               | 14,072                       | 14,370                        | 1,450                          | 4.75                | 305                      |
| 1950                          | 27,268.76               | 24,092                       | 24,603                        | 2,666                          | 5.01                | 532                      |
| 1951                          | 51,640.80               | 45,312                       | 46,273                        | 5,368                          | 5.27                | 1,019                    |
| 1952                          | 33,100.16               | 28,843                       | 29,454                        | 3,646                          | 5.53                | 659                      |
| 1953                          | 18,038.96               | 15,610                       | 15,941                        | 2,098                          | 5.79                | 362                      |
| 1954                          | 50,883.65               | 43,713                       | 44,640                        | 6,244                          | 6.06                | 1,030                    |
| 1955                          | 64,087.06               | 54,653                       | 55,812                        | 8,275                          | 6.33                | 1,307                    |
| 1956                          | 30,339.76               | 25,676                       | 26,220                        | 4,120                          | 6.61                | 623                      |
| 1957                          | 173,535.33              | 145,730                      | 148,819                       | 24,716                         | 6.89                | 3,587                    |
| 1958                          | 168,621.75              | 140,506                      | 143,485                       | 25,137                         | 7.17                | 3,506                    |
| 1959                          | 171,581.73              | 141,814                      | 144,820                       | 26,762                         | 7.46                | 3,587                    |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 381 METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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 43-S1.5 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0       |                         |                              |                               |                                |                     |                          |
| 1960                          | 211,626.66              | 173,485                      | 177,163                       | 34,464                         | 7.75                | 4,447                    |
| 1961                          | 240,782.81              | 195,706                      | 199,855                       | 40,928                         | 8.05                | 5,084                    |
| 1962                          | 222,893.35              | 179,610                      | 183,418                       | 39,475                         | 8.35                | 4,728                    |
| 1963                          | 150,113.20              | 119,880                      | 122,421                       | 27,692                         | 8.66                | 3,198                    |
| 1964                          | 208,273.64              | 164,778                      | 168,271                       | 40,003                         | 8.98                | 4,455                    |
| 1965                          | 270,733.48              | 212,179                      | 216,677                       | 54,056                         | 9.30                | 5,812                    |
| 1966                          | 330,486.05              | 256,474                      | 261,911                       | 68,575                         | 9.63                | 7,121                    |
| 1967                          | 301,366.14              | 231,561                      | 236,470                       | 64,896                         | 9.96                | 6,516                    |
| 1968                          | 211,401.15              | 160,713                      | 164,120                       | 47,281                         | 10.31               | 4,586                    |
| 1969                          | 228,713.29              | 172,013                      | 175,660                       | 53,053                         | 10.66               | 4,977                    |
| 1970                          | 197,073.49              | 146,567                      | 149,674                       | 47,399                         | 11.02               | 4,301                    |
| 1971                          | 305,085.87              | 224,275                      | 229,030                       | 76,056                         | 11.39               | 6,677                    |
| 1972                          | 252,695.68              | 183,528                      | 187,419                       | 65,277                         | 11.77               | 5,546                    |
| 1973                          | 143,764.88              | 103,143                      | 105,330                       | 38,435                         | 12.15               | 3,163                    |
| 1974                          | 189,806.96              | 134,410                      | 137,259                       | 52,548                         | 12.55               | 4,187                    |
| 1975                          | 236,173.29              | 164,991                      | 168,489                       | 67,684                         | 12.96               | 5,223                    |
| 1976                          | 113,670.74              | 87,936                       | 89,800                        | 23,871                         | 11.85               | 2,014                    |
| 1977                          | 191,185.34              | 145,760                      | 148,850                       | 42,335                         | 12.31               | 3,439                    |
| 1978                          | 195,304.38              | 147,377                      | 150,501                       | 44,803                         | 12.52               | 3,579                    |
| 1979                          | 310,916.02              | 230,855                      | 235,749                       | 75,167                         | 13.01               | 5,778                    |
| 1980                          | 626,916.98              | 459,906                      | 469,656                       | 157,261                        | 13.25               | 11,869                   |
| 1981                          | 677,323.41              | 488,079                      | 498,426                       | 178,897                        | 13.76               | 13,001                   |
| 1982                          | 458,805.25              | 326,073                      | 332,986                       | 125,819                        | 14.04               | 8,961                    |
| 1983                          | 337,989.79              | 236,660                      | 241,677                       | 96,313                         | 14.34               | 6,716                    |
| 1984                          | 462,060.23              | 316,881                      | 323,599                       | 138,461                        | 14.89               | 9,299                    |
| 1985                          | 566,041.63              | 381,569                      | 389,658                       | 176,384                        | 15.23               | 11,581                   |
| 1986                          | 622,340.78              | 411,865                      | 420,597                       | 201,744                        | 15.59               | 12,941                   |
| 1987                          | 634,972.77              | 410,192                      | 418,888                       | 216,085                        | 16.16               | 13,372                   |
| 1988                          | 705,643.33              | 446,461                      | 455,926                       | 249,717                        | 16.55               | 15,089                   |
| 1989                          | 819,186.43              | 506,913                      | 517,660                       | 301,526                        | 16.94               | 17,800                   |
| 1990                          | 515,678.80              | 310,232                      | 316,809                       | 198,870                        | 17.55               | 11,332                   |
| 1991                          | 575,145.58              | 337,323                      | 344,474                       | 230,672                        | 17.98               | 12,829                   |
| 1992                          | 850,335.73              | 485,372                      | 495,662                       | 354,674                        | 18.42               | 19,255                   |
| 1993                          | 979,178.98              | 543,053                      | 554,566                       | 424,613                        | 18.87               | 22,502                   |
| 1994                          | 409,864.70              | 219,483                      | 224,136                       | 185,729                        | 19.52               | 9,515                    |
| 1995                          | 8,107.36                | 4,201                        | 4,290                         | 3,817                          | 19.99               | 191                      |
| 1996                          | 1,752,589.88            | 876,645                      | 895,230                       | 857,360                        | 20.48               | 41,863                   |
| 1997                          | 778,581.58              | 373,486                      | 381,404                       | 397,178                        | 21.15               | 18,779                   |
| 1998                          | 1,085,049.02            | 499,774                      | 510,369                       | 574,680                        | 21.66               | 26,532                   |
| 1999                          | 1,229,118.65            | 542,041                      | 553,532                       | 675,587                        | 22.18               | 30,459                   |
| 2000                          | 95,156.23               | 39,880                       | 40,725                        | 54,431                         | 22.87               | 2,380                    |
| 2001                          | 529,516.51              | 210,959                      | 215,431                       | 314,086                        | 23.41               | 13,417                   |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 381 METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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 43-S1.5                                |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                      |                         |                              |                               |                                |                     |                          |
| 2002                                                         | 1,174,131.52            | 441,004                      | 450,353                       | 723,779                        | 24.11               | 30,020                   |
| 2003                                                         | 859,638.86              | 302,937                      | 309,359                       | 550,280                        | 24.81               | 22,180                   |
| 2004                                                         | 1,197,736.82            | 393,816                      | 402,165                       | 795,572                        | 25.52               | 31,174                   |
| 2005                                                         | 399,747.30              | 122,283                      | 124,875                       | 274,872                        | 26.09               | 10,536                   |
| 2006                                                         | 628,327.42              | 176,811                      | 180,559                       | 447,768                        | 26.81               | 16,702                   |
| 2007                                                         | 1,035,780.08            | 265,678                      | 271,311                       | 764,469                        | 27.54               | 27,758                   |
| 2008                                                         | 1,088,325.57            | 250,750                      | 256,066                       | 832,260                        | 28.40               | 29,305                   |
| 2009                                                         | 1,428,422.37            | 292,541                      | 298,743                       | 1,129,679                      | 29.13               | 38,781                   |
| 2010                                                         | 1,149,131.54            | 205,465                      | 209,821                       | 939,311                        | 29.86               | 31,457                   |
| 2011                                                         | 1,057,706.49            | 160,560                      | 163,964                       | 893,742                        | 30.73               | 29,084                   |
| 2012                                                         | 1,382,487.54            | 172,258                      | 175,910                       | 1,206,578                      | 31.60               | 38,183                   |
| 2013                                                         | 1,311,774.49            | 127,636                      | 130,342                       | 1,181,432                      | 32.47               | 36,385                   |
| 2014                                                         | 1,177,302.80            | 82,176                       | 83,918                        | 1,093,385                      | 33.34               | 32,795                   |
| 2015                                                         | 1,099,889.56            | 46,195                       | 47,174                        | 1,052,716                      | 34.21               | 30,772                   |
| 2016                                                         | 1,099,900.00            | 15,399                       | 15,726                        | 1,084,174                      | 35.21               | 30,792                   |
|                                                              | 36,182,184.44           | 15,650,449                   | 15,981,682                    | 20,200,502                     |                     | 877,483                  |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. |                         |                              |                               |                                |                     | 23.0 2.43                |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 381.1 METERS - AMR

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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                                                         | 266,534.36              | 230,019                      | 221,548                       | 44,986                         | 2.62                | 17,170                   |
| 2001                                                         | 255,725.65              | 215,219                      | 207,293                       | 48,433                         | 2.92                | 16,587                   |
| 2003                                                         | 487.36                  | 385                          | 371                           | 116                            | 3.59                | 32                       |
| 2004                                                         | 103,547.70              | 78,437                       | 75,548                        | 28,000                         | 4.00                | 7,000                    |
| 2005                                                         | 164,086.86              | 118,307                      | 113,950                       | 50,137                         | 4.45                | 11,267                   |
| 2007                                                         | 105,879.30              | 66,990                       | 64,523                        | 41,356                         | 5.52                | 7,492                    |
| 2008                                                         | 480,989.63              | 279,263                      | 268,978                       | 212,012                        | 6.14                | 34,530                   |
| 2009                                                         | 418,416.12              | 219,041                      | 210,974                       | 207,442                        | 6.83                | 30,372                   |
| 2010                                                         | 822,270.42              | 380,053                      | 366,056                       | 456,214                        | 7.56                | 60,346                   |
| 2011                                                         | 11,245,399.66           | 4,459,926                    | 4,295,675                     | 6,949,725                      | 8.37                | 830,314                  |
| 2012                                                         | 8,729,643.46            | 2,859,831                    | 2,754,508                     | 5,975,135                      | 9.24                | 646,660                  |
| 2014                                                         | 346,860.04              | 63,753                       | 61,405                        | 285,455                        | 11.10               | 25,717                   |
| 2015                                                         | 410,098.24              | 45,275                       | 43,608                        | 366,490                        | 12.09               | 30,313                   |
| 2016                                                         | 410,100.00              | 15,092                       | 14,536                        | 395,564                        | 13.09               | 30,219                   |
|                                                              | 23,760,038.80           | 9,031,591                    | 8,698,973                     | 15,061,066                     |                     | 1,748,019                |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. |                         |                              |                               |                                |                     | 8.6 7.36                 |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 382 METER INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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-R2.5 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0       |                         |                              |                               |                                |                     |                          |
| 1937                          | 5,125.02                | 4,604                        | 4,915                         | 210                            | 5.59                | 38                       |
| 1938                          | 10,589.21               | 9,469                        | 10,109                        | 480                            | 5.82                | 82                       |
| 1939                          | 7,873.66                | 7,008                        | 7,482                         | 392                            | 6.05                | 65                       |
| 1940                          | 6,964.59                | 6,169                        | 6,586                         | 379                            | 6.28                | 60                       |
| 1941                          | 9,953.94                | 8,776                        | 9,369                         | 585                            | 6.51                | 90                       |
| 1942                          | 7,495.08                | 6,575                        | 7,019                         | 476                            | 6.75                | 71                       |
| 1943                          | 3,413.80                | 2,980                        | 3,181                         | 233                            | 6.99                | 33                       |
| 1944                          | 3,465.28                | 3,009                        | 3,212                         | 253                            | 7.24                | 35                       |
| 1945                          | 4,625.14                | 3,995                        | 4,265                         | 360                            | 7.49                | 48                       |
| 1946                          | 11,265.78               | 9,678                        | 10,332                        | 934                            | 7.75                | 121                      |
| 1947                          | 16,500.24               | 14,094                       | 15,047                        | 1,453                          | 8.02                | 181                      |
| 1948                          | 21,078.40               | 17,901                       | 19,111                        | 1,967                          | 8.29                | 237                      |
| 1949                          | 27,347.47               | 23,086                       | 24,646                        | 2,701                          | 8.57                | 315                      |
| 1950                          | 31,952.39               | 26,805                       | 28,617                        | 3,335                          | 8.86                | 376                      |
| 1951                          | 28,002.08               | 23,338                       | 24,915                        | 3,087                          | 9.16                | 337                      |
| 1952                          | 29,304.73               | 24,259                       | 25,899                        | 3,406                          | 9.47                | 360                      |
| 1953                          | 35,215.47               | 28,941                       | 30,897                        | 4,318                          | 9.80                | 441                      |
| 1954                          | 33,226.18               | 27,101                       | 28,933                        | 4,293                          | 10.14               | 423                      |
| 1955                          | 41,883.75               | 33,895                       | 36,186                        | 5,698                          | 10.49               | 543                      |
| 1956                          | 44,388.60               | 35,624                       | 38,032                        | 6,357                          | 10.86               | 585                      |
| 1957                          | 40,954.37               | 32,585                       | 34,787                        | 6,167                          | 11.24               | 549                      |
| 1958                          | 53,811.31               | 42,433                       | 45,301                        | 8,510                          | 11.63               | 732                      |
| 1959                          | 64,263.43               | 50,196                       | 53,589                        | 10,674                         | 12.04               | 887                      |
| 1960                          | 46,985.75               | 36,333                       | 38,789                        | 8,197                          | 12.47               | 657                      |
| 1961                          | 40,825.60               | 31,243                       | 33,355                        | 7,471                          | 12.91               | 579                      |
| 1962                          | 58,554.25               | 44,320                       | 47,316                        | 11,238                         | 13.37               | 841                      |
| 1963                          | 62,524.58               | 46,780                       | 49,942                        | 12,583                         | 13.85               | 909                      |
| 1964                          | 112,419.14              | 83,108                       | 88,725                        | 23,694                         | 14.34               | 1,652                    |
| 1965                          | 149,562.43              | 109,181                      | 116,561                       | 33,001                         | 14.85               | 2,222                    |
| 1966                          | 138,896.60              | 100,082                      | 106,847                       | 32,050                         | 15.37               | 2,085                    |
| 1967                          | 128,534.96              | 91,377                       | 97,553                        | 30,982                         | 15.90               | 1,949                    |
| 1968                          | 165,043.50              | 115,651                      | 123,468                       | 41,576                         | 16.46               | 2,526                    |
| 1969                          | 156,486.46              | 108,062                      | 115,366                       | 41,120                         | 17.02               | 2,416                    |
| 1970                          | 143,647.25              | 97,680                       | 104,282                       | 39,365                         | 17.60               | 2,237                    |
| 1971                          | 125,674.01              | 84,087                       | 89,771                        | 35,903                         | 18.20               | 1,973                    |
| 1972                          | 79,131.97               | 52,083                       | 55,603                        | 23,529                         | 18.80               | 1,252                    |
| 1973                          | 73,624.53               | 47,628                       | 50,847                        | 22,778                         | 19.42               | 1,173                    |
| 1974                          | 13,982.55               | 8,883                        | 9,483                         | 4,500                          | 20.06               | 224                      |
| 1975                          | 26,290.77               | 16,396                       | 17,504                        | 8,787                          | 20.70               | 424                      |
| 1976                          | 51,138.63               | 34,795                       | 37,147                        | 13,992                         | 19.02               | 736                      |
| 1977                          | 57,017.18               | 38,065                       | 40,638                        | 16,379                         | 19.67               | 833                      |
| 1978                          | 53,608.54               | 35,087                       | 37,459                        | 16,150                         | 20.32               | 795                      |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 382 METER INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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-R2.5 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0       |                         |                              |                               |                                |                     |                          |
| 1979                          | 143,339.33              | 92,454                       | 98,703                        | 44,636                         | 20.64               | 2,163                    |
| 1980                          | 347,010.49              | 219,102                      | 233,911                       | 113,099                        | 21.31               | 5,307                    |
| 1981                          | 421,168.86              | 260,156                      | 277,740                       | 143,429                        | 21.97               | 6,528                    |
| 1982                          | 330,921.03              | 199,810                      | 213,316                       | 117,605                        | 22.64               | 5,195                    |
| 1983                          | 378,724.56              | 224,584                      | 239,764                       | 138,961                        | 22.99               | 6,044                    |
| 1984                          | 452,829.77              | 261,962                      | 279,668                       | 173,162                        | 23.68               | 7,313                    |
| 1985                          | 470,398.26              | 265,211                      | 283,137                       | 187,261                        | 24.37               | 7,684                    |
| 1986                          | 537,219.58              | 294,934                      | 314,869                       | 222,351                        | 25.06               | 8,873                    |
| 1987                          | 604,034.62              | 324,306                      | 346,226                       | 257,809                        | 25.45               | 10,130                   |
| 1988                          | 679,859.63              | 354,615                      | 378,584                       | 301,276                        | 26.14               | 11,525                   |
| 1989                          | 768,195.73              | 388,707                      | 414,980                       | 353,216                        | 26.85               | 13,155                   |
| 1990                          | 780,174.80              | 382,442                      | 408,292                       | 371,883                        | 27.56               | 13,494                   |
| 1991                          | 701,827.13              | 332,877                      | 355,377                       | 346,450                        | 28.26               | 12,259                   |
| 1992                          | 764,046.12              | 351,920                      | 375,707                       | 388,339                        | 28.69               | 13,536                   |
| 1993                          | 647,157.13              | 287,467                      | 306,897                       | 340,260                        | 29.41               | 11,570                   |
| 1994                          | 749,388.79              | 320,364                      | 342,018                       | 407,371                        | 30.13               | 13,520                   |
| 1995                          | 660,433.82              | 272,627                      | 291,054                       | 369,380                        | 30.58               | 12,079                   |
| 1996                          | 752,885.21              | 297,841                      | 317,973                       | 434,912                        | 31.32               | 13,886                   |
| 1997                          | 720,217.14              | 272,458                      | 290,874                       | 429,343                        | 32.05               | 13,396                   |
| 1998                          | 618,124.48              | 223,019                      | 238,093                       | 380,031                        | 32.78               | 11,593                   |
| 1999                          | 519,382.61              | 179,083                      | 191,188                       | 328,195                        | 33.26               | 9,868                    |
| 2000                          | 1,144,350.14            | 373,859                      | 399,129                       | 745,221                        | 34.01               | 21,912                   |
| 2001                          | 1,043,217.55            | 321,728                      | 343,474                       | 699,744                        | 34.75               | 20,137                   |
| 2002                          | 1,042,654.69            | 303,830                      | 324,367                       | 718,288                        | 35.25               | 20,377                   |
| 2003                          | 1,098,454.32            | 299,548                      | 319,795                       | 778,659                        | 36.00               | 21,629                   |
| 2004                          | 1,075,438.60            | 274,237                      | 292,773                       | 782,666                        | 36.52               | 21,431                   |
| 2005                          | 1,190,844.80            | 280,801                      | 299,781                       | 891,064                        | 37.28               | 23,902                   |
| 2006                          | 1,247,069.87            | 271,113                      | 289,438                       | 957,632                        | 37.81               | 25,327                   |
| 2007                          | 1,475,973.00            | 291,652                      | 311,365                       | 1,164,608                      | 38.58               | 30,187                   |
| 2008                          | 1,431,870.92            | 255,589                      | 272,865                       | 1,159,006                      | 39.12               | 29,627                   |
| 2009                          | 1,883,431.02            | 299,466                      | 319,708                       | 1,563,723                      | 39.67               | 39,418                   |
| 2010                          | 1,505,239.32            | 209,379                      | 223,531                       | 1,281,708                      | 40.23               | 31,860                   |
| 2011                          | 1,467,861.68            | 174,382                      | 186,169                       | 1,281,693                      | 40.80               | 31,414                   |
| 2012                          | 1,671,530.47            | 164,813                      | 175,953                       | 1,495,577                      | 41.16               | 36,336                   |
| 2013                          | 1,026,295.59            | 79,743                       | 85,133                        | 941,163                        | 41.55               | 22,651                   |
| 2014                          | 1,413,228.75            | 79,847                       | 85,244                        | 1,327,985                      | 41.75               | 31,808                   |
| 2015                          | 1,248,841.17            | 43,460                       | 46,398                        | 1,202,443                      | 41.60               | 28,905                   |
| 2016                          | 1,250,000.00            | 15,250                       | 16,281                        | 1,233,719                      | 40.32               | 30,598                   |
|                               | 36,486,289.60           | 11,167,998                   | 11,922,861                    | 24,563,429                     |                     | 708,729                  |

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 383 HOUSE REGULATORS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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 40-S2 |                  |                       |                        |                         |              |                   |
| NET SALVAGE PERCENT.. 0     |                  |                       |                        |                         |              |                   |
| 1955                        | 261.33           | 237                   | 261                    |                         |              |                   |
| 1957                        | 322.33           | 289                   | 321                    | 1                       | 4.17         |                   |
| 1958                        | 475.57           | 423                   | 470                    | 6                       | 4.41         | 1                 |
| 1960                        | 418.94           | 368                   | 409                    | 10                      | 4.91         | 2                 |
| 1961                        | 669.62           | 583                   | 648                    | 22                      | 5.17         | 4                 |
| 1962                        | 5,329.10         | 4,606                 | 5,116                  | 213                     | 5.43         | 39                |
| 1963                        | 8,517.49         | 7,304                 | 8,113                  | 404                     | 5.70         | 71                |
| 1964                        | 12,277.77        | 10,442                | 11,598                 | 680                     | 5.98         | 114               |
| 1965                        | 15,604.08        | 13,162                | 14,620                 | 984                     | 6.26         | 157               |
| 1966                        | 40,193.51        | 33,602                | 37,323                 | 2,871                   | 6.56         | 438               |
| 1967                        | 31,673.90        | 26,250                | 29,157                 | 2,517                   | 6.85         | 367               |
| 1968                        | 42,144.93        | 34,601                | 38,433                 | 3,712                   | 7.16         | 518               |
| 1969                        | 39,061.05        | 31,766                | 35,284                 | 3,777                   | 7.47         | 506               |
| 1970                        | 42,859.44        | 34,502                | 38,323                 | 4,536                   | 7.80         | 582               |
| 1971                        | 36,556.42        | 29,126                | 32,352                 | 4,204                   | 8.13         | 517               |
| 1972                        | 21,326.07        | 16,810                | 18,672                 | 2,654                   | 8.47         | 313               |
| 1973                        | 19,000.62        | 14,811                | 16,451                 | 2,550                   | 8.82         | 289               |
| 1974                        | 2,361.16         | 1,819                 | 2,020                  | 341                     | 9.18         | 37                |
| 1975                        | 2,039.39         | 1,552                 | 1,724                  | 315                     | 9.56         | 33                |
| 1976                        | 4,292.25         | 3,511                 | 3,900                  | 392                     | 9.00         | 44                |
| 1977                        | 4,443.31         | 3,598                 | 3,996                  | 447                     | 9.28         | 48                |
| 1978                        | 6,410.66         | 5,134                 | 5,703                  | 708                     | 9.58         | 74                |
| 1979                        | 14,951.33        | 11,774                | 13,078                 | 1,873                   | 10.12        | 185               |
| 1980                        | 34,529.49        | 26,843                | 29,816                 | 4,713                   | 10.45        | 451               |
| 1981                        | 46,772.04        | 35,865                | 39,837                 | 6,935                   | 10.80        | 642               |
| 1982                        | 43,444.94        | 32,827                | 36,462                 | 6,983                   | 11.16        | 626               |
| 1983                        | 43,787.33        | 32,565                | 36,171                 | 7,616                   | 11.55        | 659               |
| 1984                        | 46,923.42        | 34,310                | 38,110                 | 8,813                   | 11.95        | 737               |
| 1985                        | 48,155.07        | 34,585                | 38,415                 | 9,740                   | 12.36        | 788               |
| 1986                        | 62,683.89        | 44,167                | 49,058                 | 13,626                  | 12.79        | 1,065             |
| 1987                        | 67,859.03        | 46,843                | 52,031                 | 15,828                  | 13.24        | 1,195             |
| 1988                        | 84,413.86        | 57,013                | 63,327                 | 21,087                  | 13.70        | 1,539             |
| 1989                        | 90,785.07        | 59,918                | 66,554                 | 24,231                  | 14.17        | 1,710             |
| 1990                        | 88,374.23        | 56,913                | 63,216                 | 25,158                  | 14.65        | 1,717             |
| 1991                        | 73,861.81        | 46,334                | 51,465                 | 22,397                  | 15.15        | 1,478             |
| 1992                        | 81,328.89        | 49,611                | 55,105                 | 26,224                  | 15.66        | 1,675             |
| 1993                        | 58,696.69        | 34,760                | 38,610                 | 20,087                  | 16.18        | 1,241             |
| 1994                        | 71,192.08        | 40,850                | 45,374                 | 25,818                  | 16.71        | 1,545             |
| 1995                        | 79,583.37        | 44,145                | 49,034                 | 30,549                  | 17.26        | 1,770             |
| 1996                        | 84,465.46        | 45,020                | 50,006                 | 34,459                  | 17.96        | 1,919             |
| 1997                        | 97,729.03        | 50,115                | 55,665                 | 42,064                  | 18.52        | 2,271             |
| 1998                        | 36,077.31        | 17,754                | 19,720                 | 16,357                  | 19.09        | 857               |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 383 HOUSE REGULATORS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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 40-S2                                       |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                           |                         |                              |                               |                                |                     |                          |
| 1999                                                              | 18,963.99               | 8,894                        | 9,879                         | 9,085                          | 19.81               | 459                      |
| 2000                                                              | 177,877.06              | 79,244                       | 88,020                        | 89,857                         | 20.54               | 4,375                    |
| 2001                                                              | 69,186.92               | 29,169                       | 32,399                        | 36,788                         | 21.26               | 1,730                    |
| 2002                                                              | 376,188.82              | 149,460                      | 166,012                       | 210,177                        | 22.00               | 9,554                    |
| 2003                                                              | 544,386.85              | 202,839                      | 225,303                       | 319,084                        | 22.73               | 14,038                   |
| 2004                                                              | 840,155.07              | 290,862                      | 323,074                       | 517,081                        | 23.60               | 21,910                   |
| 2005                                                              | 676,482.94              | 217,016                      | 241,050                       | 435,433                        | 24.34               | 17,890                   |
| 2006                                                              | 664,894.90              | 195,479                      | 217,128                       | 447,767                        | 25.21               | 17,761                   |
| 2007                                                              | 739,568.16              | 197,465                      | 219,334                       | 520,234                        | 26.09               | 19,940                   |
| 2008                                                              | 553,726.35              | 132,728                      | 147,427                       | 406,299                        | 26.96               | 15,070                   |
| 2009                                                              | 785,422.45              | 166,117                      | 184,514                       | 600,908                        | 27.96               | 21,492                   |
| 2010                                                              | 637,031.78              | 117,214                      | 130,195                       | 506,837                        | 28.83               | 17,580                   |
| 2011                                                              | 673,881.55              | 104,856                      | 116,469                       | 557,413                        | 29.84               | 18,680                   |
| 2012                                                              | 693,343.10              | 88,609                       | 98,422                        | 594,921                        | 30.71               | 19,372                   |
| 2013                                                              | 507,728.99              | 50,468                       | 56,057                        | 451,672                        | 31.71               | 14,244                   |
| 2014                                                              | 746,360.72              | 52,992                       | 58,861                        | 687,500                        | 32.71               | 21,018                   |
| 2015                                                              | 649,999.55              | 27,690                       | 30,757                        | 619,243                        | 33.71               | 18,370                   |
| 2016                                                              | 650,000.00              | 9,230                        | 10,252                        | 639,748                        | 34.71               | 18,431                   |
|                                                                   | 11,597,052.48           | 3,197,040                    | 3,551,101                     | 8,045,951                      |                     | 300,138                  |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 26.8 |                         |                              |                               |                                |                     | 2.59                     |



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 384 HOUSE REGULATOR INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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-S3 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0     |                         |                              |                               |                                |                     |                          |
| 1956                        | 4,098.01                | 3,960                        | 4,098                         |                                |                     |                          |
| 1957                        | 11,093.12               | 10,675                       | 11,093                        |                                |                     |                          |
| 1958                        | 8,984.62                | 8,610                        | 8,985                         |                                |                     |                          |
| 1959                        | 10,504.99               | 10,022                       | 10,505                        |                                |                     |                          |
| 1960                        | 6,886.85                | 6,541                        | 6,887                         |                                |                     |                          |
| 1961                        | 5,770.97                | 5,456                        | 5,771                         |                                |                     |                          |
| 1962                        | 6,336.36                | 5,962                        | 6,336                         |                                |                     |                          |
| 1963                        | 9,429.02                | 8,826                        | 9,429                         |                                |                     |                          |
| 1964                        | 13,020.68               | 12,124                       | 13,021                        |                                |                     |                          |
| 1965                        | 14,473.42               | 13,402                       | 14,473                        |                                |                     |                          |
| 1966                        | 13,305.16               | 12,252                       | 13,305                        |                                |                     |                          |
| 1967                        | 17,106.02               | 15,659                       | 17,106                        |                                |                     |                          |
| 1968                        | 26,484.46               | 24,093                       | 26,484                        |                                |                     |                          |
| 1969                        | 37,452.06               | 33,846                       | 37,452                        |                                |                     |                          |
| 1970                        | 54,867.42               | 49,255                       | 54,867                        |                                |                     |                          |
| 1971                        | 52,330.89               | 46,634                       | 52,331                        |                                |                     |                          |
| 1972                        | 30,594.70               | 27,063                       | 30,595                        |                                |                     |                          |
| 1973                        | 41,286.72               | 36,238                       | 40,991                        | 296                            | 4.28                | 69                       |
| 1974                        | 15,958.45               | 13,888                       | 15,710                        | 248                            | 4.54                | 55                       |
| 1975                        | 25,717.11               | 22,183                       | 25,093                        | 624                            | 4.81                | 130                      |
| 1976                        | 13,626.03               | 12,195                       | 13,626                        |                                |                     |                          |
| 1978                        | 1,304.20                | 1,145                        | 1,295                         | 9                              | 5.36                | 2                        |
| 1979                        | 41,749.48               | 36,322                       | 41,089                        | 660                            | 5.60                | 118                      |
| 1980                        | 78,231.18               | 67,388                       | 76,232                        | 1,999                          | 5.87                | 341                      |
| 1981                        | 103,540.67              | 88,217                       | 99,795                        | 3,746                          | 6.17                | 607                      |
| 1982                        | 111,541.38              | 93,896                       | 106,219                       | 5,322                          | 6.48                | 821                      |
| 1983                        | 94,279.56               | 78,327                       | 88,607                        | 5,673                          | 6.82                | 832                      |
| 1984                        | 100,051.83              | 81,942                       | 92,696                        | 7,356                          | 7.18                | 1,025                    |
| 1985                        | 116,774.98              | 94,167                       | 106,526                       | 10,249                         | 7.56                | 1,356                    |
| 1986                        | 125,389.90              | 99,434                       | 112,484                       | 12,906                         | 7.96                | 1,621                    |
| 1987                        | 160,772.64              | 124,727                      | 141,097                       | 19,676                         | 8.52                | 2,309                    |
| 1988                        | 175,315.37              | 133,415                      | 150,925                       | 24,390                         | 8.95                | 2,725                    |
| 1989                        | 145,310.01              | 108,285                      | 122,497                       | 22,813                         | 9.40                | 2,427                    |
| 1990                        | 142,228.97              | 103,656                      | 117,260                       | 24,969                         | 9.86                | 2,532                    |
| 1991                        | 135,142.11              | 95,802                       | 108,375                       | 26,767                         | 10.47               | 2,557                    |
| 1992                        | 132,043.34              | 91,229                       | 103,202                       | 28,841                         | 10.96               | 2,631                    |
| 1993                        | 112,250.88              | 75,186                       | 85,054                        | 27,197                         | 11.59               | 2,347                    |
| 1994                        | 183,968.70              | 119,212                      | 134,858                       | 49,111                         | 12.22               | 4,019                    |
| 1995                        | 147,476.46              | 92,261                       | 104,369                       | 43,107                         | 12.87               | 3,349                    |
| 1996                        | 122,299.49              | 73,453                       | 83,093                        | 39,206                         | 13.63               | 2,876                    |
| 1997                        | 182,246.23              | 105,193                      | 118,999                       | 63,247                         | 14.28               | 4,429                    |
| 1998                        | 181,143.04              | 99,864                       | 112,970                       | 68,173                         | 15.06               | 4,527                    |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 384 HOUSE REGULATOR INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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-S3                                       |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                           |                         |                              |                               |                                |                     |                          |
| 1999                                                              | 139,857.78              | 73,425                       | 83,061                        | 56,797                         | 15.83               | 3,588                    |
| 2000                                                              | 194,710.12              | 96,693                       | 109,383                       | 85,327                         | 16.72               | 5,103                    |
| 2001                                                              | 229,158.59              | 107,269                      | 121,348                       | 107,811                        | 17.61               | 6,122                    |
| 2002                                                              | 154,765.04              | 68,220                       | 77,173                        | 77,592                         | 18.39               | 4,219                    |
| 2003                                                              | 133,893.06              | 54,950                       | 62,162                        | 71,731                         | 19.39               | 3,699                    |
|                                                                   | 3,864,772.07            | 2,642,562                    | 2,978,927                     | 885,845                        |                     | 66,436                   |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 13.3 |                         |                              |                               |                                |                     | 1.72                     |

COLUMBIA GAS OF PENNSYLVANIA, INC.

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

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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       |                         |                              |                               |                                |                     |                          |
| 1890                          | 22.04                   | 22                           | 22                            |                                |                     |                          |
| 1893                          | 23.73                   | 24                           | 24                            |                                |                     |                          |
| 1902                          | 23.75                   | 24                           | 24                            |                                |                     |                          |
| 1922                          | 10.59                   | 11                           | 11                            |                                |                     |                          |
| 1928                          | 108.25                  | 108                          | 108                           |                                |                     |                          |
| 1929                          | 747.53                  | 748                          | 748                           |                                |                     |                          |
| 1930                          | 770.13                  | 770                          | 770                           |                                |                     |                          |
| 1931                          | 140.20                  | 140                          | 140                           |                                |                     |                          |
| 1933                          | 293.10                  | 293                          | 293                           |                                |                     |                          |
| 1934                          | 12.10                   | 12                           | 12                            |                                |                     |                          |
| 1935                          | 118.44                  | 118                          | 118                           |                                |                     |                          |
| 1937                          | 1,136.81                | 1,137                        | 1,137                         |                                |                     |                          |
| 1938                          | 279.19                  | 279                          | 279                           |                                |                     |                          |
| 1939                          | 266.67                  | 267                          | 267                           |                                |                     |                          |
| 1941                          | 368.24                  | 368                          | 368                           |                                |                     |                          |
| 1942                          | 663.40                  | 663                          | 663                           |                                |                     |                          |
| 1943                          | 4,193.42                | 4,193                        | 4,193                         |                                |                     |                          |
| 1944                          | 957.82                  | 958                          | 958                           |                                |                     |                          |
| 1945                          | 669.46                  | 669                          | 669                           |                                |                     |                          |
| 1946                          | 57.25                   | 57                           | 57                            |                                |                     |                          |
| 1947                          | 809.29                  | 809                          | 809                           |                                |                     |                          |
| 1948                          | 1,496.90                | 1,497                        | 1,497                         |                                |                     |                          |
| 1950                          | 2,336.16                | 2,336                        | 2,336                         |                                |                     |                          |
| 1951                          | 4,802.58                | 4,803                        | 4,803                         |                                |                     |                          |
| 1952                          | 4,059.20                | 4,059                        | 4,059                         |                                |                     |                          |
| 1953                          | 5,836.36                | 5,836                        | 5,836                         |                                |                     |                          |
| 1954                          | 13,828.76               | 13,829                       | 13,829                        |                                |                     |                          |
| 1955                          | 24,457.37               | 24,457                       | 24,457                        |                                |                     |                          |
| 1956                          | 24,040.28               | 24,040                       | 24,040                        |                                |                     |                          |
| 1957                          | 28,219.22               | 27,984                       | 28,118                        | 101                            | 0.25                | 101                      |
| 1958                          | 30,845.48               | 30,085                       | 30,229                        | 616                            | 0.74                | 616                      |
| 1959                          | 23,835.91               | 22,867                       | 22,977                        | 859                            | 1.22                | 704                      |
| 1960                          | 36,344.72               | 34,297                       | 34,462                        | 1,883                          | 1.69                | 1,114                    |
| 1961                          | 36,590.53               | 33,968                       | 34,131                        | 2,460                          | 2.15                | 1,144                    |
| 1962                          | 13,797.04               | 12,597                       | 12,657                        | 1,140                          | 2.61                | 437                      |
| 1963                          | 38,863.59               | 34,926                       | 35,094                        | 3,770                          | 3.04                | 1,240                    |
| 1964                          | 35,058.34               | 31,003                       | 31,152                        | 3,906                          | 3.47                | 1,126                    |
| 1965                          | 36,644.36               | 31,893                       | 32,046                        | 4,598                          | 3.89                | 1,182                    |
| 1966                          | 28,217.64               | 24,173                       | 24,289                        | 3,929                          | 4.30                | 914                      |
| 1967                          | 63,835.10               | 53,834                       | 54,092                        | 9,743                          | 4.70                | 2,073                    |
| 1968                          | 58,643.54               | 48,674                       | 48,908                        | 9,736                          | 5.10                | 1,909                    |

COLUMBIA GAS OF PENNSYLVANIA, INC.

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

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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       |                         |                              |                               |                                |                     |                          |
| 1969                          | 58,420.69               | 47,710                       | 47,939                        | 10,482                         | 5.50                | 1,906                    |
| 1970                          | 54,598.60               | 43,861                       | 44,071                        | 10,528                         | 5.90                | 1,784                    |
| 1971                          | 115,600.22              | 91,362                       | 91,800                        | 23,800                         | 6.29                | 3,784                    |
| 1972                          | 91,592.51               | 71,167                       | 71,509                        | 20,084                         | 6.69                | 3,002                    |
| 1973                          | 44,961.67               | 34,336                       | 34,501                        | 10,461                         | 7.09                | 1,475                    |
| 1974                          | 28,028.18               | 21,030                       | 21,131                        | 6,897                          | 7.49                | 921                      |
| 1975                          | 28,624.45               | 21,087                       | 21,188                        | 7,436                          | 7.90                | 941                      |
| 1976                          | 733.32                  | 615                          | 618                           | 115                            | 7.81                | 15                       |
| 1977                          | 2,876.49                | 2,386                        | 2,397                         | 479                            | 8.12                | 59                       |
| 1978                          | 11,167.66               | 9,157                        | 9,201                         | 1,967                          | 8.45                | 233                      |
| 1979                          | 37,017.48               | 29,984                       | 30,128                        | 6,889                          | 8.80                | 783                      |
| 1980                          | 82,256.45               | 65,756                       | 66,072                        | 16,184                         | 9.16                | 1,767                    |
| 1981                          | 121,489.31              | 95,746                       | 96,206                        | 25,283                         | 9.55                | 2,647                    |
| 1982                          | 111,593.54              | 87,009                       | 87,427                        | 24,167                         | 9.75                | 2,479                    |
| 1983                          | 73,119.94               | 56,098                       | 56,367                        | 16,753                         | 10.17               | 1,647                    |
| 1984                          | 33,552.23               | 25,298                       | 25,419                        | 8,133                          | 10.60               | 767                      |
| 1985                          | 45,301.39               | 33,677                       | 33,839                        | 11,462                         | 10.87               | 1,054                    |
| 1986                          | 91,211.30               | 66,493                       | 66,812                        | 24,399                         | 11.34               | 2,152                    |
| 1987                          | 19,675.24               | 14,103                       | 14,171                        | 5,504                          | 11.65               | 472                      |
| 1988                          | 62,999.92               | 44,352                       | 44,565                        | 18,435                         | 11.98               | 1,539                    |
| 1989                          | 71,658.78               | 49,459                       | 49,696                        | 21,963                         | 12.34               | 1,780                    |
| 1990                          | 74,924.17               | 50,634                       | 50,877                        | 24,047                         | 12.71               | 1,892                    |
| 1991                          | 141,974.52              | 93,760                       | 94,210                        | 47,765                         | 13.11               | 3,643                    |
| 1992                          | 94,539.85               | 60,921                       | 61,213                        | 33,327                         | 13.52               | 2,465                    |
| 1993                          | 123,657.92              | 77,880                       | 78,254                        | 45,404                         | 13.81               | 3,288                    |
| 1994                          | 180,402.04              | 110,803                      | 111,335                       | 69,067                         | 14.13               | 4,888                    |
| 1995                          | 134,096.01              | 79,868                       | 80,251                        | 53,845                         | 14.60               | 3,688                    |
| 1996                          | 189,044.49              | 109,287                      | 109,811                       | 79,233                         | 14.96               | 5,296                    |
| 1997                          | 130,485.78              | 73,281                       | 73,633                        | 56,853                         | 15.22               | 3,735                    |
| 1998                          | 197,259.21              | 106,914                      | 107,427                       | 89,832                         | 15.63               | 5,747                    |
| 1999                          | 67,832.40               | 35,490                       | 35,660                        | 32,172                         | 15.95               | 2,017                    |
| 2000                          | 163,753.35              | 82,401                       | 82,796                        | 80,957                         | 16.29               | 4,970                    |
| 2001                          | 18,431.84               | 8,914                        | 8,957                         | 9,475                          | 16.55               | 573                      |
| 2002                          | 299,794.81              | 138,685                      | 139,351                       | 160,444                        | 16.85               | 9,522                    |
| 2003                          | 518,671.02              | 228,941                      | 230,040                       | 288,631                        | 17.08               | 16,899                   |
| 2004                          | 17,878.07               | 7,487                        | 7,523                         | 10,355                         | 17.35               | 597                      |
| 2005                          | 105,671.03              | 41,803                       | 42,004                        | 63,667                         | 17.57               | 3,624                    |
| 2006                          | 211,195.33              | 78,269                       | 78,645                        | 132,550                        | 17.83               | 7,434                    |
| 2007                          | 243,501.39              | 84,203                       | 84,607                        | 158,894                        | 17.97               | 8,842                    |
| 2008                          | 241,715.11              | 77,252                       | 77,623                        | 164,092                        | 18.10               | 9,066                    |
| 2009                          | 150,331.27              | 43,972                       | 44,183                        | 106,148                        | 18.14               | 5,852                    |

COLUMBIA GAS OF PENNSYLVANIA, INC.

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

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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                                           |                         |                              |                               |                                |                     |                          |
| 2010                                                              | 310,413.61              | 81,918                       | 82,311                        | 228,103                        | 18.13               | 12,582                   |
| 2011                                                              | 212,472.50              | 49,676                       | 49,914                        | 162,558                        | 18.03               | 9,016                    |
| 2012                                                              | 212,012.22              | 42,742                       | 42,947                        | 169,065                        | 17.82               | 9,487                    |
| 2013                                                              | 296,487.08              | 49,602                       | 49,840                        | 246,647                        | 17.42               | 14,159                   |
| 2014                                                              | 648,007.71              | 83,917                       | 84,320                        | 563,688                        | 16.81               | 33,533                   |
| 2015                                                              | 149,649.02              | 13,064                       | 13,126                        | 136,523                        | 15.68               | 8,707                    |
| 2016                                                              | 149,900.00              | 5,576                        | 5,603                         | 144,297                        | 12.92               | 11,168                   |
|                                                                   | 6,994,005.61            | 3,306,774                    | 3,322,200                     | 3,671,806                      |                     | 246,457                  |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 14.9 |                         |                              |                               |                                |                     | 3.52                     |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 387 OTHER EQUIPMENT - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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       |                         |                              |                               |                                |                     |                          |
| 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               | 14,255                       | 14,375                        |                                |                     |                          |
| 1959                          | 188.29                  | 181                          | 188                           |                                |                     |                          |
| 1962                          | 7,626.48                | 6,963                        | 7,626                         |                                |                     |                          |
| 1967                          | 445.13                  | 375                          | 422                           | 23                             | 4.70                | 5                        |
| 1972                          | 7,910.24                | 6,146                        | 6,913                         | 997                            | 6.69                | 149                      |
| 1981                          | 13,548.93               | 10,678                       | 12,011                        | 1,538                          | 9.55                | 161                      |
| 1985                          | 14,556.64               | 10,821                       | 12,172                        | 2,385                          | 10.87               | 219                      |
| 1992                          | 2,228.63                | 1,436                        | 1,615                         | 614                            | 13.52               | 45                       |
| 2010                          | 68,488.09               | 18,074                       | 20,330                        | 48,158                         | 18.13               | 2,656                    |
|                               | 133,851.06              | 73,412                       | 80,135                        | 53,716                         |                     | 3,235                    |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 16.6 2.42

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 387.4 OTHER EQUIPMENT - CUSTOMER INFORMATION SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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-R2.5 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0       |                         |                              |                               |                                |                     |                          |
| 1973                          | 917.13                  | 889                          | 860                           | 57                             | 0.76                | 57                       |
| 1974                          | 11,561.27               | 11,085                       | 10,721                        | 840                            | 1.03                | 816                      |
| 1975                          | 3,189.09                | 3,022                        | 2,923                         | 266                            | 1.31                | 203                      |
| 1976                          | 6,308.81                | 6,081                        | 5,881                         | 428                            | 1.52                | 282                      |
| 1980                          | 1,144.78                | 1,078                        | 1,043                         | 102                            | 2.26                | 45                       |
| 1983                          | 10,695.21               | 9,817                        | 9,494                         | 1,201                          | 3.00                | 400                      |
| 1984                          | 4,730.23                | 4,305                        | 4,164                         | 566                            | 3.21                | 176                      |
| 1985                          | 27,353.09               | 24,642                       | 23,832                        | 3,521                          | 3.47                | 1,015                    |
| 1986                          | 61,596.14               | 55,042                       | 53,234                        | 8,362                          | 3.63                | 2,304                    |
| 1987                          | 40,005.58               | 35,285                       | 34,126                        | 5,880                          | 3.95                | 1,489                    |
| 1989                          | 3,425.59                | 2,939                        | 2,842                         | 584                            | 4.55                | 128                      |
| 1990                          | 37,952.71               | 32,085                       | 31,031                        | 6,922                          | 4.85                | 1,427                    |
| 1991                          | 31,594.95               | 26,186                       | 25,326                        | 6,269                          | 5.27                | 1,190                    |
| 1992                          | 6,510.50                | 5,296                        | 5,122                         | 1,388                          | 5.62                | 247                      |
| 1993                          | 1,718.09                | 1,365                        | 1,320                         | 398                            | 6.09                | 65                       |
| 1994                          | 4,082.11                | 3,160                        | 3,056                         | 1,026                          | 6.57                | 156                      |
| 2000                          | 50,178.60               | 31,542                       | 30,506                        | 19,673                         | 9.75                | 2,018                    |
| 2001                          | 142,467.12              | 85,452                       | 82,644                        | 59,823                         | 10.34               | 5,786                    |
| 2003                          | 2,326.24                | 1,253                        | 1,212                         | 1,114                          | 11.56               | 96                       |
| 2004                          | 119,576.43              | 60,530                       | 58,541                        | 61,035                         | 12.19               | 5,007                    |
| 2005                          | 239,392.72              | 113,137                      | 109,420                       | 129,973                        | 12.83               | 10,130                   |
| 2006                          | 28,069.86               | 12,289                       | 11,885                        | 16,185                         | 13.48               | 1,201                    |
| 2007                          | 22,252.02               | 8,941                        | 8,647                         | 13,605                         | 14.14               | 962                      |
| 2008                          | 0.11                    |                              |                               |                                |                     |                          |
| 2009                          | 13,302.75               | 4,350                        | 4,207                         | 9,096                          | 15.44               | 589                      |
| 2010                          | 58,509.38               | 16,810                       | 16,258                        | 42,251                         | 16.12               | 2,621                    |
| 2011                          | 109,605.60              | 27,073                       | 26,183                        | 83,423                         | 16.77               | 4,975                    |
| 2012                          | 239,723.71              | 49,287                       | 47,668                        | 192,056                        | 17.38               | 11,050                   |
| 2013                          | 646,811.10              | 105,495                      | 102,029                       | 544,782                        | 17.96               | 30,333                   |
| 2014                          | 1,188,727.29            | 141,459                      | 136,811                       | 1,051,916                      | 18.51               | 56,830                   |
|                               | 3,113,728.21            | 879,895                      | 850,986                       | 2,262,742                      |                     | 141,598                  |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 16.0 4.55

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 390 STRUCTURES AND IMPROVEMENTS - COMMUNICATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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 40-R2.5                                          |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                                |                         |                              |                               |                                |                     |                          |
| 1955                                                                   | 1,170.54                | 1,075                        | 1,171                         |                                |                     |                          |
| 1958                                                                   | 192.08                  | 173                          | 192                           |                                |                     |                          |
| 1959                                                                   | 2,129.94                | 1,909                        | 2,130                         |                                |                     |                          |
| 1971                                                                   | 17,971.09               | 14,664                       | 17,971                        |                                |                     |                          |
| 1983                                                                   | 7,872.27                | 5,829                        | 7,872                         |                                |                     |                          |
| 1984                                                                   | 3,449.87                | 2,512                        | 3,409                         | 41                             | 12.14               | 3                        |
| 1987                                                                   | 6,786.87                | 4,625                        | 6,276                         | 511                            | 13.79               | 37                       |
| 1988                                                                   | 9,428.54                | 6,261                        | 8,496                         | 933                            | 14.42               | 65                       |
| 1990                                                                   | 820.22                  | 517                          | 702                           | 118                            | 15.52               | 8                        |
|                                                                        | 49,821.42               | 37,565                       | 48,219                        | 1,602                          |                     | 113                      |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 14.2 0.23 |                         |                              |                               |                                |                     |                          |



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, 2016

| 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    |                         |                              |                               |                                |                     |                          |
| 1997                       | 470,390.27              | 458,631                      | 470,390                       |                                |                     |                          |
| 1998                       | 480,955.49              | 444,884                      | 466,880                       | 14,075                         | 1.50                | 9,383                    |
| 1999                       | 80,599.29               | 70,524                       | 74,011                        | 6,588                          | 2.50                | 2,635                    |
| 2000                       | 95,723.34               | 78,972                       | 82,877                        | 12,846                         | 3.50                | 3,670                    |
| 2001                       | 173,686.96              | 134,607                      | 141,262                       | 32,425                         | 4.50                | 7,206                    |
| 2002                       | 94,356.55               | 68,408                       | 71,790                        | 22,567                         | 5.50                | 4,103                    |
| 2003                       | 95,837.52               | 64,690                       | 67,888                        | 27,950                         | 6.50                | 4,300                    |
| 2004                       | 32,484.97               | 20,303                       | 21,307                        | 11,178                         | 7.50                | 1,490                    |
| 2005                       | 522.52                  | 300                          | 315                           | 208                            | 8.50                | 24                       |
| 2007                       | 4,181.56                | 1,986                        | 2,084                         | 2,098                          | 10.50               | 200                      |
| 2010                       | 7,734.00                | 2,514                        | 2,638                         | 5,096                          | 13.50               | 377                      |
| 2011                       | 12,031.56               | 3,309                        | 3,473                         | 8,559                          | 14.50               | 590                      |
| 2012                       | 1,550.11                | 349                          | 366                           | 1,184                          | 15.50               | 76                       |
| 2014                       | 9,693.70                | 1,212                        | 1,272                         | 8,422                          | 17.50               | 481                      |
| 2015                       | 150,000.00              | 11,250                       | 11,806                        | 138,194                        | 18.50               | 7,470                    |
| 2016                       | 150,100.00              | 3,752                        | 3,938                         | 146,162                        | 19.50               | 7,495                    |
|                            | 1,859,847.84            | 1,365,691                    | 1,422,297                     | 437,551                        |                     | 49,500                   |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 8.8 2.66

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 391.11 OFFICE FURNITURE AND EQUIPMENT - EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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               | 8,957                        | 12,718                        | 11,709                         | 9.50                | 1,233                    |
|                                                                       | 24,427.00               | 8,957                        | 12,718                        | 11,709                         |                     | 1,233                    |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 9.5 5.05 |                         |                              |                               |                                |                     |                          |

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, 2016

| 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              | 209,377                      | 171,996                       | 127,114                        | 1.50                | 84,743                   |
| 2014                                                             | 353,000.00              | 176,500                      | 144,989                       | 208,011                        | 2.50                | 83,204                   |
| 2015                                                             | 422,900.00              | 126,870                      | 104,220                       | 318,680                        | 3.50                | 91,051                   |
|                                                                  | 1,075,009.66            | 512,747                      | 421,205                       | 653,805                        |                     | 258,998                  |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 2.5 |                         |                              |                               |                                |                     | 24.09                    |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 392 TRANSPORTATION EQUIPMENT - TRAILERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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                                                             | 70,904.01               | 59,086                       | 42,771                        | 28,133                         | 2.50                | 11,253                   |
| 2011                                                             | 3,781.00                | 1,386                        | 1,003                         | 2,778                          | 9.50                | 292                      |
| 2012                                                             | 14,849.79               | 4,455                        | 3,225                         | 11,625                         | 10.50               | 1,107                    |
| 2013                                                             | 2,789.00                | 651                          | 471                           | 2,318                          | 11.50               | 202                      |
|                                                                  | 92,323.80               | 65,578                       | 47,470                        | 44,854                         |                     | 12,854                   |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 3.5 |                         |                              |                               |                                |                     | 13.92                    |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 393 STORES EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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                                          |                         |                              |                               |                                |                     |                          |
| 1997                                                             | 939.35                  | 916                          | 939                           |                                |                     |                          |
| 1998                                                             | 13,435.25               | 12,428                       | 13,296                        | 139                            | 1.50                | 93                       |
|                                                                  | 14,374.60               | 13,344                       | 14,235                        | 140                            |                     | 93                       |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 1.5 |                         |                              |                               |                                |                     | 0.65                     |

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, 2016

| 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<br>NET SALVAGE PERCENT.. 0             |                         |                              |                               |                                |                     |                          |
| 1992                                                              | 186,713.88              | 182,980                      | 186,714                       |                                |                     |                          |
| 1993                                                              | 413,416.69              | 388,612                      | 396,675                       | 16,742                         | 1.50                | 11,161                   |
| 1994                                                              | 566,669.51              | 510,003                      | 520,584                       | 46,086                         | 2.50                | 18,434                   |
| 1995                                                              | 162,417.47              | 139,679                      | 142,577                       | 19,840                         | 3.50                | 5,669                    |
| 1996                                                              | 552,198.39              | 452,803                      | 462,198                       | 90,000                         | 4.50                | 20,000                   |
| 1997                                                              | 1,161,874.46            | 906,262                      | 925,065                       | 236,809                        | 5.50                | 43,056                   |
| 1998                                                              | 383,704.26              | 283,941                      | 289,832                       | 93,872                         | 6.50                | 14,442                   |
| 1999                                                              | 191,341.50              | 133,939                      | 136,718                       | 54,624                         | 7.50                | 7,283                    |
| 2000                                                              | 296,716.81              | 195,833                      | 199,896                       | 96,821                         | 8.50                | 11,391                   |
| 2001                                                              | 186,888.81              | 115,871                      | 118,275                       | 68,614                         | 9.50                | 7,223                    |
| 2002                                                              | 307,053.93              | 178,091                      | 181,786                       | 125,268                        | 10.50               | 11,930                   |
| 2003                                                              | 266,861.99              | 144,105                      | 147,095                       | 119,767                        | 11.50               | 10,415                   |
| 2004                                                              | 366,999.55              | 183,500                      | 187,307                       | 179,693                        | 12.50               | 14,375                   |
| 2005                                                              | 79,725.36               | 36,674                       | 37,435                        | 42,290                         | 13.50               | 3,133                    |
| 2006                                                              | 179,958.05              | 75,582                       | 77,150                        | 102,808                        | 14.50               | 7,090                    |
| 2007                                                              | 847,845.86              | 322,181                      | 328,866                       | 518,980                        | 15.50               | 33,483                   |
| 2008                                                              | 1,181,797.10            | 401,811                      | 410,148                       | 771,649                        | 16.50               | 46,767                   |
| 2009                                                              | 278,442.30              | 83,533                       | 85,266                        | 193,176                        | 17.50               | 11,039                   |
| 2010                                                              | 746,136.58              | 193,996                      | 198,021                       | 548,116                        | 18.50               | 29,628                   |
| 2011                                                              | 626,616.50              | 137,856                      | 140,716                       | 485,900                        | 19.50               | 24,918                   |
| 2012                                                              | 870,830.41              | 156,749                      | 160,001                       | 710,829                        | 20.50               | 34,675                   |
| 2013                                                              | 784,168.63              | 109,784                      | 112,062                       | 672,107                        | 21.50               | 31,261                   |
| 2014                                                              | 1,190,507.07            | 119,051                      | 121,521                       | 1,068,986                      | 22.50               | 47,510                   |
| 2015                                                              | 567,081.00              | 34,025                       | 34,731                        | 532,350                        | 23.50               | 22,653                   |
| 2016                                                              | 378,000.00              | 7,560                        | 7,717                         | 370,283                        | 24.50               | 15,114                   |
|                                                                   | 12,773,966.11           | 5,494,421                    | 5,608,356                     | 7,165,610                      |                     | 482,650                  |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 14.8 |                         |                              |                               |                                |                     | 3.78                     |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 394.12 TOOLS, SHOP AND GARAGE EQUIPMENT - CNG FACILITIES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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              | 116,749                      | 117,928                       |                                |                     |                          |
| 1995                                                                  | 1,135,467.56            | 1,108,330                    | 1,135,468                     |                                |                     |                          |
| 1996                                                                  | 280,092.23              | 269,869                      | 280,092                       |                                |                     |                          |
| 1998                                                                  | 98,401.65               | 91,927                       | 98,402                        |                                |                     |                          |
| 1999                                                                  | 18,450.18               | 16,952                       | 18,450                        |                                |                     |                          |
| 2001                                                                  | 80,747.15               | 71,340                       | 80,535                        | 212                            | 2.04                | 104                      |
|                                                                       | 1,953,497.84            | 1,897,578                    | 1,953,286                     | 212                            |                     | 104                      |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 2.0 0.01 |                         |                              |                               |                                |                     |                          |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 394.5 TOOLS, SHOP AND GARAGE EQUIPMENT - GPS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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.. 10-SQUARE                                       |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                          |                         |                              |                               |                                |                     |                          |
| 2014                                                             | 871,620.00              | 217,905                      | 169,672                       | 701,948                        | 7.50                | 93,593                   |
| 2015                                                             | 1,533,219.00            | 229,983                      | 179,077                       | 1,354,142                      | 8.50                | 159,311                  |
| 2016                                                             | 1,022,000.00            | 51,100                       | 39,789                        | 982,211                        | 9.50                | 103,391                  |
|                                                                  | 3,426,839.00            | 498,988                      | 388,538                       | 3,038,301                      |                     | 356,295                  |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 8.5 |                         |                              |                               |                                |                     | 10.40                    |



COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 395 LABORATORY EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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                                          |                         |                              |                               |                                |                     |                          |
| 1997                                                             | 8,811.95                | 8,592                        | 8,431                         | 381                            | 0.50                | 381                      |
| 1998                                                             | 4,710.24                | 4,357                        | 4,275                         | 435                            | 1.50                | 290                      |
| 2000                                                             | 2,990.39                | 2,467                        | 2,421                         | 569                            | 3.50                | 163                      |
| 2002                                                             | 1,118.18                | 811                          | 796                           | 322                            | 5.50                | 59                       |
| 2011                                                             | 19,084.33               | 5,248                        | 5,150                         | 13,934                         | 14.50               | 961                      |
|                                                                  | 36,715.09               | 21,475                       | 21,073                        | 15,642                         |                     | 1,854                    |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 8.4 |                         |                              |                               |                                |                     | 5.05                     |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 396 POWER OPERATED EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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-L3                                           |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                               |                         |                              |                               |                                |                     |                          |
| 1990                                                                  | 14,666.07               | 14,536                       | 14,666                        |                                |                     |                          |
| 1991                                                                  | 77,918.78               | 76,501                       | 77,919                        |                                |                     |                          |
| 1992                                                                  | 7,619.70                | 7,411                        | 7,620                         |                                |                     |                          |
| 1993                                                                  | 2,619.06                | 2,523                        | 2,619                         |                                |                     |                          |
| 1994                                                                  | 49,419.28               | 47,146                       | 49,419                        |                                |                     |                          |
| 1995                                                                  | 102,911.30              | 96,912                       | 102,911                       |                                |                     |                          |
| 1997                                                                  | 46,192.45               | 42,423                       | 46,192                        |                                |                     |                          |
| 1999                                                                  | 176,977.59              | 157,333                      | 173,521                       | 3,457                          | 2.19                | 1,579                    |
| 2000                                                                  | 424,416.34              | 370,431                      | 408,544                       | 15,872                         | 2.40                | 6,613                    |
| 2001                                                                  | 23,340.60               | 19,970                       | 22,025                        | 1,316                          | 2.62                | 502                      |
| 2002                                                                  | 21,599.55               | 18,103                       | 19,966                        | 1,634                          | 2.80                | 584                      |
| 2003                                                                  | 458,375.61              | 376,876                      | 415,652                       | 42,724                         | 2.92                | 14,632                   |
| 2011                                                                  | 25,036.41               | 12,365                       | 13,637                        | 11,399                         | 5.64                | 2,021                    |
| 2014                                                                  | 4,400.00                | 1,033                        | 1,139                         | 3,261                          | 8.15                | 400                      |
|                                                                       | 1,435,492.74            | 1,243,563                    | 1,355,830                     | 79,663                         |                     | 26,331                   |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 3.0 1.83 |                         |                              |                               |                                |                     |                          |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 397.1 COMMUNICATION EQUIPMENT - TELEPHONE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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.. 10-SQUARE                                             |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                                |                         |                              |                               |                                |                     |                          |
| 2014                                                                   | 190,124.00              | 47,531                       | 31,007                        | 159,117                        | 7.50                | 21,216                   |
| 2015                                                                   | 261,058.00              | 39,159                       | 25,546                        | 235,512                        | 8.50                | 27,707                   |
| 2016                                                                   | 347,971.00              | 17,399                       | 11,350                        | 336,621                        | 9.50                | 35,434                   |
|                                                                        | 799,153.00              | 104,089                      | 67,903                        | 731,250                        |                     | 84,357                   |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 8.7 10.56 |                         |                              |                               |                                |                     |                          |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 397.24 COMMUNICATION EQUIPMENT - RADIO

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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                                                              | 36,568.41               | 32,912                       | 11,925                        | 24,643                         | 1.50                | 16,429                   |
| 2014                                                              | 340,912.00              | 56,820                       | 20,587                        | 320,325                        | 12.50               | 25,626                   |
| 2015                                                              | 468,104.00              | 46,810                       | 16,961                        | 451,143                        | 13.50               | 33,418                   |
| 2016                                                              | 623,948.00              | 20,796                       | 7,535                         | 616,413                        | 14.50               | 42,511                   |
|                                                                   | 1,469,532.41            | 157,338                      | 57,008                        | 1,412,524                      |                     | 117,984                  |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 12.0 |                         |                              |                               |                                |                     | 8.03                     |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 397.5 COMMUNICATION EQUIPMENT - TELEMETERING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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 17-R3                                           |                  |                       |                        |                         |              |                   |
| NET SALVAGE PERCENT.. 0                                               |                  |                       |                        |                         |              |                   |
| 1995                                                                  | 11,233.39        | 10,409                | 10,831                 | 402                     | 1.70         | 236               |
| 1996                                                                  | 163,883.53       | 149,495               | 155,549                | 8,335                   | 1.97         | 4,231             |
| 1997                                                                  | 36,505.23        | 32,745                | 34,071                 | 2,434                   | 2.24         | 1,087             |
| 1998                                                                  | 6,171.79         | 5,412                 | 5,631                  | 541                     | 2.60         | 208               |
| 1999                                                                  | 94,169.90        | 80,591                | 83,855                 | 10,315                  | 2.95         | 3,497             |
| 2000                                                                  | 235,196.49       | 195,213               | 203,118                | 32,078                  | 3.38         | 9,491             |
| 2001                                                                  | 115,329.34       | 92,425                | 96,168                 | 19,161                  | 3.84         | 4,990             |
| 2002                                                                  | 104,739.40       | 80,492                | 83,751                 | 20,988                  | 4.37         | 4,803             |
| 2011                                                                  | 42,994.18        | 14,945                | 15,550                 | 27,444                  | 10.32        | 2,659             |
| 2014                                                                  | 124,564.00       | 20,528                | 21,359                 | 103,205                 | 12.67        | 8,146             |
| 2015                                                                  | 171,038.00       | 17,138                | 17,832                 | 153,206                 | 13.47        | 11,374            |
| 2016                                                                  | 227,981.00       | 7,797                 | 8,113                  | 219,868                 | 14.10        | 15,593            |
|                                                                       | 1,333,806.25     | 707,190               | 735,828                | 597,978                 |              | 66,315            |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 9.0 4.97 |                  |                       |                        |                         |              |                   |

COLUMBIA GAS OF PENNSYLVANIA, INC.

ACCOUNT 398 MISCELLANEOUS EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| 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                                           |                         |                              |                               |                                |                     |                          |
| 2002                                                              | 9,171.96                | 8,866                        | 7,978                         | 1,194                          | 0.50                | 1,194                    |
| 2003                                                              | 7,484.08                | 6,736                        | 6,061                         | 1,423                          | 1.50                | 949                      |
| 2004                                                              | 11,186.58               | 9,322                        | 8,388                         | 2,799                          | 2.50                | 1,120                    |
| 2005                                                              | 23,458.02               | 17,985                       | 16,183                        | 7,275                          | 3.50                | 2,079                    |
| 2006                                                              | 8,228.13                | 5,760                        | 5,183                         | 3,045                          | 4.50                | 677                      |
| 2007                                                              | 136.82                  | 87                           | 78                            | 59                             | 5.50                | 11                       |
| 2008                                                              | 2,264.03                | 1,283                        | 1,154                         | 1,110                          | 6.50                | 171                      |
| 2009                                                              | 11,311.50               | 5,656                        | 5,089                         | 6,222                          | 7.50                | 830                      |
| 2010                                                              | 4,537.40                | 1,966                        | 1,769                         | 2,768                          | 8.50                | 326                      |
| 2011                                                              | 66,158.60               | 24,258                       | 21,827                        | 44,332                         | 9.50                | 4,667                    |
| 2012                                                              | 129,294.07              | 38,788                       | 34,901                        | 94,393                         | 10.50               | 8,990                    |
| 2013                                                              | 7,172.00                | 1,673                        | 1,505                         | 5,667                          | 11.50               | 493                      |
| 2014                                                              | 228,080.79              | 38,014                       | 34,205                        | 193,876                        | 12.50               | 15,510                   |
| 2015                                                              | 550,000.00              | 55,000                       | 49,489                        | 500,511                        | 13.50               | 37,075                   |
|                                                                   | 1,058,483.98            | 215,394                      | 193,810                       | 864,674                        |                     | 74,092                   |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 11.7 |                         |                              |                               |                                |                     | 7.00                     |

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

COLUMBIA GAS OF PENNSYLVANIA, INC.

SUMMARY OF COST OF REMOVAL AND GROSS SALVAGE AND  
AMORTIZATION OF EXPERIENCED AND ESTIMATED NET SALVAGE

| ACCT                  | REGULAR<br>RETIREMENTS | COST OF<br>REMOVAL | GROSS<br>SALVAGE | NET<br>SALVAGE |
|-----------------------|------------------------|--------------------|------------------|----------------|
| 2011 TRANSACTION YEAR |                        |                    |                  |                |
| 362.10                | 2,955.95               | 11,780.05          |                  | 11,780.05-     |
| 374.40                | 2,451.03               |                    |                  |                |
| 375.34                | 8,426.70               | 12,279.55          |                  | 12,279.55-     |
| 375.70                | 4,917.10               |                    |                  |                |
| 376.00                | 6,094,674.85           | 1,269,063.41       | 1,541.00         | 1,267,522.41-  |
| 378.00                | 316,954.17             | 59,829.10          |                  | 59,829.10-     |
| 380.00                | 4,301,280.30           | 4,313,652.88       |                  | 4,313,652.88-  |
| 381.00                | 688,641.33             |                    | 759.60           | 759.60         |
| 382.00                | 93,240.91              |                    |                  |                |
| 383.00                | 12,047.13              |                    |                  |                |
| 384.00                | 12,350.94              |                    |                  |                |
| 385.00                | 179,661.32             | 31,592.63          |                  | 31,592.63-     |
| 387.00                |                        | 26,983.46          |                  | 26,983.46-     |
| 387.40                |                        | 208.04             |                  | 208.04-        |
| 392.00                |                        |                    | 7,201.42         | 7,201.42       |
| 394.00                | 144,268.92             |                    |                  |                |
| 396.00                |                        |                    | 43,731.96        | 43,731.96      |
|                       | 11,861,870.65          | 5,725,389.12       | 53,233.98        | 5,672,155.14-  |
| 2012 TRANSACTION YEAR |                        |                    |                  |                |
| 362.10                |                        | 6,457.05           |                  | 6,457.05-      |
| 374.40                | 15,595.34              | 260.16             |                  | 260.16-        |
| 375.34                | 32,534.20              | 17,416.11          |                  | 17,416.11-     |
| 375.60                | 22.40                  |                    |                  |                |
| 375.70                | 6,691.59               | 5,103.09           |                  | 5,103.09-      |
| 376.00                | 6,717,810.62           | 886,996.12         |                  | 886,996.12-    |
| 378.00                | 261,314.24             | 18,887.95          |                  | 18,887.95-     |
| 380.00                | 5,021,027.74           | 2,192,533.99       |                  | 2,192,533.99-  |
| 381.00                | 574,916.43             | 305.85             | 25,333.32        | 25,027.47      |
| 382.00                | 71,791.00              |                    |                  |                |
| 383.00                | 12,740.78              |                    |                  |                |
| 385.00                | 129,670.47             | 23,198.35          |                  | 23,198.35-     |
| 387.40                | 18,518.39              | 55.60              |                  | 55.60-         |
| 396.00                | 61,173.74              |                    |                  |                |
|                       | 12,923,806.94          | 3,151,214.27       | 25,333.32        | 3,125,880.95-  |



COLUMBIA GAS OF PENNSYLVANIA, INC.

SUMMARY OF COST OF REMOVAL AND GROSS SALVAGE AND  
AMORTIZATION OF EXPERIENCED AND ESTIMATED 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                | 4,573.73               | 4,911.96           |                  | 4,911.96-      |
| 375.34                | 21,986.97              | 22,427.70          |                  | 22,427.70-     |
| 375.60                |                        | 1,091.39           |                  | 1,091.39-      |
| 376.00                | 7,496,191.99           | 691,743.41         | 2,051.59         | 689,691.82-    |
| 378.00                | 216,579.21             | 216,795.76         |                  | 216,795.76-    |
| 380.00                | 5,734,991.74           | 1,750,826.78       |                  | 1,750,826.78-  |
| 381.00                | 421,072.33             | 23.20              | 6,554.08         | 6,530.88       |
| 382.00                | 91,732.07              |                    |                  |                |
| 383.00                | 9,962.93               |                    |                  |                |
| 385.00                | 250,693.05             | 51,158.61          |                  | 51,158.61-     |
| 387.00                | 4,694.90               |                    |                  |                |
| 387.40                | 7,558.85               | 392.50             |                  | 392.50-        |
| 392.00                | 118,202.85             |                    | 44,482.18        | 44,482.18      |
| 396.00                | 349,409.40             |                    | 104,669.48       | 104,669.48     |
|                       | 14,729,233.72          | 2,838,110.41       | 157,757.33       | 2,680,353.08-  |
| 2014 TRANSACTION YEAR |                        |                    |                  |                |
| 362.10                |                        | 190,000.00         |                  | 190,000.00-    |
| 374.40                | 23,069.43              | 65.91              |                  | 65.91-         |
| 375.34                | 59,628.61              | 21,436.63          |                  | 21,436.63-     |
| 375.70                | 85,500.00              | 12,825.00          |                  | 12,825.00-     |
| 376.00                | 5,834,387.77           | 1,246,578.85       |                  | 1,246,578.85-  |
| 378.00                | 406,574.02             | 183,240.21         |                  | 183,240.21-    |
| 379.10                | 12,676.85              | 91.84              |                  | 91.84-         |
| 380.00                | 5,992,235.17           | 4,297,939.86       |                  | 4,297,939.86-  |
| 381.00                | 372,226.36             |                    | 623.00           | 623.00         |
| 382.00                | 113,987.26             |                    |                  |                |
| 383.00                | 21,591.65              | 139.00             |                  | 139.00-        |
| 385.00                | 226,203.18             | 60,963.56          |                  | 60,963.56-     |
| 387.40                | 27,680.85              | 933.57             |                  | 933.57-        |
| 392.00                | 23,449.34              |                    | 10,317.71        | 10,317.71      |
| 394.00                | 549,726.20             |                    |                  |                |
|                       | 13,748,936.69          | 6,014,214.43       | 10,940.71        | 6,003,273.72-  |

COLUMBIA GAS OF PENNSYLVANIA, INC.

SUMMARY OF COST OF REMOVAL AND GROSS SALVAGE AND  
AMORTIZATION OF EXPERIENCED AND ESTIMATED NET SALVAGE

| ACCT                  | REGULAR<br>RETIREMENTS | COST OF<br>REMOVAL | GROSS<br>SALVAGE | NET<br>SALVAGE |
|-----------------------|------------------------|--------------------|------------------|----------------|
| 2015 TRANSACTION YEAR |                        |                    |                  |                |
| 362.10                |                        | 395,000.00         |                  | 395,000.00-    |
| 374.40                | 11,400.00              | 1,368.00           |                  | 1,368.00-      |
| 375.34                | 28,700.00              | 28,987.00          |                  | 28,987.00-     |
| 375.70                | 334,700.00             | 60,246.00          |                  | 60,246.00-     |
| 376.00                | 15,116,600.00          | 2,418,656.00       |                  | 2,418,656.00-  |
| 378.00                | 1,006,300.00           | 342,142.00         |                  | 342,142.00-    |
| 380.00                | 4,448,400.00           | 2,446,620.00       |                  | 2,446,620.00-  |
| 381.00                | 126,800.00             |                    | 2,536.00         | 2,536.00       |
| 382.00                | 143,900.00             |                    |                  |                |
| 383.00                | 74,900.00              | 749.00             |                  | 749.00-        |
| 385.00                | 17,300.00              | 3,806.00           |                  | 3,806.00-      |
| 394.00                | 209,079.28             |                    |                  |                |
|                       | 21,518,079.28          | 5,697,574.00       | 2,536.00         | 5,695,038.00-  |
| TOTAL                 | 74,781,927.28          | 23,426,502.23      | 249,801.34       | 23,176,700.89- |

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, 2015 and as of December 31, 2016.

COLUMBIA GAS OF PENNSYLVANIA, INC.

COMPARISON OF CALCULATED ACCRUED DEPRECIATION  
AND BOOK RESERVE AS OF NOVEMBER 30, 2015

| <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                          | 1,331                                          | 1,931                   |
| 351                              | COMPRESSOR STATION STRUCTURES          | 738,012                                        | 861,264                 |
|                                  | WELLS                                  |                                                |                         |
| 352.01                           | CONSTRUCTION                           | 553,112                                        | 799,118                 |
| 352.02                           | EQUIPMENT                              | 132,016                                        | 168,680                 |
|                                  | <i>TOTAL ACCOUNT 352</i>               | <u>685,128</u>                                 | <u>967,798</u>          |
| 352.1                            | STORAGE LEASEHOLDS AND RIGHTS          | 144,604                                        | 206,932                 |
| 353                              | LINES                                  | 290,493                                        | 405,288                 |
| 354                              | COMPRESSOR STATION EQUIPMENT           | 451,064                                        | 569,716                 |
| 355                              | MEASURING AND REGULATING EQUIPMENT     | 92,816                                         | 123,010                 |
|                                  | <b>TOTAL UNDERGROUND STORAGE PLANT</b> | <b>2,403,448</b>                               | <b>3,135,939</b>        |
| <b>DISTRIBUTION PLANT</b>        |                                        |                                                |                         |
|                                  | LAND AND LAND RIGHTS                   |                                                |                         |
| 374.4                            | LAND RIGHTS                            | 678,701                                        | 651,055                 |
| 374.5                            | RIGHTS-OF-WAY                          | 1,539,625                                      | 1,555,652               |
|                                  | <i>TOTAL ACCOUNT 374</i>               | <u>2,218,326</u>                               | <u>2,206,707</u>        |
|                                  | STRUCTURES AND IMPROVEMENTS            |                                                |                         |
| 375.34                           | MEASURING AND REGULATING               | 925,411                                        | 824,030                 |
| 375.6                            | INDUSTRIAL MEASURING AND REGULATING    | 62,355                                         | 72,639                  |
| 375.7                            | OTHER DISTRIBUTION SYSTEMS             |                                                |                         |
|                                  | DISTRIBUTION SYSTEM STRUCTURES         | 1,002,752                                      | 938,647                 |
|                                  | OTHER BUILDINGS                        | 953,226                                        | 887,124                 |
|                                  | <i>TOTAL ACCOUNT 375.70</i>            | <u>1,955,978</u>                               | <u>1,825,771</u>        |
| 375.8                            | COMMUNICATION STRUCTURES               | 5,262                                          | 6,177                   |
|                                  | <i>TOTAL ACCOUNT 375</i>               | <b>2,949,006</b>                               | <b>2,728,617</b>        |
| 376                              | MAINS                                  |                                                |                         |
|                                  | CAST IRON                              | 456,706                                        | 397,531                 |
|                                  | BARE STEEL                             | 52,911,766                                     | 46,055,992              |
|                                  | OTHER                                  | 154,544,085                                    | 134,519,820             |
|                                  | <i>TOTAL ACCOUNT 376</i>               | <b>207,912,557</b>                             | <b>180,973,343</b>      |

COLUMBIA GAS OF PENNSYLVANIA, INC.

COMPARISON OF CALCULATED ACCRUED DEPRECIATION  
AND BOOK RESERVE AS OF NOVEMBER 30, 2015

|                      | DEPRECIABLE GROUP<br>(1)                                             | CALCULATED<br>ACCRUED<br>DEPRECIATION<br>(2)<br>\$ | BOOK<br>RESERVE<br>(3)<br>\$ |
|----------------------|----------------------------------------------------------------------|----------------------------------------------------|------------------------------|
| 378                  | MEASURING AND REGULATING EQUIPMENT - GENERAL                         | 9,106,593                                          | 8,503,313                    |
| 379.1                | MEASURING AND REGULATING EQUIPMENT - CITY GATE                       | 97,406                                             | 89,069                       |
| 380                  | SERVICES                                                             |                                                    |                              |
|                      | BARE STEEL                                                           | 726,330                                            | 744,647                      |
|                      | OTHER                                                                | 100,380,037                                        | 102,911,461                  |
|                      | <i>TOTAL ACCOUNT 380</i>                                             | 101,106,367                                        | 103,656,108                  |
| 381                  | METERS                                                               | 14,992,512                                         | 15,173,270                   |
| 381.1                | METERS - AMR                                                         | 7,315,902                                          | 6,817,382                    |
| 382                  | METER INSTALLATIONS                                                  | 10,556,467                                         | 11,320,688                   |
| 383                  | HOUSE REGULATORS                                                     | 2,939,761                                          | 3,318,441                    |
| 384                  | HOUSE REGULATOR INSTALLATIONS                                        | 2,561,385                                          | 2,904,820                    |
| 385                  | INDUSTRIAL MEASURING AND REGULATING EQUIPMENT -<br>OTHER THAN METERS | 3,134,937                                          | 3,015,332                    |
|                      | OTHER EQUIPMENT                                                      |                                                    |                              |
| 387                  | GENERAL                                                              | 70,310                                             | 68,826                       |
| 387.4                | CUSTOMER INFORMATION SERVICES                                        | 745,968                                            | 689,626                      |
|                      | <i>TOTAL ACCOUNT 387</i>                                             | 816,278                                            | 758,452                      |
|                      | <b>TOTAL DISTRIBUTION PLANT</b>                                      | <b>365,707,497</b>                                 | <b>341,465,542</b>           |
| <b>GENERAL PLANT</b> |                                                                      |                                                    |                              |
| 390.1                | STRUCTURES AND IMPROVEMENTS - COMMUNICATIONS                         | 36,889                                             | 48,089                       |
|                      | OFFICE FURNITURE AND EQUIPMENT                                       |                                                    |                              |
| 391.1                | FURNITURE                                                            | 1,623,379                                          | 1,742,734                    |
| 391.11               | EQUIPMENT                                                            | 7,192                                              | 11,382                       |
| 391.12               | INFORMATION SYSTEMS                                                  | 1,921,837                                          | 1,900,062                    |
|                      | <i>TOTAL ACCOUNT 391</i>                                             | 3,552,408                                          | 3,654,178                    |
| 392                  | TRANSPORTATION EQUIPMENT - TRAILERS                                  | 63,569                                             | 53,871                       |
| 393                  | STORES EQUIPMENT                                                     | 14,798                                             | 16,436                       |
|                      | TOOLS, SHOP AND GARAGE EQUIPMENT                                     |                                                    |                              |
| 394                  | EQUIPMENT                                                            | 5,312,005                                          | 5,473,958                    |
| 394.12               | CNG FACILITIES                                                       | 1,869,790                                          | 1,953,286                    |
| 394                  | GPS                                                                  | 178,653                                            | 109,781                      |
|                      | <i>TOTAL ACCOUNT 394</i>                                             | 7,360,448                                          | 7,537,025                    |
| 395                  | LABORATORY EQUIPMENT                                                 | 33,024                                             | 31,717                       |
| 396                  | POWER OPERATED EQUIPMENT                                             | 1,216,804                                          | 1,367,201                    |

COLUMBIA GAS OF PENNSYLVANIA, INC.

COMPARISON OF CALCULATED ACCRUED DEPRECIATION  
AND BOOK RESERVE AS OF NOVEMBER 30, 2015

|                          | DEPRECIABLE GROUP<br>(1)             | CALCULATED<br>ACCRUED<br>DEPRECIATION<br>(2)<br>\$ | BOOK<br>RESERVE<br>(3)<br>\$ |
|--------------------------|--------------------------------------|----------------------------------------------------|------------------------------|
|                          | COMMUNICATION EQUIPMENT              |                                                    |                              |
| 397.1                    | TELEPHONE                            | 367,996                                            | 344,072                      |
| 397.24                   | RADIO                                | 1,769,607                                          | 1,729,110                    |
| 397.5                    | TELEMETERING                         | 652,436                                            | 676,536                      |
|                          | <i>TOTAL ACCOUNT 397</i>             | <u>2,790,039</u>                                   | <u>2,749,718</u>             |
| 398                      | MISCELLANEOUS EQUIPMENT              | <u>181,237</u>                                     | <u>169,968</u>               |
|                          | <b>TOTAL GENERAL PLANT</b>           | <u><b>15,249,216</b></u>                           | <u><b>15,628,203</b></u>     |
|                          | <b>SUBTOTAL DEPRECIABLE PLANT</b>    | <b>383,360,161</b>                                 | <b>360,229,684</b>           |
| <b>AMORTIZABLE PLANT</b> |                                      |                                                    |                              |
| 303                      | MISCELLANEOUS INTANGIBLE PLANT       | 7,112,928                                          | 7,112,928                    |
| 305                      | STRUCTURES AND IMPROVEMENTS          | (4,583)                                            | (4,583)                      |
| 362                      | GAS HOLDERS                          | (1,609)                                            | (1,609)                      |
| 362.1                    | ENVIRONMENTAL REMEDIATION            | (956,223)                                          | (956,223)                    |
| 374.2                    | LAND, OTHER DISTRIBUTION SYSTEMS     | 222,752                                            | 222,752                      |
| 375.71                   | STRUCTURES AND IMPROVEMENTS - LEASED | 1,098,950                                          | 1,098,950                    |
| 389.2                    | LAND AND LAND RIGHTS - LAND RIGHTS   | <u>39</u>                                          | <u>39</u>                    |
|                          | <b>SUBTOTAL AMORTIZABLE PLANT</b>    | <u><b>7,472,254</b></u>                            | <u><b>7,472,254</b></u>      |
|                          | <b>TOTAL GAS PLANT</b>               | <u><b>390,832,415</b></u>                          | <u><b>367,701,938</b></u>    |

COLUMBIA GAS OF PENNSYLVANIA, INC.

COMPARISON OF CALCULATED ACCRUED DEPRECIATION  
AND BOOK RESERVE AS OF DECEMBER 31, 2016

| <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                          | 1,365                                          | 1,931                   |
| 351                              | COMPRESSOR STATION STRUCTURES          | 872,695                                        | 992,754                 |
|                                  | WELLS                                  |                                                |                         |
| 352.01                           | CONSTRUCTION                           | 566,685                                        | 799,118                 |
| 352.02                           | EQUIPMENT                              | 133,738                                        | 168,680                 |
|                                  | <i>TOTAL ACCOUNT 352</i>               | <u>700,423</u>                                 | <u>967,798</u>          |
| 352.1                            | STORAGE LEASEHOLDS AND RIGHTS          | 148,041                                        | 206,932                 |
| 353                              | LINES                                  | 295,938                                        | 405,288                 |
| 354                              | COMPRESSOR STATION EQUIPMENT           | 472,041                                        | 574,335                 |
| 355                              | MEASURING AND REGULATING EQUIPMENT     | <u>94,444</u>                                  | <u>123,010</u>          |
|                                  | <b>TOTAL UNDERGROUND STORAGE PLANT</b> | <b>2,584,947</b>                               | <b>3,272,048</b>        |
| <b>DISTRIBUTION PLANT</b>        |                                        |                                                |                         |
|                                  | LAND AND LAND RIGHTS                   |                                                |                         |
| 374.4                            | LAND RIGHTS                            | 711,147                                        | 681,965                 |
| 374.5                            | RIGHTS-OF-WAY                          | 1,581,310                                      | 1,601,901               |
|                                  | <i>TOTAL ACCOUNT 374</i>               | <u>2,292,457</u>                               | <u>2,283,866</u>        |
|                                  | STRUCTURES AND IMPROVEMENTS            |                                                |                         |
| 375.34                           | MEASURING AND REGULATING               | 980,173                                        | 883,045                 |
| 375.6                            | INDUSTRIAL MEASURING AND REGULATING    | 63,187                                         | 73,869                  |
| 375.7                            | OTHER DISTRIBUTION SYSTEMS             |                                                |                         |
|                                  | DISTRIBUTION SYSTEM STRUCTURES         | 1,276,266                                      | 1,155,979               |
|                                  | OTHER BUILDINGS                        | 973,597                                        | 875,722                 |
|                                  | <i>TOTAL ACCOUNT 375.70</i>            | <u>2,249,863</u>                               | <u>2,031,701</u>        |
| 375.8                            | COMMUNICATION STRUCTURES               | <u>5,605</u>                                   | <u>6,540</u>            |
|                                  | <i>TOTAL ACCOUNT 375</i>               | <b>3,298,828</b>                               | <b>2,995,155</b>        |
| 376                              | MAINS                                  |                                                |                         |
|                                  | CAST IRON                              | 403,771                                        | 342,363                 |
|                                  | BARE STEEL                             | 46,476,978                                     | 39,408,488              |
|                                  | OTHER                                  | <u>171,776,284</u>                             | <u>145,651,545</u>      |
|                                  | <i>TOTAL ACCOUNT 376</i>               | <b>218,657,033</b>                             | <b>185,402,396</b>      |

COLUMBIA GAS OF PENNSYLVANIA, INC.

COMPARISON OF CALCULATED ACCRUED DEPRECIATION  
AND BOOK RESERVE AS OF DECEMBER 31, 2016

|                      | DEPRECIABLE GROUP                                                    | CALCULATED<br>ACCRUED<br>DEPRECIATION | BOOK<br>RESERVE    |
|----------------------|----------------------------------------------------------------------|---------------------------------------|--------------------|
|                      | (1)                                                                  | (2)                                   | (3)                |
|                      |                                                                      | \$                                    | \$                 |
| 378                  | MEASURING AND REGULATING EQUIPMENT - GENERAL                         | 10,079,450                            | 9,897,811          |
| 379.1                | MEASURING AND REGULATING EQUIPMENT - CITY GATE                       | 100,083                               | 94,150             |
| 380                  | SERVICES                                                             |                                       |                    |
|                      | BARE STEEL                                                           | 655,928                               | 674,065            |
|                      | OTHER                                                                | 109,359,292                           | 112,383,099        |
|                      | <i>TOTAL ACCOUNT 380</i>                                             | 110,015,220                           | 113,057,164        |
| 381                  | METERS                                                               | 15,650,449                            | 15,981,682         |
| 381.1                | METERS - AMR                                                         | 9,031,591                             | 8,698,973          |
| 382                  | METER INSTALLATIONS                                                  | 11,167,998                            | 11,922,861         |
| 383                  | HOUSE REGULATORS                                                     | 3,197,040                             | 3,551,101          |
| 384                  | HOUSE REGULATOR INSTALLATIONS                                        | 2,642,562                             | 2,978,927          |
| 385                  | INDUSTRIAL MEASURING AND REGULATING EQUIPMENT -<br>OTHER THAN METERS | 3,306,774                             | 3,322,200          |
|                      | OTHER EQUIPMENT                                                      |                                       |                    |
| 387                  | GENERAL                                                              | 73,412                                | 80,135             |
| 387.4                | CUSTOMER INFORMATION SERVICES                                        | 879,895                               | 850,986            |
|                      | <i>TOTAL ACCOUNT 387</i>                                             | 953,307                               | 931,121            |
|                      | <b>TOTAL DISTRIBUTION PLANT</b>                                      | <b>390,392,792</b>                    | <b>361,117,407</b> |
| <b>GENERAL PLANT</b> |                                                                      |                                       |                    |
| 390.1                | STRUCTURES AND IMPROVEMENTS - COMMUNICATIONS                         | 37,565                                | 48,219             |
|                      | OFFICE FURNITURE AND EQUIPMENT                                       |                                       |                    |
| 391.1                | FURNITURE                                                            | 1,365,691                             | 1,422,297          |
| 391.11               | EQUIPMENT                                                            | 8,957                                 | 12,718             |
| 391.12               | INFORMATION SYSTEMS                                                  | 512,747                               | 421,205            |
|                      | <i>TOTAL ACCOUNT 391</i>                                             | 1,887,395                             | 1,856,220          |
| 392                  | TRANSPORTATION EQUIPMENT - TRAILERS                                  | 65,578                                | 47,470             |
| 393                  | STORES EQUIPMENT                                                     | 13,344                                | 14,235             |
|                      | TOOLS, SHOP AND GARAGE EQUIPMENT                                     |                                       |                    |
| 394                  | EQUIPMENT                                                            | 5,494,421                             | 5,608,356          |
| 394.12               | CNG FACILITIES                                                       | 1,897,578                             | 1,953,286          |
| 394                  | GPS                                                                  | 498,988                               | 388,538            |
|                      | <i>TOTAL ACCOUNT 394</i>                                             | 7,890,987                             | 7,950,180          |
| 395                  | LABORATORY EQUIPMENT                                                 | 21,475                                | 21,073             |
| 396                  | POWER OPERATED EQUIPMENT                                             | 1,243,563                             | 1,355,830          |



COLUMBIA GAS OF PENNSYLVANIA, INC.

COMPARISON OF CALCULATED ACCRUED DEPRECIATION  
AND BOOK RESERVE AS OF DECEMBER 31, 2016

|                          | DEPRECIABLE GROUP                    | CALCULATED<br>ACCRUED<br>DEPRECIATION | BOOK<br>RESERVE           |
|--------------------------|--------------------------------------|---------------------------------------|---------------------------|
|                          | (1)                                  | (2)                                   | (3)                       |
|                          |                                      | \$                                    | \$                        |
|                          | COMMUNICATION EQUIPMENT              |                                       |                           |
| 397.1                    | TELEPHONE                            | 104,089                               | 67,903                    |
| 397.24                   | RADIO                                | 157,338                               | 57,008                    |
| 397.5                    | TELEMETERING                         | 707,190                               | 735,828                   |
|                          | <i>TOTAL ACCOUNT 397</i>             | <u>968,617</u>                        | <u>860,739</u>            |
| 398                      | MISCELLANEOUS EQUIPMENT              | <u>215,394</u>                        | <u>193,810</u>            |
|                          | <b>TOTAL GENERAL PLANT</b>           | <b><u>12,343,918</u></b>              | <b><u>12,347,776</u></b>  |
|                          | <b>SUBTOTAL DEPRECIABLE PLANT</b>    | <b>405,321,657</b>                    | <b>376,737,231</b>        |
| <b>AMORTIZABLE PLANT</b> |                                      |                                       |                           |
| 303                      | MISCELLANEOUS INTANGIBLE PLANT       | 9,443,231                             | 9,443,231                 |
| 305                      | STRUCTURES AND IMPROVEMENTS          | (4,583)                               | (4,583)                   |
| 362                      | GAS HOLDERS                          | (1,609)                               | (1,609)                   |
| 362.1                    | ENVIRONMENTAL REMEDIATION            | (797,692)                             | (797,692)                 |
| 374.2                    | LAND, OTHER DISTRIBUTION SYSTEMS     | 235,240                               | 235,240                   |
| 375.71                   | STRUCTURES AND IMPROVEMENTS - LEASED | 1,125,911                             | 1,125,911                 |
| 389.2                    | LAND AND LAND RIGHTS - LAND RIGHTS   | <u>39</u>                             | <u>39</u>                 |
|                          | <b>SUBTOTAL AMORTIZABLE PLANT</b>    | <b>10,000,537</b>                     | <b>10,000,537</b>         |
|                          | <b>TOTAL GAS PLANT</b>               | <b><u>415,322,194</u></b>             | <b><u>386,737,768</u></b> |

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

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

Response:

- a. Please refer to pages V-4 through V-6 of Columbia's Future Test Year depreciation study included in Exhibit No. 109, Attachment A.  
  
Please refer to pages I-3 through I-5 of Columbia's Fully Forecasted Rate Year depreciation study included in Exhibit No. 9, Attachment B.
- b. Please refer to Pages 2 through 7 of this response.
- b. (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, 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, 2014

| DEPRECIABLE GROUP                |                                     | SURVIVOR  | ORIGINAL COST     | BOOK        | FUTURE      | CALCULATED     |             | COMPOSITE   |
|----------------------------------|-------------------------------------|-----------|-------------------|-------------|-------------|----------------|-------------|-------------|
| (1)                              |                                     | CURVE     | AS OF             | RESERVE     | BOOK        | ANNUAL ACCRUAL |             | REMAINING   |
|                                  |                                     | (2)       | NOVEMBER 30, 2014 | (4)         | ACCURALS    | 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 * | 1,546,676.39      | 699,213     | 847,463     | 43,165         | 2.79        | 19.6        |
| WELLS                            |                                     |           |                   |             |             |                |             |             |
| 352.01                           | CONSTRUCTION                        | SQUARE *  | 799,133.73        | 799,118     | 16          | 1              | 0.00        | 16.0        |
| 352.02                           | EQUIPMENT                           | 45-S2.5 * | 168,679.67        | 168,680     | 0           | 0              | -           | -           |
| TOTAL ACCOUNT 352                |                                     |           | 967,813.40        | 967,798     | 16          | 1              |             |             |
| 352.1                            | STORAGE LEASEHOLDS AND RIGHTS       | SQUARE *  | 206,940.78        | 206,932     | 9           | 0              | 0.00        | 20.6        |
| 353                              | LINES                               | 50-S1.5 * | 405,287.78        | 405,288     | 0           | 0              | -           | -           |
| 354                              | COMPRESSOR STATION EQUIPMENT        | 50-R2.5 * | 1,925,572.58      | 460,045     | 1,465,528   | 79,124         | 4.11        | 18.5        |
| 355                              | MEASURING AND REGULATING EQUIPMENT  | 37-R1.5 * | 123,010.01        | 123,010     | 0           | 0              | -           | -           |
| TOTAL UNDERGROUND STORAGE PLANT  |                                     |           | 5,177,233.02      | 2,864,217   | 2,313,017   | 122,290        | 2.36        |             |
| <b>DISTRIBUTION PLANT</b>        |                                     |           |                   |             |             |                |             |             |
| LAND AND LAND RIGHTS             |                                     |           |                   |             |             |                |             |             |
| 374.4                            | LAND RIGHTS                         | 65-R3     | 2,206,166.99      | 627,794     | 1,578,373   | 37,439         | 1.70        | 42.2        |
| 374.5                            | RIGHTS-OF-WAY                       | 75-S4     | 3,233,084.36      | 1,512,786   | 1,720,298   | 42,994         | 1.33        | 40.0        |
| TOTAL ACCOUNT 374                |                                     |           | 5,439,251.35      | 2,140,580   | 3,298,671   | 80,433         | 1.48        |             |
| STRUCTURES AND IMPROVEMENTS      |                                     |           |                   |             |             |                |             |             |
| 375.34                           | MEASURING AND REGULATING            | 60-R1.5   | 3,314,436.99      | 803,853     | 2,510,584   | 73,097         | 2.21        | 34.3        |
| 375.6                            | INDUSTRIAL MEASURING AND REGULATING | 50-R1.5   | 87,669.84         | 71,426      | 16,244      | 972            | 1.11        | 16.7        |
| 375.7                            | OTHER DISTRIBUTION SYSTEMS          |           |                   |             |             |                |             |             |
|                                  | DISTRIBUTION SYSTEM STRUCTURES      | 90-R1 *   | 3,315,747.37      | 1,059,986   | 2,255,761   | 147,379        | 4.44        | 15.3        |
|                                  | OTHER BUILDINGS                     | 33-S1     | 2,627,599.53      | 1,111,982   | 1,515,618   | 74,158         | 2.82        | 20.4        |
| TOTAL ACCOUNT 375.70             |                                     |           | 5,943,346.90      | 2,171,968   | 3,771,379   | 221,537        | 3.73        | 17.0        |
| 375.8                            | COMMUNICATION STRUCTURES            | 50-R2     | 16,515.17         | 5,842       | 10,673      | 340            | 2.06        | 31.4        |
| TOTAL ACCOUNT 375                |                                     |           | 9,361,968.90      | 3,053,089   | 6,308,880   | 295,946        | 3.16        |             |
| 376                              | MAINS                               |           |                   |             |             |                |             |             |
|                                  | CAST IRON                           | 72-R1.5 * | 490,909.42        | 376,573     | 114,336     | 12,649         | 2.58        | 9.0         |
|                                  | BARE STEEL                          | 72-R1.5 * | 65,681,006.57     | 47,193,488  | 18,487,519  | 1,801,348      | 2.74        | 10.3        |
|                                  | OTHER                               | 72-R1.5   | 928,806,993.97    | 124,575,626 | 804,231,368 | 18,428,830     | 1.98        | 43.6        |
| TOTAL ACCOUNT 376                |                                     |           | 994,978,909.96    | 172,145,687 | 822,833,223 | 20,242,827     | 2.03        |             |

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, 2014

| DEPRECIABLE GROUP        |                                                                   | SURVIVOR | ORIGINAL COST     | BOOK        | FUTURE        | CALCULATED     |             | COMPOSITE   |
|--------------------------|-------------------------------------------------------------------|----------|-------------------|-------------|---------------|----------------|-------------|-------------|
|                          |                                                                   | CURVE    | AS OF             | RESERVE     | BOOK          | ANNUAL ACCRUAL |             | REMAINING   |
| (1)                      |                                                                   | (2)      | NOVEMBER 30, 2014 | (4)         | ACCRUALS      | AMOUNT         | RATE        | LIFE        |
|                          |                                                                   | (2)      | (3)               | (4)         | (5)           | (6)            | (7)=(6)/(3) | (8)=(5)/(6) |
| 378                      | MEASURING AND REGULATING EQUIPMENT - CITY GATE                    | 45-R0.5  | 20,803,155.58     | 6,301,158   | 14,501,998    | 612,372        | 2.94        | 23.7        |
| 379.1                    | MEASURING AND REGULATING EQUIPMENT - GENERAL                      | 35-S2.5  | 153,793.95        | 96,838      | 56,956        | 4,917          | 3.20        | 11.6        |
| 380                      | SERVICES                                                          |          |                   |             |               |                |             |             |
|                          | BARE STEEL                                                        | 50-R0.5  | 863,159.03        | 766,528     | 96,631        | 11,122         | 1.29        | 8.7         |
|                          | OTHER                                                             | 50-R0.5  | 370,871,459.65    | 101,907,202 | 268,964,258   | 10,191,769     | 2.75        | 26.4        |
| TOTAL ACCOUNT 380        |                                                                   |          | 371,734,618.68    | 102,673,730 | 269,060,889   | 10,202,891     | 2.74        |             |
| 381                      | METERS                                                            | 43-S1.5  | 34,275,001.98     | 14,745,213  | 19,529,789    | 844,870        | 2.46        | 23.1        |
| 381.1                    | METERS - AMR                                                      | 15-S2.5  | 23,045,848.44     | 5,085,121   | 17,960,727    | 1,750,552      | 7.60        | 10.3        |
| 382                      | METER INSTALLATIONS                                               | 55-R2.5  | 34,187,445.92     | 10,793,822  | 23,393,624    | 665,949        | 1.95        | 35.1        |
| 383                      | HOUSE REGULATORS                                                  | 40-S2    | 10,401,378.18     | 3,072,274   | 7,329,104     | 265,908        | 2.56        | 27.6        |
| 384                      | HOUSE REGULATOR INSTALLATIONS                                     | 35-S3    | 3,864,772.07      | 2,833,707   | 1,031,065     | 70,396         | 1.82        | 14.6        |
| 385                      | INDUSTRIAL MEASURING AND REGULATING EQUIPMENT - OTHER THAN METERS | 30-R0.5  | 6,444,727.68      | 3,012,245   | 3,432,483     | 240,024        | 3.72        | 14.3        |
|                          | OTHER EQUIPMENT                                                   |          |                   |             |               |                |             |             |
| 387                      | GENERAL                                                           | 30-R0.5  | 133,851.06        | 60,779      | 73,072        | 6,849          | 5.12        | 10.7        |
| 387.4                    | CUSTOMER INFORMATION SERVICES                                     | 25-R2.5  | 1,514,067.26      | 555,895     | 958,172       | 66,001         | 4.36        | 14.5        |
| TOTAL ACCOUNT 387        |                                                                   |          | 1,647,918.32      | 616,674     | 1,031,244     | 72,850         | 4.42        |             |
| TOTAL DISTRIBUTION PLANT |                                                                   |          | 1,516,338,791.01  | 326,570,138 | 1,189,768,653 | 35,349,935     | 2.33        |             |
| GENERAL PLANT            |                                                                   |          |                   |             |               |                |             |             |
| 390.1                    | STRUCTURES AND IMPROVEMENTS - COMMUNICATIONS                      | 40-R2.5  | 49,821.42         | 47,870      | 1,951         | 128            | 0.26        | 15.2        |
|                          | OFFICE FURNITURE AND EQUIPMENT                                    |          |                   |             |               |                |             |             |
| 391.1                    | FURNITURE                                                         | 20-SQ    | 2,306,549.97      | 2,015,958   | 290,592       | 59,763         | 2.59        | 4.9         |
| 391.11                   | EQUIPMENT                                                         | 15-SQ    | 24,427.00         | 8,185       | 16,242        | 1,403          | 5.74        | 11.6        |
| 391.12                   | INFORMATION SYSTEMS                                               | 5-SQ     | 1,911,084.06      | 1,394,666   | 516,418       | 326,847        | 17.10       | 1.6         |
| TOTAL ACCOUNT 391        |                                                                   |          | 4,242,061.03      | 3,418,809   | 823,252       | 388,013        | 9.15        |             |
| 392                      | TRANSPORTATION EQUIPMENT - TRAILERS                               | 15-SQ    | 179,595.88        | 135,647     | 43,949        | 7,394          | 4.12        | 5.9         |
| 393                      | STORES EQUIPMENT                                                  | 20-SQ    | 16,674.52         | 15,767      | 908           | 254            | 1.52        | 3.6         |
|                          | TOOLS, SHOP AND GARAGE EQUIPMENT                                  |          |                   |             |               |                |             |             |
| 394                      | EQUIPMENT                                                         | 25-SQ    | 12,249,061.86     | 5,164,156   | 7,084,906     | 451,207        | 3.68        | 15.7        |
| 394.12                   | CNG FACILITIES                                                    | 12-S1.5  | 1,953,497.84      | 1,953,286   | 212           | 81             | 0.00        | 2.6         |
| TOTAL ACCOUNT 394        |                                                                   |          | 14,202,559.70     | 7,117,442   | 7,085,118     | 451,288        | 3.18        |             |

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, 2014

| DEPRECIABLE GROUP    |                                      | SURVIVOR<br>CURVE | ORIGINAL COST<br>AS OF<br>NOVEMBER 30, 2014 | 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             | 71,550.49                                   | 50,649          | 20,901                     | 2,844                        | 3.97                | 7.3                            |
| 396                  | POWER OPERATED EQUIPMENT             | 12-L3             | 1,725,639.17                                | 1,622,546       | 103,093                    | 31,050                       | 1.80                | 3.3                            |
|                      | COMMUNICATION EQUIPMENT              |                   |                                             |                 |                            |                              |                     |                                |
| 397.1                | TELEPHONE                            | 10-SQ             | 959,579.33                                  | 911,861         | 47,718                     | 28,950                       | 3.02                | 1.6                            |
| 397.24               | RADIO                                | 15-SQ             | 2,349,372.32                                | 2,238,497       | 110,875                    | 86,903                       | 3.70                | 1.3                            |
| 397.5                | TELEMETERING                         | 17-R3             | 864,588.87                                  | 683,421         | 181,168                    | 36,725                       | 4.25                | 4.9                            |
|                      | TOTAL ACCOUNT 397                    |                   | 4,173,540.52                                | 3,833,779       | 339,761                    | 152,578                      | 3.66                |                                |
| 398                  | MISCELLANEOUS EQUIPMENT              | 15-SQ             | 643,562.98                                  | 199,424         | 444,139                    | 45,285                       | 7.04                | 9.8                            |
|                      | TOTAL GENERAL PLANT                  |                   | 25,305,005.71                               | 16,441,933      | 8,863,072                  | 1,078,834                    | 4.26                |                                |
|                      | SUBTOTAL DEPRECIABLE PLANT           |                   | 1,546,821,029.74                            | 345,876,288     | 1,200,944,742              | 36,551,059                   | 2.36                |                                |
| AMORTIZABLE PLANT    |                                      |                   |                                             |                 |                            |                              |                     |                                |
| 303                  | INTANGIBLE PLANT                     |                   | 17,331,603.85                               | 4,782,122       | 12,549,482                 | 2,149,262                    | **                  |                                |
| 305                  | STRUCTURES AND IMPROVEMENTS          |                   |                                             | (3,413)         |                            |                              |                     |                                |
| 362                  | GAS HOLDERS                          |                   |                                             | (1,198)         |                            |                              |                     |                                |
| 362.1                | ENVIRONMENTAL REMEDIATION            |                   |                                             | (989,914)       |                            |                              |                     |                                |
| 374.2                | LAND, OTHER DISTRIBUTION SYSTEMS     |                   | 479,552.22                                  | 22,821          |                            |                              |                     |                                |
| 375.71               | STRUCTURES AND IMPROVEMENTS - LEASED |                   | 1,148,423.29                                | 1,049,275       | 99,148                     | 75,808                       | **                  |                                |
| 389.2                | LAND AND LAND RIGHTS - LAND RIGHTS   |                   |                                             | 39              |                            |                              |                     |                                |
|                      | SUBTOTAL AMORTIZABLE PLANT           |                   | 18,959,579.36                               | 4,859,732       | 12,648,630                 | 2,225,070                    |                     |                                |
| NONDEPRECIABLE PLANT |                                      |                   | 172,413.08                                  |                 |                            |                              |                     |                                |
| TOTAL GAS PLANT      |                                      |                   | 1,565,953,022.18                            | 350,736,020     | 1,213,593,372              | 38,776,129                   |                     |                                |

\* 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, 2015

| DEPRECIABLE GROUP                  |                                        | SURVIVOR  | ORIGINAL COST     | BOOK        | FUTURE      | CALCULATED     |             | COMPOSITE   |
|------------------------------------|----------------------------------------|-----------|-------------------|-------------|-------------|----------------|-------------|-------------|
| (1)                                |                                        | CURVE     | AS OF             | RESERVE     | BOOK        | ANNUAL ACCRUAL | RATE        | REMAINING   |
|                                    |                                        | (2)       | DECEMBER 31, 2015 | (4)         | ACCUALS     | AMOUNT         |             | 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              | 0.00        | 0.0         |
| 351                                | COMPRESSOR STATION STRUCTURES          | 65-R2.5 * | 1,546,676.39      | 746,093     | 800,583     | 42,957         | 2.78        | 18.6        |
| <b>WELLS</b>                       |                                        |           |                   |             |             |                |             |             |
| 352.01                             | CONSTRUCTION                           | SQUARE *  | 799,133.73        | 799,118     | 16          | 1              | 0.00        | 16.0        |
| 352.02                             | EQUIPMENT                              | 45-S2.5 * | 168,679.67        | 168,680     | 0           | 0              | -           | -           |
|                                    | <b>TOTAL ACCOUNT 352</b>               |           | 967,813.40        | 967,798     | 16          | 1              |             |             |
| 352.1                              | STORAGE LEASEHOLDS AND RIGHTS          | SQUARE *  | 206,940.78        | 206,932     | 9           | 0              | 0.00        | 0.0         |
| 353                                | LINES                                  | 50-S1.5 * | 405,287.78        | 405,288     | 0           | 0              | -           | -           |
| 354                                | COMPRESSOR STATION EQUIPMENT           | 50-R2.5 * | 2,188,972.58      | 529,949     | 1,659,024   | 93,110         | 4.25        | 17.8        |
| 355                                | MEASURING AND REGULATING EQUIPMENT     | 37-R1.5 * | 123,010.01        | 123,010     | 0           | 0              | -           | -           |
|                                    | <b>TOTAL UNDERGROUND STORAGE PLANT</b> |           | 5,440,633.02      | 2,981,001   | 2,459,633   | 136,068        | 2.50        |             |
| <b>DISTRIBUTION PLANT</b>          |                                        |           |                   |             |             |                |             |             |
| <b>LAND AND LAND RIGHTS</b>        |                                        |           |                   |             |             |                |             |             |
| 374.4                              | LAND RIGHTS                            | 65-R3     | 2,412,566.99      | 651,534     | 1,761,033   | 41,193         | 1.71        | 42.8        |
| 374.5                              | RIGHTS-OF-WAY                          | 75-S4     | 3,233,084.36      | 1,559,574   | 1,673,510   | 42,515         | 1.31        | 39.4        |
|                                    | <b>TOTAL ACCOUNT 374</b>               |           | 5,645,651.35      | 2,211,108   | 3,434,543   | 83,708         | 1.48        |             |
| <b>STRUCTURES AND IMPROVEMENTS</b> |                                        |           |                   |             |             |                |             |             |
| 375.34                             | MEASURING AND REGULATING               | 60-R1.5   | 3,618,836.99      | 855,843     | 2,762,994   | 80,000         | 2.21        | 34.5        |
| 375.6                              | INDUSTRIAL MEASURING AND REGULATING    | 50-R1.5   | 87,669.84         | 72,889      | 14,781      | 895            | 1.02        | 16.5        |
| 375.7                              | OTHER DISTRIBUTION SYSTEMS             |           |                   |             |             |                |             |             |
|                                    | DISTRIBUTION SYSTEM STRUCTURES         | 90-R1 *   | 14,228,847.37     | 1,594,539   | 12,634,308  | 500,337        | 3.52        | 25.3        |
|                                    | OTHER BUILDINGS                        | 33-S1     | 2,462,399.53      | 635,696     | 1,826,704   | 79,711         | 3.24        | 22.9        |
|                                    | <b>TOTAL ACCOUNT 375.70</b>            |           | 16,691,246.90     | 2,230,235   | 14,461,012  | 580,048        | 3.48        | 24.9        |
| 375.8                              | COMMUNICATION STRUCTURES               | 50-R2     | 16,515.17         | 6,211       | 10,304      | 335            | 2.03        | 30.8        |
|                                    | <b>TOTAL ACCOUNT 375</b>               |           | 20,414,268.90     | 3,165,178   | 17,249,091  | 661,278        | 3.24        |             |
| 376                                | <b>MAINS</b>                           |           |                   |             |             |                |             |             |
|                                    | CAST IRON                              | 72-R1.5 * | 387,270.42        | 302,118     | 85,152      | 10,235         | 2.64        | 8.3         |
|                                    | BARE STEEL                             | 72-R1.5 * | 59,462,666.57     | 43,812,612  | 15,650,055  | 1,677,870      | 2.82        | 9.3         |
|                                    | OTHER                                  | 72-R1.5   | 1,062,188,072.97  | 140,403,449 | 921,784,624 | 20,984,248     | 1.98        | 43.9        |
|                                    | <b>TOTAL ACCOUNT 376</b>               |           | 1,122,038,009.96  | 184,518,179 | 937,519,831 | 22,672,353     | 2.02        |             |

## COLUMBIA GAS OF PENNSYLVANIA, INC.

Exhibit 109  
Schedule 3  
Page 6 of 7  
Witness: J.J. Spanos

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

| DEPRECIABLE GROUP |                                                                      | SURVIVOR | ORIGINAL COST     | BOOK        | FUTURE        | CALCULATED     |             | COMPOSITE   |
|-------------------|----------------------------------------------------------------------|----------|-------------------|-------------|---------------|----------------|-------------|-------------|
|                   |                                                                      | CURVE    | AS OF             | RESERVE     | BOOK          | ANNUAL ACCRUAL |             | REMAINING   |
| (1)               |                                                                      | (2)      | DECEMBER 31, 2015 | (4)         | ACCRUALS      | AMOUNT         | RATE        | LIFE        |
|                   |                                                                      |          | (3)               |             | (5)           | (6)            | (7)=(6)/(3) | (8)=(5)/(6) |
| 378               | MEASURING AND REGULATING EQUIPMENT - CITY GATE                       | 45-R0.5  | 22,157,055.58     | 6,906,499   | 15,250,557    | 637,607        | 2.88        | 23.9        |
| 379.1             | MEASURING AND REGULATING EQUIPMENT - GENERAL                         | 35-S2.5  | 153,793.95        | 102,577     | 51,217        | 4,625          | 3.01        | 11.1        |
| 380               | SERVICES                                                             |          |                   |             |               |                |             |             |
|                   | BARE STEEL                                                           | 50-R0.5  | 721,264.03        | 653,601     | 67,663        | 8,371          | 1.16        | 8.1         |
|                   | OTHER                                                                | 50-R0.5  | 405,808,954.65    | 111,646,346 | 294,162,609   | 11,110,268     | 2.74        | 26.5        |
|                   | TOTAL ACCOUNT 380                                                    |          | 406,530,218.68    | 112,299,947 | 294,230,272   | 11,118,639     | 2.74        |             |
| 381               | METERS                                                               | 43-S1.5  | 35,286,101.98     | 15,573,352  | 19,712,750    | 856,930        | 2.43        | 23.0        |
| 381.1             | METERS - AMR                                                         | 15-S2.5  | 23,426,948.44     | 6,966,410   | 16,460,538    | 1,754,214      | 7.49        | 9.4         |
| 382               | METER INSTALLATIONS                                                  | 55-R2.5  | 35,614,945.92     | 11,413,753  | 24,201,193    | 693,300        | 1.95        | 34.9        |
| 383               | HOUSE REGULATORS                                                     | 40-S2    | 11,220,478.18     | 3,304,255   | 7,916,223     | 289,994        | 2.58        | 27.3        |
| 384               | HOUSE REGULATOR INSTALLATIONS                                        | 35-S3    | 3,864,772.07      | 2,909,909   | 954,863       | 68,474         | 1.77        | 13.9        |
| 385               | INDUSTRIAL MEASURING AND REGULATING EQUIPMENT -<br>OTHER THAN METERS | 30-R0.5  | 6,695,827.68      | 3,284,537   | 3,411,291     | 232,404        | 3.47        | 14.7        |
|                   | OTHER EQUIPMENT                                                      |          |                   |             |               |                |             |             |
| 387               | GENERAL                                                              | 30-R0.5  | 133,851.06        | 74,557      | 59,294        | 3,722          | 2.78        | 15.9        |
| 387.4             | CUSTOMER INFORMATION SERVICES                                        | 25-R2.5  | 1,514,067.26      | 629,031     | 885,036       | 62,387         | 4.12        | 14.2        |
|                   | TOTAL ACCOUNT 387                                                    |          | 1,647,918.32      | 703,588     | 944,330       | 66,109         | 4.01        |             |
|                   | TOTAL DISTRIBUTION PLANT                                             |          | 1,694,695,991.01  | 353,359,292 | 1,341,336,699 | 39,139,635     | 2.31        |             |
| GENERAL PLANT     |                                                                      |          |                   |             |               |                |             |             |
| 390.1             | STRUCTURES AND IMPROVEMENTS - COMMUNICATIONS                         | 40-R2.5  | 49,821.42         | 48,010      | 1,811         | 123            | 0.25        | 14.7        |
|                   | OFFICE FURNITURE AND EQUIPMENT                                       |          |                   |             |               |                |             |             |
| 391.1             | FURNITURE                                                            | 20-SQ    | 1,808,378.38      | 1,571,681   | 236,697       | 60,180         | 3.33        | 3.9         |
| 391.11            | EQUIPMENT                                                            | 15-SQ    | 24,427.00         | 9,704       | 14,723        | 1,402          | 5.74        | 10.5        |
| 391.12            | INFORMATION SYSTEMS                                                  | 5-SQ     | 1,911,084.06      | 1,748,694   | 162,390       | 162,390        | 8.50        | 1.0         |
|                   | TOTAL ACCOUNT 391                                                    |          | 3,743,889.44      | 3,330,079   | 413,810       | 223,972        | 5.98        |             |
| 392               | TRANSPORTATION EQUIPMENT - TRAILERS                                  | 15-SQ    | 150,051.45        | 127,624     | 22,427        | 3,383          | 2.25        | 6.6         |
| 393               | STORES EQUIPMENT                                                     | 20-SQ    | 16,674.52         | 16,042      | 633           | 253            | 1.52        | 2.5         |
|                   | TOOLS, SHOP AND GARAGE EQUIPMENT                                     |          |                   |             |               |                |             |             |
| 394               | EQUIPMENT                                                            | 25-SQ    | 13,153,747.55     | 5,282,123   | 7,871,625     | 501,747        | 3.81        | 15.7        |
| 394.12            | CNG FACILITIES                                                       | 12-S1.5  | 1,953,497.84      | 1,953,286   | 212           | 91             | 0.00        | 2.3         |
|                   | TOTAL ACCOUNT 394                                                    |          | 15,107,245.39     | 7,235,409   | 7,871,837     | 501,838        | 3.32        |             |

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, 2015

| DEPRECIABLE GROUP |                                      | SURVIVOR | ORIGINAL COST     | BOOK        | FUTURE        | CALCULATED     |             | COMPOSITE   |
|-------------------|--------------------------------------|----------|-------------------|-------------|---------------|----------------|-------------|-------------|
|                   |                                      | CURVE    | AS OF             | RESERVE     | BOOK          | ANNUAL ACCRUAL |             | REMAINING   |
| (1)               |                                      | (2)      | DECEMBER 31, 2015 | (4)         | ACCURALS      | AMOUNT         | RATE        | LIFE        |
|                   |                                      |          | (3)               |             | (5)           | (6)            | (7)=(6)/(3) | (8)=(5)/(6) |
| 395               | LABORATORY EQUIPMENT                 | 20-SQ    | 50,660.92         | 31,973      | 18,688        | 3,005          | 5.93        | 6.2         |
| 396               | POWER OPERATED EQUIPMENT             | 12-L3    | 1,725,639.17      | 1,633,874   | 91,765        | 29,226         | 1.69        | 3.1         |
|                   | COMMUNICATION EQUIPMENT              |          |                   |             |               |                |             |             |
| 397.1             | TELEPHONE                            | 10-SQ    | 180,430.82        | 145,369     | 35,062        | 27,246         | 15.10       | 1.3         |
| 397.24            | RADIO                                | 15-SQ    | 57,368.41         | 15,110      | 42,258        | 10,741         | 18.72       | 3.9         |
| 397.5             | TELEMETERING                         | 17-R3    | 864,588.87        | 723,228     | 141,361       | 31,131         | 3.60        | 4.5         |
|                   | TOTAL ACCOUNT 397                    |          | 1,102,388.10      | 883,707     | 218,681       | 69,118         | 6.27        |             |
| 398               | MISCELLANEOUS EQUIPMENT              | 15-SQ    | 558,455.08        | 158,470     | 399,985       | 42,005         | 7.52        | 9.5         |
|                   | TOTAL GENERAL PLANT                  |          | 22,504,825.49     | 13,465,188  | 9,039,637     | 872,923        | 3.88        |             |
|                   | SUBTOTAL DEPRECIABLE PLANT           |          | 1,722,641,449.52  | 369,805,481 | 1,352,835,969 | 40,148,626     | 2.33        |             |
|                   | AMORTIZABLE PLANT                    |          |                   |             |               |                |             |             |
| 303               | INTANGIBLE PLANT                     |          | 16,904,303.85     | 6,749,819   | 10,154,485    | 2,297,348      | **          |             |
| 305               | STRUCTURES AND IMPROVEMENTS          |          |                   | (3,413)     |               |                |             |             |
| 362               | GAS HOLDERS                          |          |                   | (1,198)     |               |                |             |             |
| 362.1             | ENVIRONMENTAL REMEDIATION            |          |                   | (264,656)   |               |                |             |             |
| 374.2             | LAND, OTHER DISTRIBUTION SYSTEMS     |          | 479,552.22        | 22,821      |               |                |             |             |
| 375.71            | STRUCTURES AND IMPROVEMENTS - LEASED |          | 1,148,423.29      | 1,059,469   | 88,954        | 9,410          | **          |             |
| 389.2             | LAND AND LAND RIGHTS - LAND RIGHTS   |          |                   | 39          |               |                |             |             |
|                   | SUBTOTAL AMORTIZABLE PLANT           |          | 18,532,279.36     | 7,562,881   | 10,243,439    | 2,306,758      |             |             |
|                   | NONDEPRECIABLE PLANT                 |          | 172,413.08        |             |               |                |             |             |
|                   | TOTAL GAS PLANT                      |          | 1,741,346,141.96  | 377,368,362 | 1,363,079,408 | 42,455,384     |             |             |

\* 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, Attachment A.

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

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

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

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

Response:

See Exhibit No. 10, Schedule No. 3.

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

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

Response:

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

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

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

Response:

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

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

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

Response:

See Exhibit No. 10, Schedule No 5.

COLUMBIA GAS OF PENNSYLVANIA, INC.

53.53 IV. RATE STRUCTURE

B. GAS UTILITIES

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

Response:

See Exhibit No. 010, Schedule No. 6 (13).



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

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

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

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

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

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

COLUMBIA GAS OF PENNSYLVANIA, INC.  
53.62

Weather Normalization Adjustment

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

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

COLUMBIA GAS OF PENNSYLVANIA, INC.  
ESTIMATED NUMBER OF BILLS AND NORMALIZED SALES VOLUMES  
TWELVE MONTHS ENDING November 30, 2015  
53.62

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

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

COLUMBIA GAS OF PENNSYLVANIA, INC.  
FUTURE TEST YEAR SALES FORECAST  
TWELVE MONTHS ENDING NOVEMBER 30, 2015  
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. 7.

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

Response: See Exhibit Nos. 111, Schedule No. 4 and Statement No. 7.

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

Response: See Exhibit No. 111, Schedule No. 1, Pages 14 through 18.

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). (Lai)

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

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

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. (Balmert)

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

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

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

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

DOCKET NO.: R-2015-2468056  
WITNESS: B. E. ELLIOTT  
STUDY TYPE: CUSTOMER/DEMAND  
FORECASTED TEST YEAR: DECEMBER 31, 2016  
111, SCHEDULE 1

| <u>PAGE</u> | <u>DESCRIPTION</u>                                    |
|-------------|-------------------------------------------------------|
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| 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                                    |
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| 14-16       | SYSTEM CHARGE - INCLUDING CUSTOMER COMPONENT OF MAINS |
| 17-18       | SYSTEM CHARGE - EXCLUDING CUSTOMER COMPONENT OF MAINS |

DATE: 12-Mar-15  
TIME: 01:09:00 PM



COLUMBIA GAS OF PENNSYLVANIA, INC  
RATE OF RETURN BY CLASS - PROFORMA @ PROPOSED RATES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1  
PAGE 1 OF 18  
WITNESS: B. E. ELLIOTT

| LINE<br>NO. | ACCOUNT TITLE<br>(A)                           | ALLOC<br>FACTOR<br>(B) | TOTAL<br>COMPANY<br>(C)<br>\$ | RSS/RDS<br>(D)<br>\$ | SGSS/SCD/SGDS<br>(E)<br>\$ | N/A<br>(F)<br>\$ | SDS/LGSS<br>(G)<br>\$ | LDS/LGSS<br>(H)<br>\$ | MLDS<br>(I)<br>\$ |
|-------------|------------------------------------------------|------------------------|-------------------------------|----------------------|----------------------------|------------------|-----------------------|-----------------------|-------------------|
| 1           | TOTAL REVENUE [PAGE 6]                         |                        | 581,070,377                   | 423,134,165          | 116,562,496                | -                | 20,604,917            | 19,027,947            | 1,740,853         |
| 2           | PRODUCTS PURCHASED [PAGE 7]                    |                        | 190,479,760                   | 133,198,003          | 51,541,083                 | -                | 4,656,534             | 812,004               | 272,136           |
| 3           | OPERATING & MAINTENANCE EXPENSES [PAGES 7 & 8] |                        | 177,902,792                   | 150,089,692          | 20,380,475                 | -                | 3,813,040             | 3,597,592             | 21,994            |
| 4           | DEPRECIATION & AMORTIZATION [PAGE 5]           |                        | 54,751,328                    | 43,766,669           | 7,922,016                  | -                | 1,571,627             | 1,469,746             | 21,271            |
| 5           | TAXES OTHER THAN INCOME [PAGE 9]               |                        | 3,221,085                     | 2,596,101            | 450,426                    | -                | 89,224                | 84,867                | 467               |
| 6           | TOTAL EXPENSES & TAXES OTHER THAN INCOME       |                        | 426,354,965                   | 329,650,465          | 80,294,000                 | -                | 10,130,424            | 5,964,208             | 315,867           |
| 7           | OPERATING INCOME BEFORE TAXES                  |                        | 154,715,412                   | 93,483,700           | 36,268,496                 | -                | 10,474,493            | 13,063,738            | 1,424,985         |
| 8           | INCOME TAXES                                   |                        | 47,210,745                    | 25,387,380           | 12,502,657                 | -                | 3,814,646             | 4,919,510             | 586,552           |
| 9           | INVESTMENT TAX CREDIT                          | 12                     | (360,240)                     | (286,034)            | (52,793)                   | -                | (11,002)              | (10,292)              | (119)             |
| 10          | NET INCOME TAXES                               |                        | 46,850,505                    | 25,101,346           | 12,449,863                 | -                | 3,803,644             | 4,909,218             | 586,433           |
| 11          | OPERATING INCOME                               |                        | 107,864,907                   | 68,382,353           | 23,818,633                 | -                | 6,670,848             | 8,154,520             | 838,552           |
| 12          | RATE BASE [PAGE 10]                            |                        | 1,325,130,928                 | 1,045,741,140        | 200,601,683                | -                | 40,993,507            | 37,412,608            | 381,990           |
| 13          | RATE OF RETURN EARNED ON RATE BASE             |                        | 8.140%                        | 6.539%               | 11.874%                    | 0.000%           | 16.273%               | 21.796%               | 219.522%          |
| 14          | UNITIZED RETURN                                |                        | 1.00                          | 0.80                 | 1.46                       | 0.00             | 2.00                  | 2.68                  | 26.97             |

COLUMBIA GAS OF PENNSYLVANIA, INC  
RATE OF RETURN BY CLASS - CURRENT @ CURRENT RATES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1  
PAGE 2 OF 18  
WITNESS: B. E. ELLIOTT

| LINE<br>NO. | ACCOUNT TITLE<br>(A)                           | ALLOC<br>FACTOR<br>(B) | TOTAL<br>COMPANY<br>(C)<br>\$ | RSS/RDS<br>(D)<br>\$ | SGSS/SCD/SGDS<br>(E)<br>\$ | N/A<br>(F)<br>\$ | SDS/LGSS<br>(G)<br>\$ | LDS/LGSS<br>(H)<br>\$ | MLDS<br>(I)<br>\$ |
|-------------|------------------------------------------------|------------------------|-------------------------------|----------------------|----------------------------|------------------|-----------------------|-----------------------|-------------------|
| 1           | TOTAL REVENUE [PAGE 6]                         |                        | 534,899,150                   | 387,295,059          | 110,405,692                | -                | 18,820,324            | 16,637,557            | 1,740,519         |
| 2           | PRODUCTS PURCHASED [PAGE 7]                    |                        | 190,479,760                   | 133,198,003          | 51,541,083                 | -                | 4,656,534             | 812,004               | 272,136           |
| 3           | OPERATING & MAINTENANCE EXPENSES [PAGES 7 & 8] |                        | 177,299,816                   | 149,621,649          | 20,300,070                 | -                | 3,789,734             | 3,566,374             | 21,990            |
| 4           | DEPRECIATION & AMORTIZATION [PAGE 5]           |                        | 54,751,328                    | 43,766,669           | 7,922,016                  | -                | 1,571,627             | 1,469,746             | 21,271            |
| 5           | TAXES OTHER THAN INCOME [PAGE 9]               |                        | 3,221,085                     | 2,596,101            | 450,426                    | -                | 89,224                | 84,867                | 467               |
| 6           | TOTAL EXPENSES & TAXES OTHER THAN INCOME       |                        | 425,751,989                   | 329,182,422          | 80,213,594                 | -                | 10,107,118            | 5,932,991             | 315,863           |
| 7           | OPERATING INCOME BEFORE TAXES                  |                        | 109,147,161                   | 58,112,637           | 30,192,097                 | -                | 8,713,205             | 10,704,566            | 1,424,656         |
| 8           | INCOME TAXES [PAGE 11]                         |                        | 29,190,575                    | 11,399,735           | 10,099,717                 | -                | 3,118,137             | 3,986,565             | 586,421           |
| 9           | INVESTMENT TAX CREDIT                          | 12                     | (360,240)                     | (286,034)            | (52,793)                   | -                | (11,002)              | (10,292)              | (119)             |
| 10          | NET INCOME TAXES                               |                        | 28,830,335                    | 11,113,701           | 10,046,924                 | -                | 3,107,135             | 3,976,273             | 586,302           |
| 11          | OPERATING INCOME                               |                        | 80,316,826                    | 46,998,937           | 20,145,173                 | -                | 5,606,070             | 6,728,293             | 838,353           |
| 12          | RATE BASE [PAGE 10]                            |                        | 1,325,130,928                 | 1,045,741,140        | 200,601,683                | -                | 40,993,507            | 37,412,608            | 381,990           |
| 13          | RATE OF RETURN EARNED ON RATE BASE             |                        | 6.061%                        | 4.494%               | 10.042%                    | 0.000%           | 13.676%               | 17.984%               | 219.470%          |
| 14          | UNITIZED RETURN                                |                        | 1.00                          | 0.74                 | 1.66                       | 0.00             | 2.26                  | 2.97                  | 36.21             |

COLUMBIA GAS OF PENNSYLVANIA, INC  
GROSS PLANT (Accounts 101 & 106)  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1  
PAGE 3 OF 18  
WITNESS: B. E. ELLIOTT

| LINE NO. | ACCT. NO.<br>(A) | ACCOUNT TITLE<br>(B)                       | ALLOC FACTOR<br>(C) | TOTAL COMPANY<br>(D)<br>\$ | RSS/RDS<br>(E)<br>\$ | SGSS/SCD/SGDS<br>(F)<br>\$ | N/A<br>(G)<br>\$ | SDS/LGSS<br>(H)<br>\$ | LDS/LGSS<br>(I)<br>\$ | MLDS<br>(J)<br>\$ |
|----------|------------------|--------------------------------------------|---------------------|----------------------------|----------------------|----------------------------|------------------|-----------------------|-----------------------|-------------------|
| 1        | 301-305          | INTANGIBLE PLANT                           | 11                  | 25,650,455                 | 20,372,105           | 3,751,123                  | -                | 784,391               | 734,886               | 7,952             |
| 2        | 350-362          | UNDERGROUND STORAGE PLANT                  | 25                  | 6,188,872                  | 4,536,505            | 1,507,981                  | -                | 115,546               | 20,176                | 8,664             |
|          |                  | <u>DISTRIBUTION PLANT</u>                  |                     |                            |                      |                            |                  |                       |                       |                   |
| 3        | 374.10           | LAND - CITY GATE & M/L IND M&R             | 20                  | 21,944                     | 16,610               | 3,581                      | -                | 903                   | 850                   | -                 |
| 4        | 374.20           | LAND - OTHER DISTRIBUTION                  | 20                  | 680,675                    | 515,230              | 111,073                    | -                | 27,996                | 26,376                | -                 |
| 5        | 374.30           | LAND RIGHTS - CITY GATE MAIN LINE          | 20                  | 95,361                     | 72,183               | 15,561                     | -                | 3,922                 | 3,695                 | -                 |
| 6        | 374.40           | LAND RIGHTS - OTHER DISTRIBUTION           | 20                  | 2,128,780                  | 1,611,359            | 347,374                    | -                | 87,557                | 82,490                | -                 |
| 7        | 374.40           | DIRECT - LAND RIGHTS-OTHER DISTRIBUTION    |                     | 3                          | -                    | -                          | -                | -                     | -                     | 3                 |
| 8        | 374.41           | LAND RIGHTS - OTHER DISTRIBUTION LOC       | 20                  | 13                         | 10                   | 2                          | -                | -                     | 1                     | -                 |
| 9        | 374.50           | RIGHTS OF WAY                              | 20                  | 3,208,212                  | 2,428,424            | 523,516                    | -                | 131,954               | 124,318               | -                 |
| 10       | 374.50           | DIRECT - RIGHTS OF WAY                     |                     | 1,195                      | -                    | -                          | -                | -                     | -                     | 1,195             |
| 11       | 375.20           | M & R STRUCTURES - CITY GATE               | 20                  | 503,526                    | 381,139              | 82,165                     | -                | 20,710                | 19,512                | -                 |
| 12       | 375.31           | M & R STRUCTURES - LOCAL GAS PURCH         | 20                  | 4,012                      | 3,037                | 655                        | -                | 165                   | 156                   | -                 |
| 13       | 375.40           | M & R STRUCTURES - REGULATING              | 20                  | 3,330,552                  | 2,521,028            | 543,480                    | -                | 136,986               | 129,059               | -                 |
| 14       | 375.40           | DIRECT - M & R STRUCTURES - REGULATING     | 20                  | 27,227                     | -                    | -                          | -                | -                     | -                     | 27,227            |
| 15       | 375.60           | M & R STRUCTURES - DIST. IND. M & R        | 17                  | 87,670                     | (0)                  | 21,519                     | -                | 29,284                | 36,867                | -                 |
| 16       | 375.70           | M & R STRUCTURES - OTHER                   | 11                  | 9,396,038                  | 7,462,522            | 1,374,077                  | -                | 287,331               | 269,197               | 2,913             |
| 17       | 375.71           | M & R STRUCTURES - OTHER LEASED            | 11                  | 1,125,911                  | 894,221              | 164,653                    | -                | 34,430                | 32,257                | 349               |
| 18       | 375.80           | M & R STRUCTURES - COMMUNICATION           | 20                  | 16,515                     | 12,501               | 2,695                      | -                | 679                   | 640                   | -                 |
| 19       | 376.00           | MAINS                                      | 20                  | 1,152,690,445              | 872,517,505          | 188,096,027                | -                | 47,410,158            | 44,666,755            | -                 |
| 20       | 376.00           | DIRECT - MAINS - MDS                       |                     | 47,434                     | -                    | -                          | -                | -                     | -                     | 47,434            |
| 21       | 376.00           | DIRECT - MAINS - LDS                       |                     | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 22       | 376.08           | MAINS-CSL REPLACEMENTS                     | 20                  | 23,786,341                 | 18,004,833           | 3,881,455                  | -                | 978,332               | 921,721               | -                 |
| 23       | 376.30           | MAINS-BARE STEEL                           | 20                  | 70,471,162                 | 53,342,442           | 11,499,484                 | -                | 2,898,479             | 2,730,758             | -                 |
| 24       | 376.30           | DIRECT - MAINS-BARE STEEL                  |                     | 147,819                    | -                    | -                          | -                | -                     | -                     | 147,819           |
| 25       | 376.80           | MAINS-CAST IRON                            | 20                  | 570,601                    | 431,910              | 93,111                     | -                | 23,469                | 22,111                | -                 |
| 26       | 378.10           | M & R EQUIP - GENERAL                      | 20                  | 56,453                     | 42,732               | 9,212                      | -                | 2,322                 | 2,188                 | -                 |
| 27       | 378.20           | M & R EQUIP - GENERAL - REGULATING         | 20                  | 39,630,043                 | 29,997,565           | 6,466,831                  | -                | 1,629,984             | 1,535,664             | -                 |
| 28       | 378.20           | DIRECT - M & R EQUIP-GEN-REG               |                     | 1,178                      | -                    | -                          | -                | -                     | -                     | 1,178             |
| 29       | 378.30           | M & R EQUIP - LOCAL GAS PURCHASES          | 20                  | 457,281                    | 346,135              | 74,619                     | -                | 18,808                | 17,720                | -                 |
| 30       | 379.10           | M & R EQUIP - CITY GATE                    | 20                  | 141,567                    | 107,158              | 23,101                     | -                | 5,823                 | 5,486                 | -                 |
| 31       | 379.11           | M & R EQUIP - EXCHANGE GAS                 | 20                  | (450)                      | (341)                | (73)                       | -                | (19)                  | (17)                  | -                 |
| 32       | 380.00           | SERVICES                                   | 15                  | 454,989,419                | 418,394,620          | 35,662,071                 | -                | 709,784               | 222,945               | -                 |
| 33       | 380.00           | DIRECT - SERVICES                          |                     | 37,630                     | -                    | -                          | -                | -                     | -                     | 37,630            |
| 34       | 380.12           | CSL REPLACEMENT                            | 15                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 35       | 381.00           | METERS                                     | 16                  | 36,181,256                 | 27,027,036           | 8,726,557                  | -                | 322,013               | 99,860                | 5,789             |
| 36       | 381.10           | AUTOMATIC METER READING                    | 16                  | 23,761,067                 | 17,749,280           | 5,730,932                  | -                | 211,474               | 65,581                | 3,802             |
| 37       | 382.00           | METER INSTALLATIONS                        | 16                  | 36,486,290                 | 27,254,893           | 8,800,128                  | -                | 324,728               | 100,702               | 5,838             |
| 38       | 383.00           | HOUSE REGULATORS                           | 26                  | 11,597,152                 | 10,516,762           | 1,053,021                  | -                | 22,499                | 4,871                 | -                 |
| 39       | 384.00           | HOUSE REG INSTALLATIONS                    | 26                  | 3,864,772                  | 3,504,730            | 350,921                    | -                | 7,498                 | 1,623                 | -                 |
| 40       | 385.00           | IND M&R EQUIPMENT                          | 17                  | 5,504,725                  | -                    | 1,351,135                  | -                | 1,838,743             | 2,314,847             | -                 |
| 41       | 385.00           | DIRECT - IND M&R EQUIPMENT                 |                     | 299,289                    | -                    | -                          | -                | -                     | -                     | 299,289           |
| 42       | 385.10           | IND M&R EQUIPMENT - LG VOLUME              | 17                  | 1,189,992                  | -                    | 292,084                    | -                | 397,493               | 500,415               | -                 |
| 43       | 387.10           | OTHER EQUIP DISTRIBUTION                   | 11                  | 16,603                     | 13,187               | 2,428                      | -                | 508                   | 476                   | 5                 |
| 44       | 387.20           | OTHER EQUIP ODORIZATION                    | 11                  | 117,248                    | 93,121               | 17,146                     | -                | 3,585                 | 3,359                 | 36                |
| 45       | 387.42           | OTHER EQUIP RADIO                          | 11                  | 121,945                    | 96,851               | 17,833                     | -                | 3,729                 | 3,494                 | 38                |
| 46       | 387.44           | OTHER EQUIP COMMUNICATION                  | 11                  | 656,004                    | 521,012              | 95,934                     | -                | 20,061                | 18,795                | 203               |
| 47       | 387.46           | OTHER EQUIP CUSTOMER INFO SERVICE          | 11                  | 2,297,341                  | 1,824,594            | 335,963                    | -                | 70,253                | 65,819                | 712               |
| 48       | 387.45           | DIRECT - OTHER EQUIP CUSTOMER INFO SERVICE | 11                  | 38,438                     | -                    | -                          | -                | -                     | -                     | 38,438            |
| 49       |                  | TOTAL DISTRIBUTION PLANT                   |                     | 1,885,786,679              | 1,497,704,287        | 275,770,269                | -                | 57,661,638            | 54,030,586            | 619,899           |
| 50       | 389-398          | GENERAL PLANT                              | 11                  | 27,403,480                 | 21,764,392           | 4,007,485                  | -                | 837,998               | 785,110               | 8,495             |
| 51       |                  | TOTAL GROSS PLANT                          |                     | 1,945,029,486              | 1,544,377,288        | 285,036,857                | -                | 59,399,574            | 55,570,757            | 645,010           |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
DEPRECIATION RESERVE  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1

PAGE 4 OF 18

WITNESS: B. E. ELLIOTT

| 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>\$ | SGSS/SCD/SGDS<br>(F)<br>\$ | N/A<br>(G)<br>\$ | SDS/LGSS<br>(H)<br>\$ | LDS/LGSS<br>(I)<br>\$ | MLDS<br>(J)<br>\$ |
|---------------------------|----------------------------|--------------------------------------------|------------------------|-------------------------------|----------------------|----------------------------|------------------|-----------------------|-----------------------|-------------------|
| 1                         | 301-305                    | INTANGIBLE PLANT                           | 11                     | 9,438,648                     | 7,496,363            | 1,380,308                  | -                | 288,634               | 270,417               | 2,926             |
| 2                         | 350-362                    | UNDERGROUND STORAGE PLANT                  | 25                     | 2,472,747                     | 1,812,548            | 602,510                    | -                | 46,166                | 8,061                 | 3,462             |
| <u>DISTRIBUTION PLANT</u> |                            |                                            |                        |                               |                      |                            |                  |                       |                       |                   |
| 3                         | 374.10                     | LAND - CITY GATE & M/L IND M&R             | 20                     | -                             | -                    | -                          | -                | -                     | -                     | -                 |
| 4                         | 374.20                     | LAND - OTHER DISTRIBUTION                  | 20                     | 235,240                       | 178,083              | 38,387                     | -                | 9,675                 | 9,116                 | -                 |
| 5                         | 374.30                     | LAND RIGHTS - CITY GATE MAIN LINE          | 20                     | -                             | -                    | -                          | -                | -                     | -                     | -                 |
| 6                         | 374.40                     | LAND RIGHTS - OTHER DISTRIBUTION           | 20                     | 681,964                       | 516,206              | 111,283                    | -                | 28,049                | 26,426                | -                 |
| 7                         | 374.40                     | DIRECT - LAND RIGHTS-OTHER DISTRIBUTION    | -                      | 1                             | -                    | -                          | -                | -                     | -                     | 1                 |
| 8                         | 374.41                     | LAND RIGHTS - OTHER DISTRIBUTION LOC       | 20                     | -                             | -                    | -                          | -                | -                     | -                     | -                 |
| 9                         | 374.50                     | RIGHTS OF WAY                              | 20                     | 1,601,194                     | 1,212,008            | 261,283                    | -                | 65,857                | 62,046                | -                 |
| 10                        | 374.50                     | DIRECT - RIGHTS OF WAY                     | -                      | 707                           | -                    | -                          | -                | -                     | -                     | 707               |
| 11                        | 375.20                     | M & R STRUCTURES - CITY GATE               | 20                     | -                             | -                    | -                          | -                | -                     | -                     | -                 |
| 12                        | 375.31                     | M & R STRUCTURES - LOCAL GAS PURCH         | 20                     | -                             | -                    | -                          | -                | -                     | -                     | -                 |
| 13                        | 375.40                     | M & R STRUCTURES - REGULATING              | 20                     | 881,823                       | 667,487              | 143,896                    | -                | 36,269                | 34,171                | -                 |
| 14                        | 375.40                     | DIRECT - M & R STRUCTURES - REGULATING     | 20                     | 1,222                         | -                    | -                          | -                | -                     | -                     | 1,222             |
| 15                        | 375.60                     | M & R STRUCTURES - DIST. IND. M & R        | 17                     | 73,869                        | -                    | 18,131                     | -                | 24,675                | 31,063                | -                 |
| 16                        | 375.70                     | M & R STRUCTURES - OTHER                   | 11                     | 2,031,701                     | 1,613,618            | 297,116                    | -                | 62,129                | 58,208                | 630               |
| 17                        | 375.71                     | M & R STRUCTURES - OTHER LEASED            | 11                     | 1,125,911                     | 894,221              | 164,653                    | -                | 34,430                | 32,257                | 349               |
| 18                        | 375.80                     | M & R STRUCTURES - COMMUNICATION           | 20                     | 6,540                         | 4,950                | 1,067                      | -                | 269                   | 253                   | -                 |
| 19                        | 376.00                     | MAINS                                      | 20                     | 145,631,838                   | 110,234,563          | 23,764,203                 | -                | 5,989,838             | 5,643,234             | -                 |
| 20                        | 376.00                     | DIRECT - MAINS - MDS                       | -                      | 19,707                        | -                    | -                          | -                | -                     | -                     | 19,707            |
| 21                        | 376.00                     | DIRECT - MAINS - LDS                       | -                      | -                             | -                    | -                          | -                | -                     | -                     | -                 |
| 22                        | 376.08                     | MAINS-CSL REPLACEMENTS                     | 20                     | -                             | -                    | -                          | -                | -                     | -                     | -                 |
| 23                        | 376.30                     | MAINS-BARE STEEL                           | 20                     | 39,288,673                    | 29,739,169           | 6,411,126                  | -                | 1,615,943             | 1,522,436             | -                 |
| 24                        | 376.30                     | DIRECT - MAINS-BARE STEEL                  | -                      | 119,815                       | -                    | -                          | -                | -                     | -                     | 119,815           |
| 25                        | 376.80                     | MAINS-CAST IRON                            | 20                     | 342,363                       | 259,148              | 55,867                     | -                | 14,081                | 13,267                | -                 |
| 26                        | 378.10                     | M & R EQUIP - GENERAL                      | 20                     | -                             | -                    | -                          | -                | -                     | -                     | -                 |
| 27                        | 378.20                     | M & R EQUIP - GENERAL - REGULATING         | 20                     | 9,897,091                     | 7,491,504            | 1,615,007                  | -                | 407,067               | 383,512               | -                 |
| 28                        | 378.20                     | DIRECT - M & R EQUIP-GEN-REG               | -                      | 720                           | -                    | -                          | -                | -                     | -                     | 720               |
| 29                        | 378.30                     | M & R EQUIP - LOCAL GAS PURCHASES          | 20                     | -                             | -                    | -                          | -                | -                     | -                     | -                 |
| 30                        | 379.10                     | M & R EQUIP - CITY GATE                    | 20                     | 94,150                        | 71,266               | 15,363                     | -                | 3,872                 | 3,648                 | -                 |
| 31                        | 379.11                     | M & R EQUIP - EXCHANGE GAS                 | 20                     | -                             | -                    | -                          | -                | -                     | -                     | -                 |
| 32                        | 380.00                     | SERVICES                                   | 15                     | 113,033,696                   | 103,942,399          | 8,859,581                  | -                | 176,333               | 55,387                | -                 |
| 33                        | 380.00                     | DIRECT - SERVICES                          | -                      | 23,465                        | -                    | -                          | -                | -                     | -                     | 23,465            |
| 34                        | 380.12                     | CSL REPLACEMENT                            | 15                     | -                             | -                    | -                          | -                | -                     | -                     | -                 |
| 35                        | 381.00                     | METERS                                     | 16                     | 15,981,682                    | 11,938,157           | 3,854,622                  | -                | 142,237               | 44,109                | 2,557             |
| 36                        | 381.10                     | AUTOMATIC METER READING                    | 16                     | 8,698,873                     | 6,498,046            | 2,098,105                  | -                | 77,421                | 24,009                | 1,392             |
| 37                        | 382.00                     | METER INSTALLATIONS                        | 16                     | 11,922,861                    | 8,908,258            | 2,875,675                  | -                | 106,114               | 32,907                | 1,908             |
| 38                        | 383.00                     | HOUSE REGULATORS                           | 26                     | 3,551,101                     | 3,220,280            | 322,440                    | -                | 6,889                 | 1,492                 | -                 |
| 39                        | 384.00                     | HOUSE REG INSTALLATIONS                    | 26                     | 2,978,927                     | 2,701,410            | 270,487                    | -                | 5,779                 | 1,251                 | -                 |
| 40                        | 385.00                     | IND M&R EQUIPMENT                          | 17                     | 3,252,946                     | 0                    | 798,436                    | -                | 1,088,581             | 1,367,929             | -                 |
| 41                        | 385.00                     | DIRECT - IND M&R EQUIPMENT                 | -                      | 69,254                        | -                    | -                          | -                | -                     | -                     | 69,254            |
| 42                        | 385.10                     | IND M&R EQUIPMENT - LG VOLUME              | 17                     | -                             | -                    | -                          | -                | -                     | -                     | -                 |
| 43                        | 387.10                     | OTHER EQUIP DISTRIBUTION                   | 11                     | -                             | -                    | -                          | -                | -                     | -                     | -                 |
| 44                        | 387.20                     | OTHER EQUIP ODORIZATION                    | 11                     | -                             | -                    | -                          | -                | -                     | -                     | -                 |
| 45                        | 387.42                     | OTHER EQUIP RADIO                          | 11                     | -                             | -                    | -                          | -                | -                     | -                     | -                 |
| 46                        | 387.44                     | OTHER EQUIP COMMUNICATION                  | 11                     | -                             | -                    | -                          | -                | -                     | -                     | -                 |
| 47                        | 387.46                     | OTHER EQUIP CUSTOMER INFO SERVICE          | 11                     | 930,202                       | 738,785              | 136,033                    | -                | 28,446                | 26,650                | 288               |
| 48                        | 387.45                     | DIRECT - OTHER EQUIP CUSTOMER INFO SERVICE | 11                     | 919                           | -                    | -                          | -                | -                     | -                     | 919               |
| 49                        | TOTAL DISTRIBUTION PLANT   |                                            |                        | 362,478,558                   | 290,827,537          | 52,112,760                 | -                | 9,921,955             | 9,373,372             | 242,934           |
| 50                        | 389-398                    | GENERAL PLANT                              | 11                     | 12,347,815                    | 9,808,882            | 1,805,745                  | -                | 377,596               | 353,765               | 3,828             |
| 51                        | TOTAL DEPRECIATION RESERVE |                                            |                        | 386,737,768                   | 309,943,330          | 55,901,322                 | -                | 10,634,352            | 10,005,615            | 253,149           |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
DEPRECIATION AND AMORTIZATION EXPENSE  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1  
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WITNESS: B. E. ELLIOTT

| 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>\$ | SGSS/SCD/SGDS<br>(F)<br>\$ | N/A<br>(G)<br>\$ | SDS/LGSS<br>(H)<br>\$ | LDS/LGSS<br>(I)<br>\$ | MLDS<br>(J)<br>\$ |
|-------------|---------------------|---------------------------------------------|------------------------|-------------------------------|----------------------|----------------------------|------------------|-----------------------|-----------------------|-------------------|
| 1           | 301-305             | INTANGIBLE PLANT                            | 11                     | 3,857,309                     | 3,063,552            | 564,093                    | -                | 117,957               | 110,512               | 1,196             |
| 2           | 350-362             | UNDERGROUND STORAGE PLANT                   | 25                     | 164,852                       | 120,838              | 40,168                     | -                | 3,078                 | 537                   | 231               |
|             |                     | <u>DISTRIBUTION PLANT</u>                   |                        |                               |                      |                            |                  |                       |                       |                   |
| 3           | 374.10              | LAND - CITY GATE & M/L IND M&R              | 20                     | -                             | -                    | -                          | -                | -                     | -                     | -                 |
| 4           | 374.20              | LAND - OTHER DISTRIBUTION                   | 20                     | -                             | -                    | -                          | -                | -                     | -                     | -                 |
| 5           | 374.30              | LAND RIGHTS - CITY GATE MAIN LINE           | 20                     | -                             | -                    | -                          | -                | -                     | -                     | -                 |
| 6           | 374.40              | LAND RIGHTS - OTHER DISTRIBUTION            | 20                     | 40,965                        | 31,008               | 6,685                      | -                | 1,685                 | 1,587                 | -                 |
| 7           | 374.40              | DIRECT - LAND RIGHTS-OTHER DISTRIBUTION     | 20                     | 0                             | -                    | -                          | -                | -                     | -                     | 0                 |
| 8           | 374.41              | LAND RIGHTS - OTHER DISTRIBUTION LOC        | 20                     | -                             | -                    | -                          | -                | -                     | -                     | -                 |
| 9           | 374.50              | RIGHTS OF WAY                               | 20                     | 42,143                        | 31,900               | 6,877                      | -                | 1,733                 | 1,633                 | -                 |
| 10          | 374.50              | DIRECT - RIGHTS OF WAY                      | 20                     | 16                            | -                    | -                          | -                | -                     | -                     | 16                |
| 11          | 375.20              | M & R STRUCTURES - CITY GATE                | 20                     | -                             | -                    | -                          | -                | -                     | -                     | -                 |
| 12          | 375.31              | M & R STRUCTURES - LOCAL GAS PURCH          | 20                     | -                             | -                    | -                          | -                | -                     | -                     | -                 |
| 13          | 375.40              | M & R STRUCTURES - REGULATING               | 20                     | 85,147                        | 64,451               | 13,894                     | -                | 3,502                 | 3,300                 | -                 |
| 14          | 375.40              | DIRECT - M & R STRUCTURES - REGULATING      | 20                     | 415                           | -                    | -                          | -                | -                     | -                     | 415               |
| 15          | 375.60              | M & R STRUCTURES - DIST IND. M & R          | 17                     | 850                           | 0                    | 209                        | -                | 284                   | 357                   | -                 |
| 16          | 375.70              | M & R STRUCTURES - OTHER                    | 11                     | 450,305                       | 357,641              | 65,853                     | -                | 13,770                | 12,901                | 140               |
| 17          | 375.71              | M & R STRUCTURES - OTHER LEASED             | 11                     | -                             | -                    | -                          | -                | -                     | -                     | -                 |
| 18          | 375.80              | M & R STRUCTURES - COMMUNICATION            | 20                     | 331                           | 251                  | 54                         | -                | 14                    | 13                    | -                 |
| 19          | 376.00              | MAINS                                       | 20                     | 23,803,903                    | 18,018,127           | 3,884,321                  | -                | 979,055               | 922,401               | -                 |
| 20          | 376.00              | DIRECT - MAINS - MDS                        | 20                     | 859                           | -                    | -                          | -                | -                     | -                     | 859               |
| 21          | 376.00              | DIRECT - MAINS - LDS                        | 20                     | -                             | -                    | -                          | -                | -                     | -                     | -                 |
| 22          | 376.08              | MAINS-CSL REPLACEMENTS                      | 20                     | -                             | -                    | -                          | -                | -                     | -                     | -                 |
| 23          | 376.30              | MAINS-BARE STEEL                            | 20                     | 1,849,518                     | 1,399,974            | 301,804                    | -                | 76,071                | 71,669                | -                 |
| 24          | 376.30              | DIRECT - MAINS-BARE STEEL                   | 20                     | 3,556                         | -                    | -                          | -                | -                     | -                     | 3,556             |
| 25          | 376.80              | MAINS-CAST IRON                             | 20                     | 14,809                        | 11,210               | 2,417                      | -                | 609                   | 574                   | -                 |
| 26          | 378.10              | M & R EQUIP - GENERAL                       | 20                     | -                             | -                    | -                          | -                | -                     | -                     | -                 |
| 27          | 378.20              | M & R EQUIP - GENERAL - REGULATING          | 20                     | 1,247,152                     | 944,019              | 203,510                    | -                | 51,295                | 48,327                | -                 |
| 28          | 378.20              | DIRECT - M & R EQUIP-GEN-REG                | 20                     | 27                            | -                    | -                          | -                | -                     | -                     | 27                |
| 29          | 378.30              | M & R EQUIP - LOCAL GAS PURCHASES           | 20                     | -                             | -                    | -                          | -                | -                     | -                     | -                 |
| 30          | 379.10              | M & R EQUIP - CITY GATE                     | 20                     | 4,384                         | 3,318                | 715                        | -                | 180                   | 170                   | -                 |
| 31          | 379.11              | M & R EQUIP - EXCHANGE GAS                  | 20                     | -                             | -                    | -                          | -                | -                     | -                     | -                 |
| 32          | 380.00              | SERVICES                                    | 15                     | 12,923,606                    | 11,884,161           | 1,012,952                  | -                | 20,161                | 6,333                 | -                 |
| 33          | 380.00              | DIRECT - SERVICES                           | 15                     | 971                           | -                    | -                          | -                | -                     | -                     | 971               |
| 34          | 380.12              | CSL REPLACEMENT                             | 15                     | -                             | -                    | -                          | -                | -                     | -                     | -                 |
| 35          | 381.00              | METERS                                      | 16                     | 877,483                       | 655,471              | 211,640                    | -                | 7,810                 | 2,422                 | 140               |
| 36          | 381.10              | AUTOMATIC METER READING                     | 16                     | 1,748,019                     | 1,305,753            | 421,605                    | -                | 15,557                | 4,825                 | 280               |
| 37          | 382.00              | METER INSTALLATIONS                         | 16                     | 708,729                       | 529,414              | 170,938                    | -                | 6,308                 | 1,956                 | 113               |
| 38          | 383.00              | HOUSE REGULATORS                            | 26                     | 300,138                       | 272,177              | 27,253                     | -                | 582                   | 126                   | -                 |
| 39          | 384.00              | HOUSE REG INSTALLATIONS                     | 26                     | 66,436                        | 60,247               | 6,032                      | -                | 129                   | 28                    | -                 |
| 40          | 385.00              | IND M&R EQUIPMENT                           | 17                     | 235,982                       | -                    | 57,922                     | -                | 78,825                | 99,235                | -                 |
| 41          | 385.00              | DIRECT - IND M&R EQUIPMENT                  | 17                     | 10,475                        | -                    | -                          | -                | -                     | -                     | 10,475            |
| 42          | 385.10              | IND M&R EQUIPMENT - LG VOLUME               | 17                     | -                             | -                    | -                          | -                | -                     | -                     | -                 |
| 43          | 387.10              | OTHER EQUIP DISTRIBUTION                    | 11                     | -                             | -                    | -                          | -                | -                     | -                     | -                 |
| 44          | 387.20              | OTHER EQUIP ODORIZATION                     | 11                     | -                             | -                    | -                          | -                | -                     | -                     | -                 |
| 45          | 387.42              | OTHER EQUIP RADIO                           | 11                     | -                             | -                    | -                          | -                | -                     | -                     | -                 |
| 46          | 387.44              | OTHER EQUIP COMMUNICATION                   | 11                     | -                             | -                    | -                          | -                | -                     | -                     | -                 |
| 47          | 387.46              | OTHER EQUIP CUSTOMER INFO SERVICE           | 11                     | 143,937                       | 114,318              | 21,049                     | -                | 4,402                 | 4,124                 | 45                |
| 48          | 387.45              | DIRECT - OTHER EQUIP CUSTOMER INFO SERVICE  | 11                     | 896                           | -                    | -                          | -                | -                     | -                     | 896               |
| 49          |                     | TOTAL DISTRIBUTION PLANT                    |                        | 44,561,052                    | 35,683,439           | 6,415,730                  | -                | 1,261,971             | 1,181,980             | 17,932            |
| 50          | 389-398             | GENERAL PLANT                               | 11                     | 1,532,773                     | 1,217,359            | 224,153                    | -                | 46,872                | 43,914                | 475               |
| 51          |                     | NET DEPRECIATION & AMORTIZATION EXPENSE     |                        | 50,115,986                    | 40,085,188           | 7,244,143                  | -                | 1,429,878             | 1,336,943             | 19,834            |
| 52          |                     | AMORTIZATION OF NET NEGATIVE SALVAGE        | 11                     | 4,635,342                     | 3,681,481            | 677,872                    | -                | 141,749               | 132,803               | 1,437             |
| 53          |                     | TOTAL AMORTIZATION AND DEPRECIATION EXPENSE |                        | 54,751,328                    | 43,766,669           | 7,922,016                  | -                | 1,571,627             | 1,469,746             | 21,271            |

COLUMBIA GAS OF PENNSYLVANIA, INC  
OPERATING REVENUE @ PROPOSED & CURRENT RATES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1

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WITNESS: B. E. ELLIOTT

| LINE NO.                          | ACCT NO.<br>(A) | ACCOUNT TITLE<br>(B)             | ALLOC FACTOR<br>(C) | TOTAL COMPANY<br>(D)<br>\$ | RSS/RDS<br>(E)<br>\$ | SGSS/SCD/SGDS<br>(F)<br>\$ | N/A<br>(G)<br>\$ | SDS/LGSS<br>(H)<br>\$ | LDS/LGSS<br>(I)<br>\$ | MLDS<br>(J)<br>\$ |
|-----------------------------------|-----------------|----------------------------------|---------------------|----------------------------|----------------------|----------------------------|------------------|-----------------------|-----------------------|-------------------|
| <u>PROPOSED OPERATING REVENUE</u> |                 |                                  |                     |                            |                      |                            |                  |                       |                       |                   |
|                                   |                 | SALES REVENUE                    |                     |                            |                      |                            |                  |                       |                       |                   |
| 1                                 | 480/481         | SALES BASE REVENUE               |                     | 220,048,699                | 179,812,274          | 40,216,579                 | -                | -                     | -                     | 19,846            |
| 2                                 |                 | USP REVENUE                      |                     | 22,763,845                 | 22,763,845           | -                          | -                | -                     | -                     | -                 |
| 3                                 |                 | STAS REVENUE                     |                     | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 4                                 |                 | RIDER CC - CUSTOMER CHOICE       |                     | 32,410                     | 23,281               | 9,129                      | -                | -                     | -                     | -                 |
| 5                                 |                 | GAS PROCUREMENT REVENUE          |                     | 554,837                    | 386,459              | 151,534                    | -                | 14,343                | 2,501                 | -                 |
| 6                                 |                 | MERCHANT FUNCTION REVENUE        |                     | 1,752,694                  | 1,573,774            | 178,920                    | -                | -                     | -                     | -                 |
| 7                                 |                 | GAS COST REVENUE                 |                     | 182,223,258                | 127,287,819          | 49,194,765                 | -                | 4,656,534             | 812,004               | 272,136           |
| 8                                 |                 | TOTAL SALES REVENUE              |                     | 427,375,743                | 331,847,452          | 89,750,927                 | -                | 4,670,877             | 814,505               | 291,982           |
|                                   |                 | TRANSPORTATION REVENUE           |                     |                            |                      |                            |                  |                       |                       |                   |
| 9                                 | 489.00          | TRANSPORTATION BASE REVENUE      |                     | 129,330,933                | 75,456,244           | 23,591,082                 | -                | 15,616,576            | 14,471,682            | 195,349           |
| 10                                |                 | USP REVENUE                      |                     | 7,953,451                  | 7,953,451            | -                          | -                | -                     | -                     | -                 |
| 11                                |                 | STAS REVENUE                     |                     | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 12                                |                 | RIDER CC - CUSTOMER CHOICE       |                     | 14,146                     | 8,134                | 6,012                      | -                | -                     | -                     | -                 |
| 13                                |                 | CHOICE ADMINISTRATIVE CHARGE     |                     | 960,011                    | 405,888              | 477,365                    | -                | 63,087                | 13,014                | 656               |
| 14                                |                 | FLEX REVENUE                     |                     | 5,162,702                  | -                    | 34,785                     | -                | 199,061               | 3,679,929             | 1,248,927         |
| 15                                |                 | GAS COST REVENUE                 |                     | 8,256,502                  | 5,910,184            | 2,346,318                  | -                | -                     | -                     | -                 |
| 16                                |                 | TOTAL TRANSPORTATION REVENUE     |                     | 151,677,745                | 89,733,901           | 26,455,563                 | -                | 15,878,724            | 18,164,625            | 1,444,932         |
|                                   |                 | MISCELLANEOUS REVENUE            |                     |                            |                      |                            |                  |                       |                       |                   |
| 17                                | 487.00          | FORFEITED DISCOUNTS              | 10                  | 1,431,975                  | 1,038,578            | 298,519                    | -                | 50,420                | 44,577                | 3,881             |
| 18                                | 488.00          | MISCELLANEOUS REVENUE            | 6                   | 150,000                    | 136,727              | 13,068                     | -                | 165                   | 36                    | 5                 |
| 19                                | 493.00          | RENTS                            | 11                  | 144,269                    | 114,581              | 21,098                     | -                | 4,412                 | 4,133                 | 45                |
| 20                                | 495.00          | OTHER                            | 6                   | 290,645                    | 264,926              | 25,321                     | -                | 320                   | 70                    | 9                 |
| 21                                |                 | TOTAL MISCELLANEOUS REVENUE      |                     | 2,016,889                  | 1,552,812            | 356,006                    | -                | 55,316                | 48,817                | 3,939             |
| 22                                |                 | TOTAL PROPOSED OPERATING REVENUE |                     | 581,070,377                | 423,134,165          | 116,562,496                | -                | 20,604,917            | 19,027,947            | 1,740,853         |
| <u>CURRENT OPERATING REVENUE</u>  |                 |                                  |                     |                            |                      |                            |                  |                       |                       |                   |
|                                   |                 | SALES REVENUE                    |                     |                            |                      |                            |                  |                       |                       |                   |
| 23                                | 480/481         | SALES BASE REVENUE               |                     | 193,569,580                | 154,667,108          | 36,418,008                 | -                | 2,147,971             | 316,621               | 19,872            |
| 24                                |                 | USP REVENUE                      |                     | 20,486,995                 | 20,486,995           | -                          | -                | -                     | -                     | -                 |
| 25                                |                 | STAS REVENUE                     |                     | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 26                                |                 | RIDER CC - CUSTOMER CHOICE       |                     | 29,169                     | 20,953               | 8,216                      | -                | -                     | -                     | -                 |
| 27                                |                 | GAS PROCUREMENT REVENUE          |                     | 2,322,967                  | 1,618,007            | 634,435                    | -                | 60,053                | 10,472                | -                 |
| 28                                |                 | MERCHANT FUNCTION REVENUE        |                     | 1,752,694                  | 1,573,774            | 178,920                    | -                | -                     | -                     | -                 |
| 29                                |                 | GAS COST REVENUE                 |                     | 182,223,258                | 127,287,819          | 49,194,765                 | -                | 4,656,534             | 812,004               | 272,136           |
| 30                                |                 | TOTAL SALES REVENUE              |                     | 400,384,663                | 305,654,656          | 86,434,344                 | -                | 6,864,568             | 1,139,097             | 292,008           |
|                                   |                 | TRANSPORTATION REVENUE           |                     |                            |                      |                            |                  |                       |                       |                   |
| 31                                | 489.00          | TRANSPORTATION BASE REVENUE      |                     | 112,021,621                | 67,094,594           | 21,252,414                 | -                | 11,705,399            | 11,773,260            | 195,954           |
| 32                                |                 | USP REVENUE                      |                     | 7,157,943                  | 7,157,943            | -                          | -                | -                     | -                     | -                 |
| 33                                |                 | STAS REVENUE                     |                     | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 34                                |                 | RIDER CC - CUSTOMER CHOICE       |                     | 12,731                     | 7,321                | 5,410                      | -                | -                     | -                     | -                 |
| 35                                |                 | CHOICE ADMINISTRATIVE CHARGE     |                     | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 36                                |                 | FLEX REVENUE                     |                     | 5,162,702                  | -                    | 34,785                     | -                | 199,061               | 3,679,929             | 1,248,927         |
| 37                                |                 | GAS COST REVENUE                 |                     | 8,256,502                  | 5,910,184            | 2,346,318                  | -                | -                     | -                     | -                 |
| 38                                |                 | TOTAL TRANSPORTATION REVENUE     |                     | 132,611,499                | 80,170,042           | 23,638,927                 | -                | 11,904,460            | 15,453,189            | 1,444,881         |
|                                   |                 | MISCELLANEOUS REVENUE            |                     |                            |                      |                            |                  |                       |                       |                   |
| 39                                | 487.00          | FORFEITED DISCOUNTS              | 10                  | 1,318,074                  | 954,127              | 272,934                    | -                | 46,409                | 41,032                | 3,572             |
| 40                                | 488.00          | MISCELLANEOUS REVENUE            | 6                   | 150,000                    | 136,727              | 13,068                     | -                | 165                   | 36                    | 5                 |
| 41                                | 493.00          | RENTS                            | 11                  | 144,269                    | 114,581              | 21,098                     | -                | 4,412                 | 4,133                 | 45                |
| 42                                | 495.00          | OTHER                            | 6                   | 290,645                    | 264,926              | 25,321                     | -                | 320                   | 70                    | 9                 |
| 43                                |                 | TOTAL MISCELLANEOUS REVENUE      |                     | 1,902,988                  | 1,470,361            | 332,421                    | -                | 51,306                | 45,271                | 3,630             |
| 44                                |                 | TOTAL CURRENT OPERATING REVENUE  |                     | 534,899,150                | 387,295,059          | 110,405,692                | -                | 18,820,324            | 16,637,557            | 1,740,519         |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
PRODUCTION & DISTRIBUTION O&M EXPENSES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1

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WITNESS: B. E. ELLIOTT

| LINE NO.                                        | ACCT NO.<br>(A) | ACCOUNT TITLE<br>(B)                  | ALLOC FACTOR<br>(C) | TOTAL COMPANY<br>(D)<br>\$ | RSS/RDS<br>(E)<br>\$ | SGSS/SCD/SGDS<br>(F)<br>\$ | N/A<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                    |                     | 190,479,760                | 133,198,003          | 51,541,083                 | -                | 4,656,534             | 812,004               | 272,136           |
| 2                                               | 807.00          | PURCHASED GAS EXPENSE                 | 4                   | 431,011                    | 301,393              | 116,627                    | -                | 10,538                | 1,836                 | 616               |
| 3                                               | 807.00          | GAS PROCUREMENT EXPENSE               | 4                   | 554,837                    | 387,981              | 150,133                    | -                | 13,566                | 2,364                 | 793               |
| 4                                               |                 | TOTAL PURCHASED GAS                   |                     | 191,465,608                | 133,887,377          | 51,807,844                 | -                | 4,680,638             | 816,204               | 273,546           |
| <u>UNDERGROUND STORAGE OPERATIONS EXPENSES</u>  |                 |                                       |                     |                            |                      |                            |                  |                       |                       |                   |
| 5                                               | 816.00          | WELLS                                 | 25                  | 2,599                      | 1,905                | 633                        | -                | 49                    | 9                     | 4                 |
| 6                                               | 817.00          | LINES                                 | 25                  | 8,430                      | 6,179                | 2,054                      | -                | 157                   | 28                    | 12                |
| 7                                               | 818.00          | COMPRESSOR STATION                    | 25                  | 418,704                    | 306,914              | 102,021                    | -                | 7,817                 | 1,365                 | 586               |
| 8                                               | 820.00          | M & R                                 | 25                  | 11,942                     | 8,754                | 2,910                      | -                | 223                   | 39                    | 17                |
| 9                                               | 821.00          | PURIFICATION                          | 25                  | 6,922                      | 5,074                | 1,687                      | -                | 129                   | 23                    | 10                |
| 10                                              | 823.00          | GAS LOSSES                            | 25                  | 3,705                      | 2,716                | 903                        | -                | 69                    | 12                    | 5                 |
| 11                                              | 825.00          | STORAGE WELL ROYALTIES                | 25                  | 16,959                     | 12,431               | 4,132                      | -                | 317                   | 55                    | 24                |
| 12                                              |                 | TOTAL UNDERGROUND STORAGE OPERATIONS  |                     | 469,261                    | 343,973              | 114,340                    | -                | 8,761                 | 1,530                 | 657               |
| <u>UNDERGROUND STORAGE MAINTENANCE EXPENSES</u> |                 |                                       |                     |                            |                      |                            |                  |                       |                       |                   |
| 13                                              | 832.00          | WELLS                                 | 25                  | 10,380                     | 7,609                | 2,529                      | -                | 194                   | 34                    | 15                |
| 14                                              | 834.00          | COMPRESSOR STATION                    | 25                  | 11,204                     | 8,213                | 2,730                      | -                | 209                   | 37                    | 16                |
| 15                                              | 836.00          | PURIFICATION                          | 25                  | 9,107                      | 6,676                | 2,219                      | -                | 170                   | 30                    | 13                |
| 16                                              |                 | TOTAL UNDERGROUND STORAGE MAINTENANCE |                     | 30,691                     | 22,497               | 7,478                      | -                | 573                   | 100                   | 43                |
| 17                                              |                 | TOTAL UNDERGROUND STORAGE             |                     | 499,952                    | 366,470              | 121,818                    | -                | 9,334                 | 1,630                 | 700               |
| <u>DISTRIBUTION OPERATIONS EXPENSES</u>         |                 |                                       |                     |                            |                      |                            |                  |                       |                       |                   |
| 18                                              | 870.00          | SUPERVISION & ENGINEERING             | 18                  | 9,498,476                  | 7,525,738            | 1,381,838                  | -                | 300,912               | 288,849               | 1,140             |
| 19                                              | 871.00          | LOAD DISPATCHING                      | 13                  | 294,268                    | 222,711              | 48,010                     | -                | 12,100                | 11,400                | 47                |
| 20                                              | 874.00          | MAINS & SERVICES                      | 14                  | 14,496,818                 | 11,601,659           | 2,036,803                  | -                | 442,878               | 413,449               | 2,030             |
| 21                                              | 875.00          | M & R - GENERAL                       | 13                  | 613,642                    | 464,423              | 100,116                    | -                | 25,233                | 23,773                | 98                |
| 22                                              | 876.00          | M & R - INDUSTRIAL                    | 17                  | 274,004                    | (0)                  | 67,254                     | -                | 91,526                | 115,224               | -                 |
| 23                                              | 878.00          | METERS & HOUSE REGULATORS             | 27                  | 2,538,487                  | 1,952,274            | 559,508                    | -                | 20,156                | 6,194                 | 355               |
| 24                                              | 879.00          | CUSTOMER INSTALLATIONS                | 15                  | 5,575,022                  | 5,126,623            | 436,970                    | -                | 8,697                 | 2,732                 | -                 |
| 25                                              | 880.00          | OTHER                                 | 18                  | 6,779,266                  | 5,371,280            | 986,248                    | -                | 214,767               | 206,158               | 814               |
| 26                                              | 881.00          | RENTS                                 | 18                  | 623,551                    | 494,046              | 90,714                     | -                | 19,754                | 18,962                | 75                |
| 27                                              |                 | TOTAL DISTRIBUTION OPERATIONS         |                     | 40,693,534                 | 32,758,753           | 5,707,461                  | -                | 1,136,022             | 1,086,740             | 4,558             |
| <u>DISTRIBUTION MAINTENANCE EXPENSES</u>        |                 |                                       |                     |                            |                      |                            |                  |                       |                       |                   |
| 28                                              | 885.00          | SUPERVISION & ENGINEERING             | 18                  | 88,211                     | 69,891               | 12,833                     | -                | 2,795                 | 2,683                 | 11                |
| 29                                              | 886.00          | STRUCTURES AND IMPROVEMENTS           | 13                  | 34,799                     | 26,337               | 5,678                      | -                | 1,431                 | 1,348                 | 6                 |
| 30                                              | 887.00          | MAINS                                 | 13                  | 15,560,041                 | 11,776,306           | 2,538,621                  | -                | 639,829               | 602,796               | 2,490             |
| 31                                              | 889.00          | M & R - GENERAL                       | 13                  | 521,191                    | 394,453              | 85,032                     | -                | 21,431                | 20,191                | 83                |
| 32                                              | 890.00          | M & R - INDUSTRIAL                    | 17                  | 185,003                    | -                    | 45,409                     | -                | 61,797                | 77,798                | -                 |
| 33                                              | 892.00          | SERVICES                              | 15                  | 1,626,214                  | 1,495,418            | 127,463                    | -                | 2,537                 | 797                   | -                 |
| 34                                              | 893.00          | METERS & HOUSE REGULATORS             | 27                  | 244,982                    | 188,408              | 53,997                     | -                | 1,945                 | 598                   | 34                |
| 35                                              | 894.00          | OTHER EQUIPMENT                       | 18                  | 1,046,046                  | 828,793              | 152,179                    | -                | 33,139                | 31,810                | 126               |
| 36                                              |                 | TOTAL DISTRIBUTION MAINTENANCE        |                     | 19,306,487                 | 14,779,605           | 3,021,210                  | -                | 764,903               | 738,020               | 2,749             |
| 37                                              |                 | TOTAL DISTRIBUTION                    |                     | 60,000,021                 | 47,538,357           | 8,728,671                  | -                | 1,900,925             | 1,824,760             | 7,307             |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
OTHER O&M EXPENSES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1  
PAGE 8 OF 18  
WITNESS: B. E. ELLIOTT

| LINE NO.                                       | ACCT NO.<br>(A) | ACCOUNT TITLE<br>(B)                     | ALLOC FACTOR<br>(C) | TOTAL COMPANY<br>(D)<br>\$ | RSS/RDS<br>(E)<br>\$ | SGSS/SCD/SGDS<br>(F)<br>\$ | N/A<br>(G)<br>\$ | SDS/LGSS<br>(H)<br>\$ | LDS/LGSS<br>(I)<br>\$ | MLDS<br>(J)<br>\$ |
|------------------------------------------------|-----------------|------------------------------------------|---------------------|----------------------------|----------------------|----------------------------|------------------|-----------------------|-----------------------|-------------------|
| <u>CUSTOMER ACCOUNTS EXPENSES</u>              |                 |                                          |                     |                            |                      |                            |                  |                       |                       |                   |
| 1                                              | 901.00          | SUPERVISION                              | 6                   | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 2                                              | 902.00          | METER READING                            | 6                   | 836,787                    | 762,740              | 72,901                     | -                | 921                   | 201                   | 25                |
| 3                                              | 903.00          | CUSTOMER RECORDS AND COLLECTION EXPENSES | 6                   | 9,650,214                  | 8,796,267            | 840,727                    | -                | 10,615                | 2,316                 | 290               |
| 4                                              | 903.00          | INTEREST ON CUSTOMER DEPOSITS            | 9                   | 89,468                     | 65,556               | 23,912                     | -                | -                     | -                     | -                 |
| 5                                              | 904.00          | UNCOLLECTIBLES-DIS REVENUE               | 7                   | 4,450,409                  | 4,093,887            | 356,522                    | -                | -                     | -                     | -                 |
| 6                                              | 904.00          | UNCOLLECTIBLES-GMB/GTS REVENUE           | 8                   | 78,025                     | 1                    | 6,157                      | -                | 36,360                | 32,143                | 3,364             |
| 7                                              | 904.00          | UNCOLLECTIBLES-UNBUNDLED GAS             | 23                  | 1,752,694                  | 1,573,779            | 178,915                    | -                | -                     | -                     | -                 |
| 8                                              | 904.00          | DIRECT USP UNCOLLECTIBLES                |                     | 18,412,353                 | 18,412,353           | -                          | -                | -                     | -                     | -                 |
| 9                                              | 905.00          | MISCELLANEOUS                            | 6                   | 36,677                     | 33,432               | 3,195                      | -                | 40                    | 9                     | 1                 |
| 10                                             | 921.00          | OFFICE SUPPLIES & EXPENSES               | 6                   | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 11                                             |                 | TOTAL CUSTOMER ACCOUNTS                  |                     | 35,306,627                 | 33,738,013           | 1,482,329                  | -                | 47,936                | 34,669                | 3,680             |
| <u>CUST SERVICE &amp; INFORMATION EXPENSES</u> |                 |                                          |                     |                            |                      |                            |                  |                       |                       |                   |
| 12                                             | 907.00          | SUPERVISION                              | 6                   | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 13                                             | 908.00          | CUSTOMER ASSISTANCE                      | 6                   | 576,029                    | 525,074              | 50,184                     | -                | 634                   | 138                   | -                 |
| 14                                             | 908.00          | DIRECT USP/LIURP/HEEP                    |                     | 9,232,585                  | 9,232,585            | -                          | -                | -                     | -                     | -                 |
| 15                                             | 909.00          | INFORMATIONAL & INSTRUCTIONAL EXPENSES   | 6                   | 73,183                     | 66,707               | 6,376                      | -                | 81                    | 18                    | 2                 |
| 16                                             | 910.00          | MISCELLANEOUS                            | 6                   | 1,102,347                  | 1,004,800            | 96,037                     | -                | 1,213                 | 265                   | 33                |
| 17                                             | 910.00          | LARGE CUSTOMER RELATIONS                 | 21                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 18                                             | 921.00          | OFFICE SUPPLIES & EXPENSES               | 6                   | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 19                                             | 931.00          | RENTS - GENERAL                          | 6                   | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 20                                             | 932.00          | MAINTENANCE                              | 6                   | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 21                                             |                 | TOTAL CUST SERVICE & INFORMATION         |                     | 10,984,144                 | 10,829,166           | 152,596                    | -                | 1,927                 | 420                   | 35                |
| <u>SALES EXPENSES</u>                          |                 |                                          |                     |                            |                      |                            |                  |                       |                       |                   |
| 22                                             | 912.00          | DEMONSTRATION                            | 6                   | 677,253                    | 617,323              | 59,002                     | -                | 745                   | 163                   | 20                |
| 23                                             | 913.00          | ADVERTISING                              | 6                   | 19,504                     | 17,778               | 1,699                      | -                | 22                    | 5                     | 1                 |
| 24                                             |                 | TOTAL SALES                              |                     | 696,757                    | 635,101              | 60,702                     | -                | 767                   | 167                   | 21                |
| <u>ADMINISTRATIVE AND GENERAL EXPENSES</u>     |                 |                                          |                     |                            |                      |                            |                  |                       |                       |                   |
| 25                                             | 920.00          | SALARIES                                 | 19                  | 4,579,280                  | 3,715,399            | 630,933                    | -                | 119,702               | 112,650               | 595               |
| 26                                             | 921.00          | OFFICE SUPPLIES & EXPENSES               | 19                  | 2,524,255                  | 2,048,054            | 347,792                    | -                | 65,984                | 62,097                | 328               |
| 27                                             | 922.00          | ADMIN. EXPENSE TRANSFERRED               | 19                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 28                                             | 923.00          | OUTSIDE SERVICES EMPLOYED                | 19                  | 47,925,970                 | 38,884,736           | 6,603,240                  | -                | 1,252,785             | 1,178,979             | 6,230             |
| 29                                             | 924.00          | PROPERTY INSURANCE                       | 19                  | 212,955                    | 172,781              | 29,341                     | -                | 5,567                 | 5,239                 | 28                |
| 30                                             | 925.00          | INJURIES AND DAMAGES                     | 19                  | 3,443,195                  | 2,793,636            | 474,403                    | -                | 90,005                | 84,703                | 448               |
| 31                                             | 926.00          | EMPLOYEE PENSIONS & BENEFITS             | 24                  | 5,561,874                  | 4,495,440            | 770,598                    | -                | 151,005               | 144,219               | 612               |
| 32                                             | 928.00          | REGULATORY COMMISSION EXPENSES           | 19                  | 2,330,000                  | 1,890,446            | 321,027                    | -                | 60,906                | 57,318                | 303               |
| 33                                             | 930.00          | MISCELLANEOUS GENERAL                    | 19                  | 402,186                    | 326,314              | 55,413                     | -                | 10,513                | 9,894                 | 52                |
| 34                                             | 931.00          | RENTS-GENERAL                            | 19                  | 1,664,699                  | 1,350,654            | 229,362                    | -                | 43,515                | 40,952                | 216               |
| 35                                             | 932.00          | MAINTENANCE                              | 19                  | 182,053                    | 147,709              | 25,083                     | -                | 4,759                 | 4,479                 | 24                |
| 36                                             |                 | TOTAL ADMINISTRATIVE & GENERAL           |                     | 68,826,467                 | 55,825,168           | 9,487,193                  | -                | 1,804,741             | 1,700,529             | 8,836             |
| 37                                             |                 | TOTAL O & M EXPENSES                     |                     | 367,779,576                | 282,819,652          | 71,841,153                 | -                | 8,446,268             | 4,378,378             | 294,126           |



COLUMBIA GAS OF PENNSYLVANIA, INC.  
TAXES OTHER THAN INCOME TAXES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1

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WITNESS: B. E. ELLIOTT

| 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) | SGSS/SCD/SGDS<br>(F) | N/A<br>(G) | SDS/LGSS<br>(H) | LDS/LGSS<br>(I) | MLDS<br>(J) |
|-------------|--------------------|-------------------------------|------------------------|-------------------------|----------------|----------------------|------------|-----------------|-----------------|-------------|
|             |                    | <u>FEDERAL TAXES</u>          |                        | \$                      | \$             | \$                   | \$         | \$              | \$              | \$          |
| 1           | 408.00             | FEDERAL/STATE UNEMPLOYMENT    | 24                     | 221,927                 | 179,375        | 30,748               | -          | 6,025           | 5,755           | 24          |
| 2           | 408.00             | FICA                          | 24                     | 2,333,377               | 1,885,975      | 323,289              | -          | 63,351          | 60,505          | 257         |
| 3           |                    | TOTAL FEDERAL TAXES           |                        | 2,555,304               | 2,065,350      | 354,037              | -          | 69,377          | 66,259          | 281         |
|             |                    | <u>STATE TAXES</u>            |                        |                         |                |                      |            |                 |                 |             |
| 4           | 408.00             | PA PROPERTY TAXES             | 11                     | 550,207                 | 436,985        | 80,462               | -          | 16,825          | 15,763          | 171         |
| 5           | 408.00             | PA STATE UNEMPLOYMENT         | 24                     | -                       | -              | -                    | -          | -               | -               | -           |
| 6           | 408.00             | STATE CAPITAL STOCK TAX       | 11                     | -                       | -              | -                    | -          | -               | -               | -           |
| 7           | 408.00             | LICENSE AND FRANCHISE TAX     | 11                     | 279                     | 222            | 41                   | -          | 9               | 8               | 0           |
| 8           | 408.00             | STATE SALES AND USE TAX       | 19                     | 108,396                 | 87,947         | 14,935               | -          | 2,834           | 2,667           | 14          |
| 9           | 408.00             | OTHER                         | 19                     | 6,899                   | 5,598          | 951                  | -          | 180             | 170             | 1           |
| 10          |                    | TOTAL STATE TAXES             |                        | 665,781                 | 530,752        | 96,388               | -          | 19,848          | 18,608          | 186         |
| 11          |                    | TOTAL TAXES OTHER THAN INCOME |                        | 3,221,085               | 2,596,101      | 450,426              | -          | 89,224          | 84,867          | 467         |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
RATE BASE  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1  
PAGE 10 OF 18  
WITNESS: B. E. ELLIOTT

| LINE NO.                     | ACCT NO.<br>(A) | ACCOUNT TITLE<br>(B)                 | ALLOC FACTOR<br>(C) | TOTAL COMPANY<br>(D)<br>\$ | RSS/RDS<br>(E)<br>\$ | SGSS/SCD/SGDS<br>(F)<br>\$ | N/A<br>(G)<br>\$ | SDS/LGSS<br>(H)<br>\$ | LDS/LGSS<br>(I)<br>\$ | MLDS<br>(J)<br>\$ |
|------------------------------|-----------------|--------------------------------------|---------------------|----------------------------|----------------------|----------------------------|------------------|-----------------------|-----------------------|-------------------|
| 1                            | 101-107         | GROSS PLANT [PAGE 3]                 |                     | 1,945,029,486              | 1,544,377,288        | 285,036,857                | -                | 59,399,574            | 55,570,757            | 645,010           |
| 2                            | 117.00          | GAS STORED UNDERGROUND - NON CURRENT | 25                  | 3,794,693                  | 2,781,548            | 924,615                    | -                | 70,847                | 12,371                | 5,313             |
| 3                            | 108-111         | DEPRECIATION RESERVE [PAGE 4]        |                     | (386,737,768)              | (309,943,330)        | (55,901,322)               | -                | (10,634,352)          | (10,005,615)          | (253,149)         |
| 4                            | 117.00          | GAS LOST-UNDERGROUND STORAGE         | 25                  | (163,467)                  | (119,823)            | (39,830)                   | -                | (3,052)               | (533)                 | (229)             |
| 5                            |                 | NET PLANT                            |                     | 1,561,922,944              | 1,237,095,683        | 230,020,319                | -                | 48,833,017            | 45,576,980            | 396,944           |
| <u>WORKING CAPITAL</u>       |                 |                                      |                     |                            |                      |                            |                  |                       |                       |                   |
| 6                            | 154.00          | MATERIALS & SUPPLIES                 | 11                  | 648,987                    | 515,438              | 94,908                     | -                | 19,846                | 18,594                | 201               |
| 7                            | 164.00          | GAS STORED UNDERGROUND - FSS         | 25                  | 58,489,294                 | 42,873,237           | 14,251,501                 | -                | 1,091,995             | 190,675               | 81,885            |
| 8                            | 165.00          | PREPAYMENTS                          | 19                  | 2,107,010                  | 1,709,523            | 290,304                    | -                | 55,077                | 51,832                | 274               |
| 9                            |                 | CASH WORKING CAPITAL - GAS PURCHASES | 4                   | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 10                           |                 | CASH WORKING CAPITAL - ALL OTHER     | 19                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 11                           |                 | TOTAL WORKING CAPITAL                |                     | 61,245,291                 | 45,098,199           | 14,636,713                 | -                | 1,166,918             | 261,101               | 82,360            |
| <u>DEFERRED INCOME TAXES</u> |                 |                                      |                     |                            |                      |                            |                  |                       |                       |                   |
| 12                           | 190.00          | ACCUMULATED DEF INCOME TAX           | 12                  | 8,949,377                  | 7,105,895            | 1,311,531                  | -                | 273,314               | 255,684               | 2,953             |
| 13                           | 282.00          | ACCUMULATED DEF INCOME TAX           | 12                  | (303,643,348)              | (241,095,855)        | (44,498,933)               | -                | (9,273,268)           | (8,675,091)           | (100,202)         |
| 14                           | 283.00          | ACCUMULATED DEF INCOME TAX           | 12                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 15                           |                 | TOTAL DEFERRED INCOME TAXES          |                     | (294,693,971)              | (233,989,960)        | (43,187,401)               | -                | (8,999,954)           | (8,419,407)           | (97,249)          |
| 16                           | 235.00          | CUSTOMER DEPOSITS                    | 9                   | (3,131,607)                | (2,294,622)          | (836,985)                  | -                | -                     | -                     | -                 |
| 17                           | 252.00          | CUSTOMER ADVANCES                    | 11                  | (211,729)                  | (168,159)            | (30,963)                   | -                | (6,475)               | (6,066)               | (66)              |
| 18                           |                 | RATE BASE                            |                     | 1,325,130,928              | 1,045,741,140        | 200,601,683                | -                | 40,993,507            | 37,412,608            | 381,990           |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
STATE/FEDERAL INCOME TAXES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1  
PAGE 11 OF 18  
WITNESS: B. E. ELLIOTT

| LINE<br>NO.               | ACCT<br>NO.<br>(A)                            | ALLOC<br>FACTOR<br>(B) | TOTAL<br>COMPANY<br>(C)<br>\$ | RSS/RDS<br>(D)<br>\$ | SGSS/SCD/SGDS<br>(E)<br>\$ | N/A<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) |                        | 109,147,161                   | 58,112,637           | 30,192,097                 | -                | 8,713,205             | 10,704,566            | 1,424,656         |
| 2                         | STATUTORY ADJUSTMENTS                         | 12                     | (50,280,540)                  | (39,923,252)         | (7,368,613)                | -                | (1,535,568)           | (1,436,515)           | (16,593)          |
| 3                         | INTEREST ON DEBT                              |                        | (34,320,891)                  | (27,084,696)         | (5,195,584)                | -                | (1,061,732)           | (968,987)             | (9,894)           |
| 4                         | PA BONUS DEPRECIATION ADJUSTMENT              | 12                     | (7,572,748)                   | (6,012,838)          | (1,109,786)                | -                | (231,272)             | (216,353)             | (2,499)           |
| 5                         | STATE TAXABLE INCOME                          |                        | 16,972,982                    | (14,908,148)         | 16,518,114                 | -                | 5,884,634             | 8,082,711             | 1,395,671         |
| 6                         | NET OPERATING LOSS DEDUCTION                  | 12                     | (5,091,895)                   | (4,043,016)          | (746,217)                  | -                | (155,507)             | (145,475)             | (1,880)           |
|                           | STATE TAXABLE INCOME                          |                        | 11,881,087                    | (18,951,164)         | 15,771,897                 | -                | 5,729,128             | 7,937,235             | 1,393,990         |
| 7                         | STATE NET INCOME TAX @ 9.99%                  |                        | 1,186,921                     | (1,893,221)          | 1,575,613                  | -                | 572,340               | 792,930               | 139,260           |
| 8                         | DEFERRED INCOME TAXES                         | 12                     | (51,103)                      | (40,576)             | (7,489)                    | -                | (1,561)               | (1,460)               | (17)              |
| 9                         | STATE INCOME TAX                              |                        | 1,135,818                     | (1,933,798)          | 1,568,123                  | -                | 570,779               | 791,470               | 139,243           |
| <u>FEDERAL INCOME TAX</u> |                                               |                        |                               |                      |                            |                  |                       |                       |                   |
| 10                        | OPERATING INCOME BEFORE TAXES (PG. 2, LINE 8) |                        | 109,147,161                   | 58,112,637           | 30,192,097                 | -                | 8,713,205             | 10,704,566            | 1,424,656         |
| 11                        | STATE NET INCOME TAX (LINE 7)                 |                        | (1,186,921)                   | 1,893,221            | (1,575,613)                | -                | (572,340)             | (792,930)             | (139,260)         |
| 12                        | STATUTORY ADJUSTMENTS (LINES 2 & 3)           | 12                     | (84,601,431)                  | (67,007,947)         | (12,564,197)               | -                | (2,597,300)           | (2,405,502)           | (26,486)          |
| 13                        | FEDERAL TAXABLE INCOME                        |                        | 23,358,809                    | (7,002,089)          | 16,052,288                 | -                | 5,543,566             | 7,506,134             | 1,258,910         |
| 14                        | FEDERAL INCOME TAX @ 35%                      |                        | 8,175,583                     | (2,450,731)          | 5,618,301                  | -                | 1,940,248             | 2,627,147             | 440,619           |
| 15                        | DEFERRED INCOME TAXES                         | 12                     | 20,631,255                    | 16,381,423           | 3,023,511                  | -                | 630,079               | 589,435               | 6,808             |
| 16                        | TAX REFUND AMORTIZATION                       | 12                     | (681,571)                     | (541,174)            | (99,884)                   | -                | (20,815)              | (19,473)              | (225)             |
| 17                        | FLOW BACK OF EXCESS DEFERRED TAXES            | 12                     | (88,396)                      | (70,187)             | (12,954)                   | -                | (2,700)               | (2,526)               | (29)              |
| 18                        | EFFECT OF CNIT DEFERRED TAX ON FIT            | 12                     | 17,886                        | 14,202               | 2,621                      | -                | 546                   | 511                   | 6                 |
| 19                        | FEDERAL INCOME TAX                            |                        | 28,054,758                    | 13,333,532           | 8,531,594                  | -                | 2,547,358             | 3,195,095             | 447,179           |
| 20                        | STATE NET INCOME TAX (LINE 9)                 |                        | 1,135,818                     | (1,933,798)          | 1,568,123                  | -                | 570,779               | 791,470               | 139,243           |
| 21                        | TOTAL INCOME TAXES                            |                        | 29,190,575                    | 11,399,735           | 10,099,717                 | -                | 3,118,137             | 3,986,565             | 586,421           |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
ALLOCATION FACTORS  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1  
PAGE 12 OF 18  
WITNESS: B. E. ELLIOTT

| LINE<br>NO. | DESCRIPTION<br>(A)                           | ALLOC<br>FACTOR<br>(B) | TOTAL<br>COMPANY<br>(C) | RSS/RDS<br>(D) | SGSS/SCD/SGDS<br>(E) | N/A<br>(F) | SDS/LGSS<br>(G) | LDS/LGSS<br>(H) | MIDS<br>(I) |
|-------------|----------------------------------------------|------------------------|-------------------------|----------------|----------------------|------------|-----------------|-----------------|-------------|
| 1           | DESIGN DAY                                   | 1                      | 791,995,000             | 458,700,000    | 189,733,000          | -          | 65,702,000      | 77,860,000      | 0           |
| 2           | PERCENT                                      |                        | 100.000%                | 57.917%        | 23.956%              | 0.000%     | 8.296%          | 9.831%          | 0.000%      |
| 3           | THROUGHPUT EXCLUDING TRANSPORTATION          | 2                      | 33,488,954              | 23,280,676     | 9,128,568            | -          | 864,065         | 150,675         | 65,000      |
| 4           | PERCENT                                      |                        | 100.000%                | 69.517%        | 27.258%              | 0.000%     | 2.580%          | 0.450%          | 0.194%      |
| 5           | THROUGHPUT EXCLUDING MDS                     | 3                      | 75,381,022              | 33,927,676     | 15,162,538           | -          | 6,865,950       | 19,424,858      | 0           |
| 6           | PERCENT                                      |                        | 100.000%                | 45.008%        | 20.115%              | 0.000%     | 9.108%          | 25.769%         | 0.000%      |
| 7           | GAS PURCHASED EXPENSE                        | 4                      | 190,479,760             | 133,198,003    | 51,541,083           | -          | 4,656,534       | 812,004         | 272,136     |
| 8           | PERCENT                                      |                        | 100.000%                | 69.928%        | 27.059%              | 0.000%     | 2.445%          | 0.426%          | 0.143%      |
| 9           | PEAK & AVERAGE MAINS                         | 5                      |                         |                |                      |            |                 |                 |             |
| 10          | PERCENT                                      |                        | 100.000%                | 56.714%        | 22.120%              | 0.000%     | 7.792%          | 13.374%         | 0.000%      |
| 11          | AVERAGE NO. OF CUSTOMERS                     | 6                      | 423,809                 | 386,310        | 36,921               | -          | 467             | 100             | 11          |
| 12          | PERCENT                                      |                        | 100.000%                | 91.152%        | 8.712%               | 0.000%     | 0.110%          | 0.024%          | 0.003%      |
| 13          | DISTRIBUTION UNCOLLECTIBLES                  | 7                      | 7,675,643               | 7,080,733      | 614,910              | -          | -               | -               | -           |
| 14          | PERCENT                                      |                        | 100.000%                | 91.989%        | 8.011%               | 0.000%     | 0.000%          | 0.000%          | 0.000%      |
| 15          | CURRENT GMB/GTS REVENUE                      | 8                      | 40,276,456              | -              | 3,178,263            | -          | 18,769,018      | 16,592,286      | 1,736,889   |
| 16          | PERCENT                                      |                        | 100.000%                | 0.000%         | 7.891%               | 0.000%     | 46.600%         | 41.196%         | 4.312%      |
| 17          | DIRECT ASSIGNMENT - CUSTOMER DEPOSITS        | 9                      | 2,445,620               | 1,791,981      | 653,639              | -          | -               | -               | -           |
| 18          | PERCENT                                      |                        | 100.000%                | 73.273%        | 26.727%              | 0.000%     | 0.000%          | 0.000%          | 0.000%      |
| 19          | FORFEITED DISCOUNTS                          | 10                     | 1,318,074               | 954,126        | 272,928              | -          | 46,415          | 41,032          | 3,573       |
| 20          | PERCENT                                      |                        | 100.000%                | 72.388%        | 20.707%              | 0.000%     | 3.521%          | 3.113%          | 0.271%      |
| 21          | DIST. PLANT EXCL ACCTS 375 70, 375.71, & 387 | 11                     | 1,872,017,151           | 1,486,798,780  | 273,762,234          | -          | 57,241,742      | 53,637,191      | 577,205     |
| 22          | PERCENT                                      |                        | 100.000%                | 79.422%        | 14.624%              | 0.000%     | 3.058%          | 2.865%          | 0.031%      |
| 23          | GROSS PLANT                                  | 12                     | 1,945,029,486           | 1,544,377,288  | 285,036,857          | -          | 59,399,574      | 55,570,757      | 645,010     |
| 24          | PERCENT                                      |                        | 100.000%                | 79.401%        | 14.655%              | 0.000%     | 3.054%          | 2.857%          | 0.033%      |
| 25          | MAINS - ACCOUNT 376                          | 13                     | 1,247,713,802           | 944,296,680    | 203,570,077          | -          | 51,310,438      | 48,341,344      | 195,254     |
| 26          | PERCENT                                      |                        | 100.000%                | 75.682%        | 16.315%              | 0.000%     | 4.112%          | 3.874%          | 0.016%      |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
ALLOCATION FACTORS (CONT.)  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1  
PAGE 13 OF 18  
WITNESS: B. E. ELLIOTT

| LINE<br>NO. | DESCRIPTION<br>(A)                          | ALLOC<br>FACTOR<br>(B) | TOTAL<br>COMPANY<br>(C) | RSS/RDS<br>(D) | SGSS/SCD/SGDS<br>(E) | N/A<br>(F) | SDS/LGSS<br>(G) | LDS/LGSS<br>(H) | MLDS<br>(I) |
|-------------|---------------------------------------------|------------------------|-------------------------|----------------|----------------------|------------|-----------------|-----------------|-------------|
| 1           | COMPOSITE DIRECT PLANT - ACCTS 376 & 38C    | 14                     | 1,702,740,850           | 1,362,691,310  | 239,232,147          | -          | 52,020,221      | 48,564,289      | 232,884     |
| 2           | PERCENT                                     |                        | 100.000%                | 80.029%        | 14.050%              | 0.000%     | 3.055%          | 2.852%          | 0.014%      |
| 3           | DIRECT ASSIGNMENT - SERVICES                | 15                     | 282,022,729             | 259,337,993    | 22,106,116           | -          | 441,317         | 137,303         | -           |
| 4           | PERCENT                                     |                        | 100.000%                | 91.956%        | 7.838%               | 0.000%     | 0.158%          | 0.049%          | 0.000%      |
| 5           | DIRECT ASSIGNMENT - METERS                  | 16                     | 25,782,967              | 19,259,659     | 6,218,634            | -          | 229,488         | 71,085          | 4,101       |
| 6           | PERCENT                                     |                        | 100.000%                | 74.699%        | 24.119%              | 0.000%     | 0.890%          | 0.276%          | 0.016%      |
| 7           | DIRECT ASSIGNMENT - IND M & R               | 17                     | 5,629,852               | -              | 1,381,785            | -          | 1,880,479       | 2,367,388       | -           |
| 8           | PERCENT                                     |                        | 100.000%                | 0.000%         | 24.545%              | 0.000%     | 33.403%         | 42.052%         | 0.000%      |
| 9           | OTHER DISTRIBUTION O & M EXPENSES           | 18                     | 41,964,471              | 33,248,611     | 6,104,860            | -          | 1,329,559       | 1,276,299       | 5,143       |
| 10          | PERCENT                                     |                        | 100.000%                | 79.230%        | 14.548%              | 0.000%     | 3.168%          | 3.041%          | 0.012%      |
| 11          | O & M EXCL GAS PUR, UNCOLLECTIBLES, & A & G | 19                     | 74,547,283              | 60,483,877     | 10,271,283           | -          | 1,948,633       | 1,833,703       | 9,789       |
| 12          | PERCENT                                     |                        | 100.000%                | 81.135%        | 13.778%              | 0.000%     | 2.614%          | 2.460%          | 0.013%      |
| 13          | CUSTOMER/DEMAND MAINS                       | 20                     |                         |                |                      |            |                 |                 |             |
| 14          | PERCENT                                     |                        | 100.000%                | 75.694%        | 16.318%              | 0.000%     | 4.113%          | 3.875%          | 0.000%      |
| 15          | LARGE CUSTOMER RELATIONS                    | 21                     | 161                     | -              | 19                   | -          | 37              | 94              | 11          |
| 16          | PERCENT                                     |                        | 100.00%                 | 0.000%         | 11.801%              | 0.000%     | 22.981%         | 58.385%         | 6.832%      |
| 17          | AVERAGE - ALLOCATORS 5 & 20                 | 22                     |                         |                |                      |            |                 |                 |             |
| 18          | PERCENT                                     |                        | 100.00%                 | 66.203%        | 19.219%              | 0.000%     | 5.953%          | 8.625%          | 0.000%      |
| 19          | UNBUNDLED UNCOLLECTIBLES                    | 23                     | 1,752,694               | 1,573,774      | 178,920              | -          | -               | -               | -           |
| 20          | PERCENT                                     |                        | 100.000%                | 89.792%        | 10.208%              | 0.000%     | 0.000%          | 0.000%          | 0.000%      |
| 21          | LABOR                                       | 24                     | 27,300,655              | 22,065,983     | 3,782,605            | -          | 741,150         | 707,853         | 3,064       |
| 22          | PERCENT                                     |                        | 100.000%                | 80.826%        | 13.855%              | 0.000%     | 2.715%          | 2.593%          | 0.011%      |
| 23          | SALES AND CHOICE TRANSPORTATION             | 25                     | 46,285,029              | 33,927,676     | 11,277,612           | -          | 864,065         | 150,675         | 65,000      |
| 24          | PERCENT                                     |                        | 100.000%                | 73.302%        | 24.366%              | 0.000%     | 1.867%          | 0.326%          | 0.140%      |
| 25          | HOUSE REGULATORS                            | 26                     | 2,761,797               | 2,504,494      | 250,777              | -          | 5,364           | 1,162           | -           |
| 26          | PERCENT                                     |                        | 100.000%                | 90.683%        | 9.080%               | 0.000%     | 0.194%          | 0.042%          | 0.000%      |
| 27          | METERS & HOUSE REGULATORS                   | 27                     | 111,890,537             | 86,052,701     | 24,661,560           | -          | 888,211         | 272,637         | 15,429      |
| 28          | PERCENT                                     |                        | 100.000%                | 76.908%        | 22.041%              | 0.000%     | 0.794%          | 0.244%          | 0.014%      |

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**CUSTOMER BASED COSTS - SYSTEM CHARGE CALCULATION WITH MAINS COMPONENT**  
**FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016**

**ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND**

**111, SCHEDULE 1  
PAGE 14 OF 18**

**WITNESS: B. E. ELLIOTT**

| LINE NO. | ACCT NO. (A) | ACCOUNT TITLE (B)                                     | ALLOC FACTOR (C) | TOTAL COMPANY (D)<br>\$ | RSS/RDS (E)<br>\$ | SGSS/SCD/SGDS (F)<br>\$ | N/A (G)<br>\$ | SDS/LGSS (H)<br>\$ | LDS/LGSS (I)<br>\$ | MLDS (J)<br>\$ |
|----------|--------------|-------------------------------------------------------|------------------|-------------------------|-------------------|-------------------------|---------------|--------------------|--------------------|----------------|
| 1        | 874.00       | MAINS & SERVICES [1]                                  | 14               | 8,769,270               | 7,017,959         | 1,232,082               | -             | 267,901            | 250,100            | 1,228          |
| 2        | 875.00       | M & R - GENERAL                                       | 13               | 613,642                 | 464,423           | 100,116                 | -             | 25,233             | 23,772             | 98             |
| 3        | 876.00       | M & R - INDUSTRIAL                                    | 17               | 274,004                 | -                 | 67,254                  | -             | 91,526             | 115,224            | -              |
| 4        | 878.00       | METERS & HOUSE REGULATORS                             | 27               | 2,538,487               | 1,952,274         | 559,508                 | -             | 20,156             | 6,194              | 355            |
| 5        | 879.00       | CUSTOMER INSTALLATIONS                                | 15               | 5,575,022               | 5,126,623         | 436,970                 | -             | 8,697              | 2,732              | -              |
| 6        | 887.00       | MAINS [2]                                             | 13               | 7,213,368               | 5,459,293         | 1,176,861               | -             | 296,614            | 279,446            | 1,154          |
| 7        | 889.00       | M & R - GENERAL                                       | 13               | 521,191                 | 394,453           | 85,032                  | -             | 21,431             | 20,191             | 83             |
| 8        | 890.00       | M & R - INDUSTRIAL                                    | 17               | 185,003                 | -                 | 45,409                  | -             | 61,797             | 77,797             | -              |
| 9        | 892.00       | SERVICES [3]                                          | 15               | 1,613,871               | 1,484,067         | 126,495                 | -             | 2,518              | 791                | -              |
| 10       | 893.00       | METERS & HOUSE REGULATORS                             | 27               | 244,982                 | 188,408           | 53,996                  | -             | 1,945              | 598                | 34             |
| 11       |              | TOTAL DISTRIBUTION                                    |                  | 27,548,840              | 22,087,500        | 3,883,725               | -             | 797,817            | 776,845            | 2,953          |
| 12       | 901.00       | SUPERVISION                                           | 6                | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 13       | 902.00       | METER READING                                         | 6                | 836,787                 | 762,740           | 72,901                  | -             | 920                | 201                | 25             |
| 14       | 903.00       | CUSTOMER RECORDS AND COLLECTION EXPEN                 | 6                | 9,650,214               | 8,796,267         | 840,727                 | -             | 10,615             | 2,316              | 290            |
| 15       | 903.00       | INTEREST ON CUSTOMER DEPOSITS                         | 9                | 89,468                  | 65,556            | 23,912                  | -             | -                  | -                  | -              |
| 16       | 904.00       | UNCOLLECTIBLES-DIS REVENUE                            | 7                | 4,450,409               | 4,093,887         | 356,522                 | -             | -                  | -                  | -              |
| 17       | 904.00       | UNCOLLECTIBLES-GMB/GTS REVENUE                        | 8                | 78,025                  | 1                 | 6,157                   | -             | 36,360             | 32,143             | 3,364          |
| 18       | 905.00       | MISCELLANEOUS                                         | 6                | 36,677                  | 33,431            | 3,195                   | -             | 40                 | 9                  | 1              |
| 19       | 921.00       | OFFICE SUPPLIES & EXPENSES                            | 6                | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 20       |              | TOTAL CUSTOMER ACCOUNTS                               |                  | 15,141,580              | 13,751,882        | 1,303,414               | -             | 47,936             | 34,669             | 3,680          |
| 21       | 907.00       | SUPERVISION                                           | 6                | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 22       | 908.00       | CUSTOMER ASSISTANCE                                   | 6                | 576,029                 | 525,056           | 50,184                  | -             | 634                | 138                | 17             |
| 23       | 909.00       | INFORMATIONAL & INSTRUCTIONAL EXPENSES                | 6                | 73,183                  | 66,707            | 6,376                   | -             | 81                 | 18                 | 2              |
| 24       | 910.00       | MISCELLANEOUS                                         | 6                | 1,102,347               | 1,004,800         | 96,036                  | -             | 1,213              | 265                | 33             |
| 25       | 910.00       | LARGE CUSTOMER RELATIONS                              | 21               | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 26       | 921.00       | OFFICE SUPPLIES & EXPENSES                            | 6                | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 27       | 931.00       | RENTS - GENERAL                                       | 6                | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 28       | 932.00       | MAINTENANCE                                           | 6                | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 29       |              | TOTAL CUST SERVICE & INFORMATION                      |                  | 1,751,559               | 1,596,563         | 152,596                 | -             | 1,927              | 420                | 53             |
| 30       | 912.00       | DEMONSTRATION                                         | 6                | 677,253                 | 617,323           | 59,002                  | -             | 745                | 163                | 20             |
| 31       | 913.00       | ADVERTISING                                           | 6                | 19,504                  | 17,778            | 1,699                   | -             | 21                 | 5                  | 1              |
| 32       |              | TOTAL SALES                                           |                  | 696,757                 | 635,101           | 60,701                  | -             | 766                | 167                | 21             |
| 33       | 920-931      | CUSTOMER-RELATED A&G [4]                              |                  | 28,591,203              | 23,190,333        | 3,941,075               | -             | 749,708            | 706,417            | 3,671          |
| 34       |              | TOTAL CUST-RELATED O&M [LINES 11, 22, 30, 33 & 34]    |                  | 73,729,938              | 61,261,379        | 9,341,511               | -             | 1,598,153          | 1,518,518          | 10,377         |
| 35       |              | DEPRECIATION & AMORTIZATION EXPENSE [PAGE 3, LINE 20] |                  | 36,932,754              | 30,160,915        | 5,059,776               | -             | 877,256            | 818,396            | 16,412         |
| 36       |              | INCOME TAXES                                          |                  | 31,364,077              | 25,541,622        | 4,270,952               | -             | 800,093            | 742,361            | 9,048          |
| 37       |              | RETURN ON RATE BASE [PAGE 2, LINE 47]                 |                  | 63,746,092              | 51,912,211        | 8,680,521               | -             | 1,626,154          | 1,508,817          | 18,389         |
| 38       |              | TOTAL ANNUAL CUSTOMER-BASED COST                      |                  | 205,772,861             | 168,876,127       | 27,352,760              | -             | 4,901,656          | 4,588,092          | 54,227         |
| 39       |              | AVERAGE ANNUAL CUSTOMER BILLS [5]                     |                  | 5,155,145               | 4,704,314         | 443,882                 | -             | 5,625              | 1,204              | 120            |
| 40       |              | MONTHLY SYSTEM BASED CHARGE/BILL                      |                  | \$ 39.92                | \$ 35.90          | \$ 61.62                | \$ -          | \$ 871.41          | \$ 3,810.71        | \$ 451.89      |

- [1] MAINS AND SERVICES @ 60.491% OF TOTAL ACCOUNT 874.  
[2] MAINS @ 46.358% OF ACCOUNT 887.  
[3] SERVICES @ 99.241% OF ACCOUNT 892.  
[4] CUSTOMER-RELATED A&G @ 41.541% OF A&G (PAGE 9, LINE 38).  
[5] AVERAGE ANNUAL CUSTOMER BILLS INCLUDE FINAL BILLS.

COLUMBIA GAS OF PENNSYLVANIA, INC.  
CUSTOMER BASED COSTS - SYSTEM CHARGE CALCULATION WITH MAINS COMPONENT  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016

| 111, SCHEDULE 1           |             |                                        |                  |                         |                   |                         |               |                    |                    |                |
|---------------------------|-------------|----------------------------------------|------------------|-------------------------|-------------------|-------------------------|---------------|--------------------|--------------------|----------------|
| PAGE 15 OF 18             |             |                                        |                  |                         |                   |                         |               |                    |                    |                |
| WITNESS: B. E. ELLIOTT    |             |                                        |                  |                         |                   |                         |               |                    |                    |                |
| ALLOCATED COST OF SERVICE |             |                                        |                  |                         |                   |                         |               |                    |                    |                |
| CUSTOMER/DEMAND           |             |                                        |                  |                         |                   |                         |               |                    |                    |                |
| LINE NO.                  | ACCT NO.    | ACCOUNT TITLE (A)                      | ALLOC FACTOR (B) | TOTAL COMPANY (C)<br>\$ | RSS/RDS (D)<br>\$ | SGSS/SCD/SGDS (E)<br>\$ | N/A (F)<br>\$ | SDS/LGSS (G)<br>\$ | LDS/LGSS (I)<br>\$ | MLDS (J)<br>\$ |
| 1                         | 303.30      | CUSTOMER & OTHER-BASED SOFTWARE        | 11               | 21,000,072              | 16,678,677        | 3,071,051               | -             | 642,182            | 601,652            | 6,510          |
| 2                         | 376.00      | MAINS [1]                              | 20               | 534,367,537             | 404,484,164       | 87,198,095              | -             | 21,978,537         | 20,706,742         | -              |
| 3                         | 376.00      | DIRECT - MAINS - MDS [1]               | -                | 21,990                  | -                 | -                       | -             | -                  | -                  | 21,990         |
| 4                         | 376.08      | MAINS-CSL REPLACEMENTS [1]             | 20               | 11,026,940              | 8,346,732         | 1,799,376               | -             | 453,538            | 427,294            | -              |
| 5                         | 376.30      | MAINS-BARE STEEL [1]                   | 20               | 32,669,223              | 24,728,642        | 5,330,964               | -             | 1,343,685          | 1,265,932          | -              |
| 6                         | 376.30      | DIRECT - MAINS-BARE STEEL [1]          | -                | 68,526                  | -                 | -                       | -             | -                  | -                  | 68,526         |
| 7                         | 376.80      | MAINS-CAST IRON [1]                    | 20               | 264,521                 | 200,226           | 43,164                  | -             | 10,880             | 10,250             | -              |
| 8                         | 378.10      | M & R EQUIP - GENERAL [1]              | 20               | 26,171                  | 19,810            | 4,271                   | -             | 1,076              | 1,014              | -              |
| 9                         | 378.20      | M & R EQUIP - GENERAL - REGULATING [1] | 20               | 18,371,809              | 13,906,357        | 2,997,912               | -             | 755,633            | 711,908            | -              |
| 10                        | 378.20      | DIRECT - M & R EQUIP-GEN-REG [1]       | 20               | 546                     | -                 | -                       | -             | -                  | -                  | 546            |
| 11                        | 380.00      | SERVICES [2]                           | 15               | 451,536,049             | 415,219,005       | 35,391,396              | -             | 704,396            | 221,253            | -              |
| 12                        | 380.00      | DIRECT - SERVICES [2]                  | -                | 37,344                  | -                 | -                       | -             | -                  | -                  | 37,344         |
| 13                        | 380.12      | CSL REPLACEMENT [2]                    | 15               | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 14                        | 381.00      | METERS                                 | 16               | 36,181,256              | 27,027,036        | 8,726,557               | -             | 322,013            | 99,860             | 5,789          |
| 15                        | 381.10      | AUTOMATIC METER READING                | 16               | 23,761,067              | 17,749,280        | 5,730,932               | -             | 211,473            | 65,581             | 3,802          |
| 16                        | 382.00      | METER INSTALLATIONS                    | 16               | 36,486,290              | 27,254,893        | 8,800,128               | -             | 324,728            | 100,702            | 5,838          |
| 17                        | 383.00      | HOUSE REGULATORS                       | 26               | 11,597,152              | 10,516,762        | 1,053,021               | -             | 22,498             | 4,871              | -              |
| 18                        | 384.00      | HOUSE REG INSTALLATIONS                | 26               | 3,864,772               | 3,504,730         | 350,921                 | -             | 7,498              | 1,623              | -              |
| 19                        | 385.00      | IND M&R EQUIPMENT                      | 17               | 5,504,725               | -                 | 1,351,135               | -             | 1,838,743          | 2,314,847          | -              |
| 20                        | 385.00      | DIRECT - IND M&R EQUIPMENT             | -                | 299,289                 | -                 | -                       | -             | -                  | -                  | 299,289        |
| 21                        | 385.10      | IND M&R EQUIPMENT - LG VOLUME          | 17               | 1,189,992               | -                 | 292,083                 | -             | 397,493            | 500,415            | -              |
| 22                        | 389-398     | GENERAL PLANT [3]                      | 11               | 16,980,840              | 13,486,523        | 2,483,278               | -             | 519,274            | 486,501            | 5,264          |
| 23                        |             | TOTAL GROSS PLANT                      |                  | 1,205,256,112           | 983,122,837       | 164,624,283             | -             | 29,533,648         | 27,520,445         | 454,899        |
| 24                        | 303.30      | CUSTOMER & OTHER-BASED SOFTWARE        | 11               | 9,443,231               | 7,500,003         | 1,380,978               | -             | 288,774            | 270,549            | 2,927          |
| 25                        | 376.00      | MAINS [1]                              | 20               | 67,512,424              | 51,102,855        | 11,016,677              | -             | 2,776,786          | 2,616,106          | 0              |
| 26                        | 376.00      | DIRECT - MAINS - MDS [1]               | -                | 9,136                   | -                 | -                       | -             | -                  | -                  | 9,136          |
| 27                        | 376.08      | MAINS-CSL REPLACEMENTS [1]             | 20               | -                       | -                 | -                       | -             | -                  | -                  | 0              |
| 28                        | 376.30      | MAINS-BARE STEEL [1]                   | 20               | 18,213,556              | 13,786,569        | 2,972,088               | -             | 749,124            | 705,775            | 0              |
| 29                        | 376.30      | DIRECT - MAINS-BARE STEEL [1]          | -                | 55,544                  | -                 | -                       | -             | -                  | -                  | 55,544         |
| 30                        | 376.80      | MAINS-CAST IRON [1]                    | 20               | 158,714                 | 120,137           | 25,899                  | -             | 6,528              | 6,150              | 0              |
| 31                        | 378.10      | M & R EQUIP - GENERAL [1]              | 20               | -                       | -                 | -                       | -             | -                  | -                  | 0              |
| 32                        | 378.20      | M & R EQUIP - GENERAL - REGULATING [1] | 20               | 4,588,122               | 3,472,933         | 748,690                 | -             | 188,709            | 177,790            | 0              |
| 33                        | 378.20      | DIRECT - M & R EQUIP-GEN-REG [1]       | 20               | 334                     | -                 | -                       | -             | -                  | -                  | 334            |
| 34                        | 380.00      | SERVICES [2]                           | 15               | 112,175,774             | 103,153,476       | 8,792,337               | -             | 174,994            | 54,966             | 0              |
| 35                        | 380.00      | DIRECT - SERVICES [2]                  | -                | 23,286                  | -                 | -                       | -             | -                  | -                  | 23,286         |
| 36                        | 380.12      | CSL REPLACEMENT [2]                    | 15               | -                       | -                 | -                       | -             | -                  | -                  | 0              |
| 37                        | 381.00      | METERS                                 | 16               | 15,981,682              | 11,938,157        | 3,854,622               | -             | 142,237            | 44,109             | 2,557          |
| 38                        | 381.10      | AUTOMATIC METER READING                | 16               | 8,698,973               | 6,498,046         | 2,098,105               | -             | 77,421             | 24,009             | 1,392          |
| 39                        | 382.00      | METER INSTALLATIONS                    | 16               | 11,922,861              | 8,906,258         | 2,875,675               | -             | 106,113            | 32,907             | 1,908          |
| 40                        | 383.00      | HOUSE REGULATORS                       | 26               | 3,551,101               | 3,220,280         | 322,440                 | -             | 6,889              | 1,491              | 0              |
| 41                        | 384.00      | HOUSE REG INSTALLATIONS                | 26               | 2,978,927               | 2,701,410         | 270,487                 | -             | 5,779              | 1,251              | 0              |
| 42                        | 385.00      | IND M&R EQUIPMENT                      | 17               | 3,252,946               | 0                 | 798,436                 | -             | 1,086,581          | 1,367,929          | 0              |
| 43                        | 385.00      | DIRECT - IND M&R EQUIPMENT             | -                | 69,254                  | -                 | -                       | -             | -                  | -                  | 69,254         |
| 44                        | 385.10      | IND M&R EQUIPMENT - LG VOLUME          | 17               | -                       | -                 | -                       | -             | -                  | -                  | 0              |
| 45                        | 389-398     | GENERAL PLANT [3]                      | 11               | 7,651,447               | 6,076,932         | 1,118,948               | -             | 233,981            | 219,214            | 2,372          |
| 46                        |             | TOTAL DEPRECIATION RESERVE             |                  | 266,287,311             | 218,477,056       | 36,275,381              | -             | 5,843,917          | 5,522,247          | 168,710        |
| 47                        | 154.00      | CUSTOMER BASED MATERIALS & SUPPLIES    |                  | 404,669                 | 330,369           | 55,146                  | -             | 9,836              | 9,163              | 154            |
| 48                        | 190-282-283 | CUSTOMER BASED DEFERRED INCOME TAXES   |                  | (182,809,936)           | (148,954,232)     | (24,942,441)            | -             | (4,474,682)        | (4,169,659)        | (68,922)       |
| 49                        | 235.00      | CUSTOMER DEPOSITS                      | 9                | (3,131,607)             | (2,294,622)       | (836,985)               | -             | -                  | -                  | -              |
| 50                        | 252.00      | CUSTOMER BASED ADVANCES                |                  | (132,021)               | (107,781)         | (17,991)                | -             | (3,209)            | (2,990)            | (50)           |
| 51                        |             | TOTAL CUSTOMER-BASED RATE BASE         |                  | 753,499,905             | 613,619,515       | 102,806,631             | -             | 19,221,676         | 17,834,713         | 217,370        |
| 52                        |             | EQUITY CAPITAL @ 52.170%               |                  | 393,100,900             | 320,125,301       | 53,529,880              | -             | 10,027,948         | 9,304,370          | 113,402        |
| 53                        |             | RETURN ON RATE BASE @ 8.460%           |                  | 63,746,092              | 51,912,211        | 8,680,521               | -             | 1,626,154          | 1,508,817          | 18,389         |
| 54                        |             | RETURN ON EQUITY @ 11.250%             |                  | 44,223,851              | 36,014,096        | 6,022,111               | -             | 1,128,144          | 1,046,742          | 12,758         |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
CUSTOMER BASED COSTS - SYSTEM CHARGE CALCULATION WITH MAINS COMPONENT  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016

ALLOCATED COST OF SERVICE  
CUSTOMER/DEMAND

111, SCHEDULE 1  
PAGE 16 OF 18  
WITNESS: B. E. ELLIOTT

| LINE NO. | ACCT NO. | ACCOUNT TITLE<br>(A)                       | ALLOC FACTOR<br>(B) | TOTAL COMPANY<br>(C)<br>\$ | RSS/RDS<br>(D)<br>\$ | SGSS/SCD/SGDS<br>(E)<br>\$ | N/A<br>(F)<br>\$ | SDS/LGSS<br>(G)<br>\$ | LDS/LGSS<br>(I)<br>\$ | MLDS<br>(J)<br>\$ |
|----------|----------|--------------------------------------------|---------------------|----------------------------|----------------------|----------------------------|------------------|-----------------------|-----------------------|-------------------|
| 1        | 303.30   | CUSTOMER & OTHER-BASED SOFTWARE            | 11                  | 3,857,309                  | 3,063,552            | 564,093                    | -                | 117,957               | 110,512               | 1,196             |
| 2        | 376.00   | MAINS [1]                                  | 20                  | 11,035,082                 | 8,352,895            | 1,800,705                  | -                | 453,873               | 427,609               | -                 |
| 3        | 376.00   | DIRECT - MAINS - MDS [1]                   |                     | 398                        | -                    | -                          | -                | -                     | -                     | 398               |
| 4        | 376.08   | MAINS-CSL REPLACEMENTS [1]                 | 20                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 5        | 376.30   | MAINS-BARE STEEL [1]                       | 20                  | 857,405                    | 649,004              | 139,911                    | -                | 35,265                | 33,224                | -                 |
| 6        | 376.30   | DIRECT - MAINS-BARE STEEL [1]              |                     | 1,648                      | -                    | -                          | -                | -                     | -                     | 1,648             |
| 7        | 376.80   | MAINS-CAST IRON [1]                        | 20                  | 6,865                      | 5,197                | 1,120                      | -                | 282                   | 266                   | -                 |
| 8        | 378.10   | M & R EQUIP - GENERAL [1]                  | 20                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 9        | 378.20   | M & R EQUIP - GENERAL - REGULATING [1]     | 20                  | 578,158                    | 437,631              | 94,344                     | -                | 23,780                | 22,404                | -                 |
| 10       | 378.20   | DIRECT - M & R EQUIP-GEN-REG [1]           | 20                  | 13                         | -                    | -                          | -                | -                     | -                     | 13                |
| 11       | 380.00   | SERVICES [2]                               | 15                  | 12,825,516                 | 11,793,960           | 1,005,264                  | -                | 20,008                | 6,285                 | -                 |
| 12       | 380.00   | DIRECT - SERVICES [2]                      |                     | 963                        | -                    | -                          | -                | -                     | -                     | 963               |
| 13       | 380.12   | CSL REPLACEMENT [2]                        | 15                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 14       | 381.00   | METERS                                     | 16                  | 877,483                    | 655,471              | 211,640                    | -                | 7,810                 | 2,422                 | 140               |
| 15       | 381.10   | AUTOMATIC METER READING                    | 16                  | 1,748,019                  | 1,305,753            | 421,605                    | -                | 15,557                | 4,825                 | 280               |
| 16       | 382.00   | METER INSTALLATIONS                        | 16                  | 708,729                    | 529,413              | 170,938                    | -                | 6,308                 | 1,956                 | 113               |
| 17       | 383.00   | HOUSE REGULATORS                           | 26                  | 300,138                    | 272,177              | 27,253                     | -                | 582                   | 126                   | -                 |
| 18       | 384.00   | HOUSE REG INSTALLATIONS                    | 26                  | 66,436                     | 60,247               | 6,032                      | -                | 129                   | 28                    | -                 |
| 19       | 385.00   | IND M&R EQUIPMENT                          | 17                  | 235,982                    | -                    | 57,922                     | -                | 78,825                | 99,235                | -                 |
| 20       | 385.00   | DIRECT - IND M&R EQUIPMENT                 |                     | 10,475                     | -                    | -                          | -                | -                     | -                     | 10,475            |
| 21       | 385.10   | IND M&R EQUIPMENT - LG VOLUME              | 17                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 22       | 389-398  | GENERAL PLANT [3]                          | 11                  | 949,798                    | 754,349              | 138,898                    | -                | 29,045                | 27,212                | 294               |
| 23       |          | TOTAL DEPRECIATION EXPENSES                |                     | 34,060,418                 | 27,879,648           | 4,639,725                  | -                | 789,420               | 736,103               | 15,521            |
| 24       |          | TOTAL NET SALVAGE AMORTIZED [3]            | 11                  | 2,872,336                  | 2,281,267            | 420,050                    | -                | 87,836                | 82,292                | 890               |
| 25       |          | TOTAL DEPRECIATION & AMORTIZATION EXPENSES |                     | 36,932,754                 | 30,160,915           | 5,059,776                  | -                | 877,256               | 818,396               | 16,412            |

[1] MAINS AND RELATED @ 46.358% OF GROSS PLANT, DEPRECIATION RESERVE, & DEPRECIATION EXPENSES

[2] SERVICES @ 99.241% OF GROSS PLANT, DEPRECIATION RESERVE, & DEPRECIATION EXPENSES.

[3] GENERAL PLANT & NET SALVAGE @ 61.966% OF GROSS PLANT, DEPRECIATION RESERVE, & DEPRECIATION EXPENSES.



**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**CUSTOMER BASED COSTS - SYSTEM CHARGE CALCULATION EXCLUDING MAINS**  
**FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016**

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

111, SCHEDULE 1  
PAGE 17 OF 18  
WITNESS: B. E. ELLIOTT

| LINE NO. | ACCT NO. | ACCOUNT TITLE                                        | ALLOC FACTOR | TOTAL COMPANY | RSS/RDS    | SGSS/SCD/SGDS | N/A  | SDS/LGSS  | LDS/LGSS  | MLDS      |
|----------|----------|------------------------------------------------------|--------------|---------------|------------|---------------|------|-----------|-----------|-----------|
|          | (A)      | (B)                                                  | (C)          | (D)           | (E)        | (F)           | (G)  | (H)       | (I)       | (J)       |
|          |          |                                                      |              | \$            | \$         | \$            | \$   | \$        | \$        | \$        |
| 1        | 874.00   | MAINS & SERVICES [SERVICES ONLY][1]                  | 15           | 3,844,869     | 3,535,626  | 301,361       | -    | 5,998     | 1,884     | -         |
| 2        | 876.00   | M & R - INDUSTRIAL                                   | 17           | 274,004       | -          | 67,254        | -    | 91,526    | 115,224   | -         |
| 3        | 878.00   | METERS & HOUSE REGULATORS                            | 27           | 2,538,487     | 1,952,274  | 559,508       | -    | 20,156    | 6,194     | 355       |
| 4        | 879.00   | CUSTOMER INSTALLATIONS                               | 15           | 5,575,022     | 5,126,623  | 436,970       | -    | 8,697     | 2,732     | -         |
| 5        | 890.00   | M & R - INDUSTRIAL                                   | 17           | 185,003       | -          | 45,409        | -    | 61,797    | 77,797    | -         |
| 6        | 892.00   | SERVICES [2]                                         | 15           | 1,613,871     | 1,484,067  | 126,495       | -    | 2,518     | 791       | -         |
| 7        | 893.00   | METERS & HOUSE REGULATORS                            | 27           | 244,982       | 188,408    | 53,996        | -    | 1,945     | 598       | 34        |
| 8        |          | TOTAL DISTRIBUTION                                   |              | 14,276,238    | 12,286,998 | 1,590,994     | -    | 192,636   | 205,220   | 390       |
| 9        | 901.00   | SUPERVISION                                          | 6            | -             | -          | -             | -    | -         | -         | -         |
| 10       | 902.00   | METER READING                                        | 6            | 836,787       | 762,740    | 72,901        | -    | 921       | 201       | 25        |
| 11       | 903.00   | CUSTOMER RECORDS AND COLLECTION EXPENSES             | 6            | 9,650,214     | 8,796,267  | 840,727       | -    | 10,615    | 2,316     | 290       |
| 12       | 903.00   | INTEREST ON CUSTOMER DEPOSITS                        | 9            | 89,468        | 65,556     | 23,912        | -    | -         | -         | -         |
| 13       | 904.00   | UNCOLLECTIBLES-DIS REVENUE                           | 7            | 4,450,409     | 4,093,887  | 356,522       | -    | -         | -         | -         |
| 14       | 904.00   | UNCOLLECTIBLES-GMB/GTS REVENUE                       | 8            | 78,025        | 1          | 6,157         | -    | 36,360    | 32,143    | 3,364     |
| 15       | 905.00   | MISCELLANEOUS                                        | 6            | 36,677        | 33,432     | 3,195         | -    | 40        | 9         | 1         |
| 16       | 921.00   | OFFICE SUPPLIES & EXPENSES                           | 6            | -             | -          | -             | -    | -         | -         | -         |
| 17       |          | TOTAL CUSTOMER ACCOUNTS                              |              | 15,141,580    | 13,751,881 | 1,303,414     | -    | 47,936    | 34,669    | 3,680     |
| 18       | 907.00   | SUPERVISION                                          | 6            | -             | -          | -             | -    | -         | -         | -         |
| 19       | 908.00   | CUSTOMER ASSISTANCE                                  | 6            | 576,029       | 525,074    | 50,184        | -    | 634       | 138       | -         |
| 20       | 909.00   | INFORMATIONAL & INSTRUCTIONAL EXPENSES               | 6            | 73,183        | 66,707     | 6,376         | -    | 81        | 18        | 2         |
| 21       | 910.00   | MISCELLANEOUS                                        | 6            | 1,102,347     | 1,004,800  | 96,036        | -    | 1,213     | 265       | 33        |
| 22       | 910.00   | LARGE CUSTOMER RELATIONS                             | 21           | -             | -          | -             | -    | -         | -         | -         |
| 23       | 921.00   | OFFICE SUPPLIES & EXPENSES                           | 6            | -             | -          | -             | -    | -         | -         | -         |
| 24       | 931.00   | RENTS - GENERAL                                      | 6            | -             | -          | -             | -    | -         | -         | -         |
| 25       | 932.00   | MAINTENANCE                                          | 6            | -             | -          | -             | -    | -         | -         | -         |
| 26       |          | TOTAL CUST SERVICE & INFORMATION                     |              | 1,751,559     | 1,596,581  | 152,596       | -    | 1,927     | 420       | 35        |
| 27       | 912.00   | DEMONSTRATION                                        | 6            | 677,253       | 617,323    | 59,002        | -    | 745       | 163       | 20        |
| 28       | 913.00   | ADVERTISING                                          | 6            | 19,504        | 17,778     | 1,699         | -    | 22        | 5         | 1         |
| 29       |          | TOTAL SALES                                          |              | 696,757       | 635,101    | 60,701        | -    | 766       | 167       | 21        |
| 30       |          | CUSTOMER-RELATED BENEFITS                            | 24           | 1,536,890     | 1,242,207  | 212,936       | -    | 41,727    | 39,852    | 169       |
| 31       |          | TOTAL CUST-RELATED O&M [LINES 8, 19, 27, 30 & 31]    |              | 33,403,023    | 29,512,768 | 3,320,641     | -    | 284,991   | 280,328   | 4,295     |
| 32       |          | DEPRECIATION EXPENSE [PAGE 2, LINE 42]               |              | 22,060,729    | 18,816,052 | 2,673,823     | -    | 290,895   | 266,348   | 13,611    |
| 33       |          | INCOME TAXES                                         |              | 13,767,272    | 12,211,798 | 1,404,353     | -    | 79,325    | 63,346    | 8,450     |
| 34       |          | RETURN ON RATE BASE [PAGE 2, LINE 25]                |              | 27,981,368    | 24,819,937 | 2,854,286     | -    | 161,224   | 128,747   | 17,174    |
| 35       |          | TOTAL ANNUAL CUSTOMER-BASED COST                     |              | 97,212,392    | 85,360,555 | 10,253,104    | -    | 816,434   | 738,769   | 43,530    |
| 36       |          | AVERAGE ANNUAL CUSTOMER BILLS [3]                    |              | 5,155,145     | 4,704,314  | 443,882       | -    | 5,625     | 1,204     | 120       |
| 37       |          | MONTHLY CUSTOMER BASED COST/BILL [LINE 36 / LINE 37] |              | \$ 18.86      | \$ 18.15   | \$ 23.10      | \$ - | \$ 145.14 | \$ 613.60 | \$ 362.75 |

[1] MAINS AND SERVICES @ 26.522% OF TOTAL ACCOUNT 874.

[2] SERVICES @ 99.241% OF ACCOUNT 892.

[3] AVERAGE ANNUAL CUSTOMER BILLS INCLUDE FINAL BILLS.

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**CUSTOMER BASED COSTS - SYSTEM CHARGE CALCULATION EXCLUDING MAINS**  
**FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016**

| 111, SCHEDULE 1           |             |                                            |                  |                   |              |                   |         |              |              |          |
|---------------------------|-------------|--------------------------------------------|------------------|-------------------|--------------|-------------------|---------|--------------|--------------|----------|
| PAGE 18 OF 18             |             |                                            |                  |                   |              |                   |         |              |              |          |
| WITNESS: B. E. ELLIOTT    |             |                                            |                  |                   |              |                   |         |              |              |          |
| ALLOCATED COST OF SERVICE |             |                                            |                  |                   |              |                   |         |              |              |          |
| CUSTOMER/DEMAND           |             |                                            |                  |                   |              |                   |         |              |              |          |
| LINE NO.                  | ACCT NO.    | ACCOUNT TITLE                              | ALLOC FACTOR (B) | TOTAL COMPANY (C) | RSS/RDS (D)  | SGSS/SCD/SGDS (E) | N/A (F) | SDS/LGSS (G) | LDS/LGSS (I) | MLDS (J) |
|                           |             | (A)                                        |                  | \$                | \$           | \$                | \$      | \$           | \$           | \$       |
| 1                         | 303.30      | CUSTOMER & OTHER-BASED SOFTWARE            | 11               | 21,000,072        | 16,678,677   | 3,071,051         | -       | 642,182      | 601,652      | 6,510    |
| 2                         | 380.00      | SERVICES [1]                               | 15               | 451,536,049       | 415,219,005  | 35,391,396        | -       | 704,396      | 221,253      | -        |
| 3                         | 380.00      | DIRECT - SERVICES [1]                      |                  | 37,344            | -            | -                 | -       | -            | -            | 37,344   |
| 4                         | 380.12      | CSL REPLACEMENT [1]                        | 15               | -                 | -            | -                 | -       | -            | -            | -        |
| 5                         | 381.00      | METERS                                     | 16               | 36,181,256        | 27,027,036   | 8,726,557         | -       | 322,013      | 99,860       | 5,789    |
| 6                         | 381.10      | AUTOMATIC METER READING                    | 16               | 23,761,067        | 17,749,280   | 5,730,932         | -       | 211,473      | 65,581       | 3,802    |
| 7                         | 382.00      | METER INSTALLATIONS                        | 16               | 36,486,290        | 27,254,893   | 8,800,128         | -       | 324,728      | 100,702      | 5,838    |
| 8                         | 383.00      | HOUSE REGULATORS                           | 26               | 11,597,152        | 10,516,762   | 1,053,021         | -       | 22,498       | 4,871        | -        |
| 9                         | 384.00      | HOUSE REG INSTALLATIONS                    | 26               | 3,864,772         | 3,504,730    | 350,921           | -       | 7,498        | 1,623        | -        |
| 10                        | 385.00      | IND M&R EQUIPMENT                          | 17               | 5,504,725         | -            | 1,351,135         | -       | 1,838,743    | 2,314,847    | -        |
| 11                        | 385.00      | DIRECT - IND M&R EQUIPMENT                 |                  | 299,289           | -            | -                 | -       | -            | -            | 299,289  |
| 12                        | 385.10      | IND M&R EQUIPMENT - LG VOLUME              | 17               | 1,189,992         | -            | 292,083           | -       | 397,493      | 500,415      | -        |
| 13                        |             | TOTAL GROSS PLANT                          |                  | 591,458,008       | 517,950,383  | 64,767,224        | -       | 4,471,025    | 3,910,804    | 358,572  |
| 14                        | 303.30      | CUSTOMER & OTHER-BASED SOFTWARE            | 11               | 9,443,231         | 7,500,003    | 1,380,978         | -       | 288,774      | 270,549      | 2,927    |
| 15                        | 380.00      | SERVICES [1]                               | 15               | 112,175,774       | 103,153,476  | 8,792,337         | -       | 174,994      | 54,966       | -        |
| 16                        | 380.00      | DIRECT - SERVICES [1]                      |                  | 23,286            | -            | -                 | -       | -            | -            | 23,286   |
| 17                        | 380.12      | CSL REPLACEMENT [1]                        | 15               | -                 | -            | -                 | -       | -            | -            | -        |
| 18                        | 381.00      | METERS                                     | 16               | 15,981,682        | 11,938,157   | 3,854,622         | -       | 142,237      | 44,109       | 2,557    |
| 19                        | 381.10      | AUTOMATIC METER READING                    | 16               | 8,698,973         | 6,498,046    | 2,098,105         | -       | 77,421       | 24,009       | 1,392    |
| 20                        | 382.00      | METER INSTALLATIONS                        | 16               | 11,922,861        | 8,906,258    | 2,875,675         | -       | 106,113      | 32,907       | 1,908    |
| 21                        | 383.00      | HOUSE REGULATORS                           | 26               | 3,551,101         | 3,220,280    | 322,440           | -       | 6,889        | 1,491        | 0        |
| 22                        | 384.00      | HOUSE REG INSTALLATIONS                    | 26               | 2,978,927         | 2,701,410    | 270,487           | -       | 5,779        | 1,251        | 0        |
| 23                        | 385.00      | IND M&R EQUIPMENT                          | 17               | 3,252,946         | -            | 798,436           | -       | 1,086,581    | 1,367,929    | -        |
| 24                        | 385.00      | DIRECT - IND M&R EQUIPMENT                 |                  | 69,254            | -            | -                 | -       | -            | -            | 69,254   |
| 25                        | 385.10      | IND M&R EQUIPMENT - LG VOLUME              | 17               | -                 | -            | -                 | -       | -            | -            | -        |
| 26                        |             | TOTAL DEPRECIATION RESERVE                 |                  | 168,098,035       | 143,917,630  | 20,393,079        | -       | 1,888,789    | 1,797,212    | 101,325  |
| 27                        | 154.00      | CUSTOMER BASED MATERIALS & SUPPLIES        |                  | 197,765           | 173,780      | 21,389            | -       | 1,327        | 1,147        | 122      |
| 28                        | 190-282-283 | CUSTOMER BASED DEFERRED INCOME TAXES       |                  | (89,612,579)      | (78,475,342) | (9,812,967)       | -       | (677,411)    | (592,531)    | (54,328) |
| 29                        | 235.00      | CUSTOMER DEPOSITS                          | 9                | (3,131,607)       | (2,294,622)  | (836,985)         | -       | -            | -            | -        |
| 30                        | 252.00      | CUSTOMER BASED ADVANCES                    |                  | (64,520)          | (56,695)     | (6,978)           | -       | (433)        | (374)        | (40)     |
| 31                        |             | TOTAL CUSTOMER-BASED RATE BASE             |                  | 330,749,032       | 293,379,673  | 33,738,604        | -       | 1,905,720    | 1,521,834    | 203,002  |
| 32                        |             | EQUITY CAPITAL @ 52.170%                   |                  | 172,551,770       | 153,056,280  | 17,601,430        | -       | 994,214      | 793,941      | 105,906  |
| 33                        |             | RETURN ON RATE BASE @ 8.460%               |                  | 27,981,368        | 24,819,937   | 2,854,286         | -       | 161,224      | 128,747      | 17,174   |
| 34                        |             | RETURN ON EQUITY @ 11.250%                 |                  | 19,412,074        | 17,218,831   | 1,980,161         | -       | 111,849      | 89,318       | 11,914   |
| 35                        | 303.30      | CUSTOMER & OTHER-BASED SOFTWARE            | 11               | 3,857,309         | 3,063,552    | 564,093           | -       | 117,957      | 110,512      | 1,196    |
| 36                        | 380.00      | SERVICES [1]                               | 15               | 12,825,516        | 11,793,960   | 1,005,264         | -       | 20,008       | 6,285        | -        |
| 37                        | 380.00      | DIRECT - SERVICES [1]                      |                  | 963               | -            | -                 | -       | -            | -            | 963      |
| 38                        | 380.12      | CSL REPLACEMENT [1]                        | 15               | -                 | -            | -                 | -       | -            | -            | -        |
| 39                        | 381.00      | METERS                                     | 16               | 877,483           | 655,471      | 211,640           | -       | 7,810        | 2,422        | 140      |
| 40                        | 381.10      | AUTOMATIC METER READING                    | 16               | 1,748,019         | 1,305,753    | 421,605           | -       | 15,557       | 4,825        | 280      |
| 41                        | 382.00      | METER INSTALLATIONS                        | 16               | 708,729           | 529,414      | 170,938           | -       | 6,308        | 1,956        | 113      |
| 42                        | 383.00      | HOUSE REGULATORS                           | 26               | 300,138           | 272,177      | 27,253            | -       | 582          | 126          | -        |
| 43                        | 384.00      | HOUSE REG INSTALLATIONS                    | 26               | 66,436            | 60,247       | 6,032             | -       | 129          | 28           | -        |
| 44                        | 385.00      | IND M&R EQUIPMENT                          | 17               | 235,982           | -            | 57,922            | -       | 78,825       | 99,235       | -        |
| 45                        | 385.00      | DIRECT - IND M&R EQUIPMENT                 |                  | 10,475            | -            | -                 | -       | -            | -            | 10,475   |
| 46                        | 385.10      | IND M&R EQUIPMENT - LG VOLUME              | 17               | -                 | -            | -                 | -       | -            | -            | -        |
| 47                        |             | TOTAL DEPRECIATION EXPENSES                |                  | 20,631,050        | 17,680,573   | 2,464,747         | -       | 247,175      | 225,388      | 13,168   |
| 48                        |             | TOTAL NET SALVAGE AMORTIZED [2]            | 11               | 1,429,679         | 1,135,479    | 209,076           | -       | 43,720       | 40,960       | 443      |
| 49                        |             | TOTAL DEPRECIATION & AMORTIZATION EXPENSES |                  | 22,060,729        | 18,816,052   | 2,673,823         | -       | 290,895      | 266,348      | 13,611   |

[1] SERVICES @ 99.241% OF GROSS PLANT, DEPRECIATION RESERVE, & DEPRECIATION EXPENSES.

[2] NET SALVAGE @ 30.843% OF TOTAL REPRESENTING CUSTOMER PORTION

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

DOCKET NO.: R-2015-2468056  
WITNESS: B. E. ELLIOTT  
STUDY TYPE: PEAK & AVERAGE  
FORECASTED TEST YEAR: DECEMBER 31, 2016  
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        |
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DATE: 12-Mar-15  
TIME: 01:18:13 PM

COLUMBIA GAS OF PENNSYLVANIA, INC  
RATE OF RETURN BY CLASS - PROFORMA @ PROPOSED RATES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016

ALLOCATED COST OF SERVICE  
PEAK & AVERAGE

111, SCHEDULE 2  
PAGE 1 OF 13  
WITNESS: B. E. ELLIOTT

| LINE<br>NO. | ACCOUNT TITLE<br>(A)                           | ALLOC<br>FACTOR<br>(B) | TOTAL<br>COMPANY<br>(C)<br>\$ | RSS/RDS<br>(D)<br>\$ | SGSS/SCD/SGDS<br>(E)<br>\$ | N/A<br>(F)<br>\$ | SDS/LGSS<br>(G)<br>\$ | LDS/LGSS<br>(H)<br>\$ | MLDS<br>(I)<br>\$ |
|-------------|------------------------------------------------|------------------------|-------------------------------|----------------------|----------------------------|------------------|-----------------------|-----------------------|-------------------|
| 1           | TOTAL REVENUE [PAGE 6]                         |                        | 581,070,377                   | 423,115,183          | 116,568,299                | -                | 20,608,596            | 19,037,447            | 1,740,853         |
| 2           | PRODUCTS PURCHASED [PAGE 7]                    |                        | 190,479,760                   | 133,198,003          | 51,541,083                 | -                | 4,656,534             | 812,004               | 272,136           |
| 3           | OPERATING & MAINTENANCE EXPENSES [PAGES 7 & 8] |                        | 177,902,792                   | 135,650,717          | 24,794,632                 | -                | 6,612,118             | 10,823,331            | 21,994            |
| 4           | DEPRECIATION & AMORTIZATION [PAGE 5]           |                        | 54,751,328                    | 37,228,070           | 9,920,805                  | -                | 2,839,009             | 4,742,174             | 21,271            |
| 5           | TAXES OTHER THAN INCOME [PAGE 9]               |                        | 3,221,085                     | 2,250,280            | 556,146                    | -                | 156,259               | 257,933               | 467               |
| 6           | TOTAL EXPENSES & TAXES OTHER THAN INCOME       |                        | 426,354,965                   | 308,327,070          | 86,812,666                 | -                | 14,263,920            | 16,635,442            | 315,867           |
| 7           | OPERATING INCOME BEFORE TAXES                  |                        | 154,715,412                   | 114,788,113          | 29,755,632                 | -                | 6,344,676             | 2,402,005             | 1,424,985         |
| 8           | INCOME TAXES                                   |                        | 47,210,745                    | 36,358,272           | 9,148,830                  | -                | 1,687,987             | (570,896)             | 586,552           |
| 9           | INVESTMENT TAX CREDIT                          | 12                     | (360,240)                     | (238,789)            | (67,235)                   | -                | (20,159)              | (33,938)              | (119)             |
| 10          | NET INCOME TAXES                               |                        | 46,850,505                    | 36,119,483           | 9,081,595                  | -                | 1,667,828             | (604,834)             | 586,433           |
| 11          | OPERATING INCOME                               |                        | 107,864,907                   | 78,668,630           | 20,674,037                 | -                | 4,676,848             | 3,006,839             | 838,552           |
| 12          | RATE BASE [PAGE 10]                            |                        | 1,325,130,928                 | 870,122,765          | 254,286,899                | -                | 75,034,940            | 125,304,335           | 381,990           |
| 13          | RATE OF RETURN EARNED ON RATE BASE             |                        | 8.140%                        | 9.041%               | 8.130%                     | 0.000%           | 6.233%                | 2.400%                | 219.522%          |
| 14          | UNITIZED RETURN                                |                        | 1.00                          | 1.11                 | 1.00                       | 0.00             | 0.77                  | 0.29                  | 26.97             |

COLUMBIA GAS OF PENNSYLVANIA, INC  
RATE OF RETURN BY CLASS - CURRENT @ CURRENT RATES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016

ALLOCATED COST OF SERVICE  
PEAK & AVERAGE

111, SCHEDULE 2

PAGE 2 OF 13

WITNESS: B. E. ELLIOTT

| LINE<br>NO. | ACCOUNT TITLE<br>(A)                           | ALLOC<br>FACTOR<br>(B) | TOTAL<br>COMPANY<br>(C)<br>\$ | RSS/RDS<br>(D)<br>\$ | SGSS/SCD/SGDS<br>(E)<br>\$ | N/A<br>(F)<br>\$ | SDS/LGSS<br>(G)<br>\$ | LDS/LGSS<br>(H)<br>\$ | MLDS<br>(I)<br>\$ |
|-------------|------------------------------------------------|------------------------|-------------------------------|----------------------|----------------------------|------------------|-----------------------|-----------------------|-------------------|
| 1           | TOTAL REVENUE [PAGE 8]                         |                        | 534,899,150                   | 387,276,078          | 110,411,494                | -                | 18,824,003            | 16,647,057            | 1,740,519         |
| 2           | PRODUCTS PURCHASED [PAGE 7]                    |                        | 190,479,760                   | 133,198,003          | 51,541,083                 | -                | 4,656,534             | 812,004               | 272,136           |
| 3           | OPERATING & MAINTENANCE EXPENSES [PAGES 7 & 8] |                        | 177,299,816                   | 135,182,674          | 24,714,227                 | -                | 6,588,812             | 10,792,114            | 21,990            |
| 4           | DEPRECIATION & AMORTIZATION [PAGE 5]           |                        | 54,751,328                    | 37,228,070           | 9,920,805                  | -                | 2,839,009             | 4,742,174             | 21,271            |
| 5           | TAXES OTHER THAN INCOME [PAGE 9]               |                        | 3,221,085                     | 2,250,280            | 556,146                    | -                | 156,259               | 257,933               | 467               |
| 6           | TOTAL EXPENSES & TAXES OTHER THAN INCOME       |                        | 425,751,989                   | 307,859,027          | 86,732,261                 | -                | 14,240,614            | 16,604,224            | 315,863           |
| 7           | OPERATING INCOME BEFORE TAXES                  |                        | 109,147,161                   | 79,417,051           | 23,679,233                 | -                | 4,583,389             | 42,833                | 1,424,656         |
| 8           | INCOME TAXES [PAGE 11]                         |                        | 29,190,575                    | 22,370,626           | 6,745,891                  | -                | 991,478               | (1,503,842)           | 586,421           |
| 9           | INVESTMENT TAX CREDIT                          | 12                     | (360,240)                     | (238,789)            | (67,235)                   | -                | (20,159)              | (33,938)              | (119)             |
| 10          | NET INCOME TAXES                               |                        | 28,830,335                    | 22,131,837           | 6,678,656                  | -                | 971,319               | (1,537,780)           | 586,302           |
| 11          | OPERATING INCOME                               |                        | 80,316,826                    | 57,285,213           | 17,000,577                 | -                | 3,612,070             | 1,580,612             | 838,353           |
| 12          | RATE BASE [PAGE 10]                            |                        | 1,325,130,928                 | 870,122,765          | 254,286,899                | -                | 75,034,940            | 125,304,335           | 381,990           |
| 13          | RATE OF RETURN EARNED ON RATE BASE             |                        | 6.061%                        | 6.584%               | 6.686%                     | 0.000%           | 4.814%                | 1.261%                | 219.470%          |
| 14          | UNITIZED RETURN                                |                        | 1.00                          | 1.09                 | 1.10                       | 0.00             | 0.79                  | 0.21                  | 36.21             |

COLUMBIA GAS OF PENNSYLVANIA, INC  
GROSS PLANT (Accounts 101 & 106)  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016

ALLOCATED COST OF SERVICE  
PEAK & AVERAGE

111, SCHEDULE 2  
PAGE 3 OF 13  
WITNESS: B. E. ELLIOTT

| LINE NO.                  | ACCT. NO.<br>(A) | ACCOUNT TITLE<br>(B)                       | ALLOC FACTOR<br>(C) | TOTAL COMPANY<br>(D)<br>\$ | RSS/RDS<br>(E)<br>\$ | SGSS/SCD/SGDS<br>(F)<br>\$ | N/A<br>(G)<br>\$ | SDS/LGSS<br>(H)<br>\$ | LDS/LGSS<br>(I)<br>\$ | MLDS<br>(J)<br>\$ |
|---------------------------|------------------|--------------------------------------------|---------------------|----------------------------|----------------------|----------------------------|------------------|-----------------------|-----------------------|-------------------|
| 1                         | 301-305          | INTANGIBLE PLANT                           | 11                  | 25,650,455                 | 16,997,274           | 4,782,784                  | -                | 1,438,478             | 2,423,968             | 7,952             |
| 2                         | 350-362          | UNDERGROUND STORAGE PLANT                  | 25                  | 6,188,872                  | 4,536,505            | 1,507,981                  | -                | 115,546               | 20,176                | 8,664             |
| <u>DISTRIBUTION PLANT</u> |                  |                                            |                     |                            |                      |                            |                  |                       |                       |                   |
| 3                         | 374.10           | LAND - CITY GATE & M/L IND M&R             | 5                   | 21,944                     | 12,445               | 4,854                      | -                | 1,710                 | 2,935                 | -                 |
| 4                         | 374.20           | LAND - OTHER DISTRIBUTION                  | 5                   | 680,675                    | 386,038              | 150,565                    | -                | 53,038                | 91,034                | -                 |
| 5                         | 374.30           | LAND RIGHTS - CITY GATE MAIN LINE          | 5                   | 95,361                     | 54,083               | 21,094                     | -                | 7,431                 | 12,754                | -                 |
| 6                         | 374.40           | LAND RIGHTS - OTHER DISTRIBUTION           | 5                   | 2,128,780                  | 1,207,316            | 470,886                    | -                | 165,875               | 284,703               | -                 |
| 7                         | 374.40           | DIRECT - LAND RIGHTS-OTHER DISTRIBUTION    |                     | 3                          | -                    | -                          | -                | -                     | -                     | 3                 |
| 8                         | 374.41           | LAND RIGHTS - OTHER DISTRIBUTION LOC       | 5                   | 13                         | 8                    | 3                          | -                | -                     | 2                     | -                 |
| 9                         | 374.50           | RIGHTS OF WAY                              | 5                   | 3,208,212                  | 1,819,505            | 709,656                    | -                | 249,984               | 429,066               | -                 |
| 10                        | 374.50           | DIRECT - RIGHTS OF WAY                     |                     | 1,195                      | -                    | -                          | -                | -                     | -                     | 1,195             |
| 11                        | 375.20           | M & R STRUCTURES - CITY GATE               | 5                   | 503,526                    | 285,570              | 111,380                    | -                | 39,235                | 67,342                | -                 |
| 12                        | 375.31           | M & R STRUCTURES - LOCAL GAS PURCH         | 5                   | 4,012                      | 2,276                | 888                        | -                | 313                   | 537                   | -                 |
| 13                        | 375.40           | M & R STRUCTURES - REGULATING              | 5                   | 3,330,552                  | 1,888,889            | 736,718                    | -                | 259,517               | 445,428               | -                 |
| 14                        | 375.40           | DIRECT - M & R STRUCTURES - REGULATING     | 5                   | 27,227                     | -                    | -                          | -                | -                     | -                     | 27,227            |
| 15                        | 375.60           | M & R STRUCTURES - DIST. IND. M & R        | 17                  | 87,670                     | (0)                  | 21,519                     | -                | 29,284                | 36,867                | -                 |
| 16                        | 375.70           | M & R STRUCTURES - OTHER                   | 11                  | 9,396,038                  | 6,226,985            | 1,751,985                  | -                | 526,930               | 887,926               | 2,913             |
| 17                        | 375.71           | M & R STRUCTURES - OTHER LEASED            | 11                  | 1,125,911                  | 746,085              | 209,937                    | -                | 63,141                | 106,399               | 349               |
| 18                        | 375.80           | M & R STRUCTURES - COMMUNICATION           | 5                   | 16,515                     | 9,366                | 3,653                      | -                | 1,287                 | 2,209                 | -                 |
| 19                        | 376.00           | MAINS                                      | 5                   | 1,152,690,445              | 653,736,859          | 254,975,126                | -                | 89,817,639            | 154,160,820           | -                 |
| 20                        | 376.00           | DIRECT - MAINS - MDS                       |                     | 47,434                     | -                    | -                          | -                | -                     | -                     | 47,434            |
| 21                        | 376.00           | DIRECT - MAINS - LDS                       |                     | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 22                        | 376.08           | MAINS-CSL REPLACEMENTS                     | 5                   | 23,786,341                 | 13,490,185           | 5,261,539                  | -                | 1,853,432             | 3,181,185             | -                 |
| 23                        | 376.30           | MAINS-BARE STEEL                           | 5                   | 70,471,162                 | 39,967,015           | 15,588,221                 | -                | 5,491,113             | 9,424,813             | -                 |
| 24                        | 376.30           | DIRECT - MAINS-BARE STEEL                  |                     | 147,819                    | -                    | -                          | -                | -                     | -                     | 147,819           |
| 25                        | 376.80           | MAINS-CAST IRON                            | 5                   | 570,601                    | 323,611              | 126,217                    | -                | 44,461                | 76,312                | -                 |
| 26                        | 378.10           | M & R EQUIP - GENERAL                      | 5                   | 56,453                     | 32,017               | 12,487                     | -                | 4,399                 | 7,550                 | -                 |
| 27                        | 378.20           | M & R EQUIP - GENERAL - REGULATING         | 5                   | 39,630,043                 | 22,475,783           | 8,766,166                  | -                | 3,087,973             | 5,300,122             | -                 |
| 28                        | 378.20           | DIRECT - M & R EQUIP-GEN-REG               |                     | 1,178                      | -                    | -                          | -                | -                     | -                     | 1,178             |
| 29                        | 378.30           | M & R EQUIP - LOCAL GAS PURCHASES          | 5                   | 457,281                    | 259,342              | 101,151                    | -                | 35,631                | 61,157                | -                 |
| 30                        | 379.10           | M & R EQUIP - CITY GATE                    | 5                   | 141,567                    | 80,288               | 31,315                     | -                | 11,031                | 18,933                | -                 |
| 31                        | 379.11           | M & R EQUIP - EXCHANGE GAS                 | 5                   | (450)                      | (255)                | (100)                      | -                | (35)                  | (60)                  | -                 |
| 32                        | 380.00           | SERVICES                                   | 15                  | 454,989,419                | 418,394,620          | 35,662,071                 | -                | 709,784               | 222,945               | -                 |
| 33                        | 380.00           | DIRECT - SERVICES                          |                     | 37,630                     | -                    | -                          | -                | -                     | -                     | 37,630            |
| 34                        | 380.12           | CSL REPLACEMENT                            | 15                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 35                        | 381.00           | METERS                                     | 16                  | 36,181,256                 | 27,027,036           | 8,726,557                  | -                | 322,013               | 99,860                | 5,789             |
| 36                        | 381.10           | AUTOMATIC METER READING                    | 16                  | 23,761,067                 | 17,749,280           | 5,730,932                  | -                | 211,474               | 65,581                | 3,802             |
| 37                        | 382.00           | METER INSTALLATIONS                        | 16                  | 36,486,290                 | 27,254,893           | 8,800,128                  | -                | 324,728               | 100,702               | 5,838             |
| 38                        | 383.00           | HOUSE REGULATORS                           | 26                  | 11,597,152                 | 10,516,762           | 1,053,021                  | -                | 22,499                | 4,871                 | -                 |
| 39                        | 384.00           | HOUSE REG INSTALLATIONS                    | 26                  | 3,884,772                  | 3,504,730            | 350,921                    | -                | 7,498                 | 1,623                 | -                 |
| 40                        | 385.00           | IND M&R EQUIPMENT                          | 17                  | 5,504,725                  | -                    | 1,351,135                  | -                | 1,838,743             | 2,314,847             | -                 |
| 41                        | 385.00           | DIRECT - IND M&R EQUIPMENT                 |                     | 299,289                    | -                    | -                          | -                | -                     | -                     | 299,289           |
| 42                        | 385.10           | IND M&R EQUIPMENT - LG VOLUME              | 17                  | 1,189,992                  | -                    | 292,084                    | -                | 397,493               | 500,415               | -                 |
| 43                        | 387.10           | OTHER EQUIP DISTRIBUTION                   | 11                  | 16,603                     | 11,002               | 3,096                      | -                | 931                   | 1,569                 | 5                 |
| 44                        | 387.20           | OTHER EQUIP ODORIZATION                    | 11                  | 117,248                    | 77,694               | 21,862                     | -                | 6,575                 | 11,080                | 36                |
| 45                        | 387.42           | OTHER EQUIP RADIO                          | 11                  | 121,945                    | 80,807               | 22,738                     | -                | 6,839                 | 11,524                | 38                |
| 46                        | 387.44           | OTHER EQUIP COMMUNICATION                  | 11                  | 656,004                    | 434,701              | 122,319                    | -                | 36,789                | 61,992                | 203               |
| 47                        | 387.46           | OTHER EQUIP CUSTOMER INFO SERVICE          | 11                  | 2,297,341                  | 1,522,333            | 428,362                    | -                | 128,835               | 217,099               | 712               |
| 48                        | 387.45           | DIRECT - OTHER EQUIP CUSTOMER INFO SERVICE | 11                  | 38,438                     | -                    | -                          | -                | -                     | -                     | 38,438            |
| 49                        |                  | TOTAL DISTRIBUTION PLANT                   |                     | 1,885,786,679              | 1,249,576,570        | 351,620,485                | -                | 105,757,586           | 178,212,138           | 619,899           |
| 50                        | 389-398          | GENERAL PLANT                              | 11                  | 27,403,480                 | 18,158,916           | 5,109,653                  | -                | 1,536,787             | 2,589,629             | 8,495             |
| 51                        |                  | TOTAL GROSS PLANT                          |                     | 1,945,029,486              | 1,289,269,265        | 363,020,902                | -                | 108,848,397           | 183,245,911           | 645,010           |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
DEPRECIATION RESERVE  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016

ALLOCATED COST OF SERVICE  
PEAK & AVERAGE

111, SCHEDULE 2  
PAGE 4 OF 13  
WITNESS: B. E. ELLIOTT

| LINE NO.                  | ACCT. NO. (A)              | ACCOUNT TITLE (B)                          | ALLOC FACTOR (C) | TOTAL COMPANY (D)<br>\$ | RSS/RDS (E)<br>\$ | SGSS/SCD/SGDS (F)<br>\$ | N/A (G)<br>\$ | SDS/LGSS (H)<br>\$ | LDS/LGSS (I)<br>\$ | MLDS (J)<br>\$ |
|---------------------------|----------------------------|--------------------------------------------|------------------|-------------------------|-------------------|-------------------------|---------------|--------------------|--------------------|----------------|
| 1                         | 301-305                    | INTANGIBLE PLANT                           | 11               | 9,438,648               | 6,254,520         | 1,759,930               | -             | 529,319            | 891,952            | 2,926          |
| 2                         | 350-362                    | UNDERGROUND STORAGE PLANT                  | 25               | 2,472,747               | 1,812,548         | 602,510                 | -             | 48,166             | 8,061              | 3,462          |
| <u>DISTRIBUTION PLANT</u> |                            |                                            |                  |                         |                   |                         |               |                    |                    |                |
| 3                         | 374.10                     | LAND - CITY GATE & M/L IND M&R             | 5                | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 4                         | 374.20                     | LAND - OTHER DISTRIBUTION                  | 5                | 235,240                 | 133,414           | 52,035                  | -             | 18,330             | 31,461             | -              |
| 5                         | 374.30                     | LAND RIGHTS - CITY GATE MAIN LINE          | 5                | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 6                         | 374.40                     | LAND RIGHTS - OTHER DISTRIBUTION           | 5                | 681,964                 | 386,769           | 150,850                 | -             | 53,139             | 91,206             | -              |
| 7                         | 374.40                     | DIRECT - LAND RIGHTS-OTHER DISTRIBUTION    |                  | 1                       | -                 | -                       | -             | -                  | -                  | 1              |
| 8                         | 374.41                     | LAND RIGHTS - OTHER DISTRIBUTION LOC       | 5                | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 9                         | 374.50                     | RIGHTS OF WAY                              | 5                | 1,601,194               | 908,101           | 354,184                 | -             | 124,765            | 214,144            | -              |
| 10                        | 374.50                     | DIRECT - RIGHTS OF WAY                     |                  | 707                     | -                 | -                       | -             | -                  | -                  | 707            |
| 11                        | 375.20                     | M & R STRUCTURES - CITY GATE               | 5                | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 12                        | 375.31                     | M & R STRUCTURES - LOCAL GAS PURCH         | 5                | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 13                        | 375.40                     | M & R STRUCTURES - REGULATING              | 5                | 881,823                 | 500,117           | 195,059                 | -             | 68,712             | 117,935            | -              |
| 14                        | 375.40                     | DIRECT - M & R STRUCTURES - REGULATING     | 5                | 1,222                   | -                 | -                       | -             | -                  | -                  | 1,222          |
| 15                        | 375.60                     | M & R STRUCTURES - DIST IND. M & R         | 17               | 73,869                  | -                 | 18,131                  | -             | 24,675             | 31,063             | -              |
| 16                        | 375.70                     | M & R STRUCTURES - OTHER                   | 11               | 2,031,701               | 1,346,307         | 378,831                 | -             | 113,938            | 191,996            | 630            |
| 17                        | 375.71                     | M & R STRUCTURES - OTHER LEASED            | 11               | 1,125,911               | 746,085           | 209,937                 | -             | 63,141             | 106,399            | 349            |
| 18                        | 375.80                     | M & R STRUCTURES - COMMUNICATION           | 5                | 6,540                   | 3,709             | 1,447                   | -             | 510                | 875                | -              |
| 19                        | 376.00                     | MAINS                                      | 5                | 145,631,838             | 82,593,641        | 32,213,763              | -             | 11,347,633         | 19,476,802         | -              |
| 20                        | 376.00                     | DIRECT - MAINS - MDS                       |                  | 19,707                  | -                 | -                       | -             | -                  | -                  | 19,707         |
| 21                        | 376.00                     | DIRECT - MAINS - LDS                       |                  | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 22                        | 376.08                     | MAINS-CSL REPLACEMENTS                     | 5                | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 23                        | 376.30                     | MAINS-BARE STEEL                           | 5                | 39,288,673              | 22,282,178        | 8,690,655               | -             | 3,061,373          | 5,254,467          | -              |
| 24                        | 376.30                     | DIRECT - MAINS-BARE STEEL                  |                  | 119,815                 | -                 | -                       | -             | -                  | -                  | 119,815        |
| 25                        | 376.80                     | MAINS-CAST IRON                            | 5                | 342,363                 | 194,168           | 75,731                  | -             | 26,677             | 45,788             | -              |
| 26                        | 378.10                     | M & R EQUIP - GENERAL                      | 5                | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 27                        | 378.20                     | M & R EQUIP - GENERAL - REGULATING         | 5                | 9,897,091               | 5,613,036         | 2,189,237               | -             | 771,181            | 1,323,637          | -              |
| 28                        | 378.20                     | DIRECT - M & R EQUIP-GEN-REG               |                  | 720                     | -                 | -                       | -             | -                  | -                  | 720            |
| 29                        | 378.30                     | M & R EQUIP - LOCAL GAS PURCHASES          | 5                | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 30                        | 379.10                     | M & R EQUIP - CITY GATE                    | 5                | 94,150                  | 53,366            | 20,826                  | -             | 7,336              | 12,592             | -              |
| 31                        | 379.11                     | M & R EQUIP - EXCHANGE GAS                 | 5                | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 32                        | 380.00                     | SERVICES                                   | 15               | 113,033,699             | 103,942,399       | 8,859,581               | -             | 176,333            | 55,387             | -              |
| 33                        | 380.00                     | DIRECT - SERVICES                          |                  | 23,465                  | -                 | -                       | -             | -                  | -                  | 23,465         |
| 34                        | 380.12                     | CSL REPLACEMENT                            | 15               | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 35                        | 381.00                     | METERS                                     | 16               | 15,981,682              | 11,938,157        | 3,854,622               | -             | 142,237            | 44,109             | 2,557          |
| 36                        | 381.10                     | AUTOMATIC METER READING                    | 16               | 8,698,973               | 6,498,046         | 2,098,105               | -             | 77,421             | 24,009             | 1,392          |
| 37                        | 382.00                     | METER INSTALLATIONS                        | 16               | 11,922,861              | 8,906,258         | 2,875,675               | -             | 106,114            | 32,907             | 1,908          |
| 38                        | 383.00                     | HOUSE REGULATORS                           | 26               | 3,551,101               | 3,220,280         | 322,440                 | -             | 6,889              | 1,492              | -              |
| 39                        | 384.00                     | HOUSE REG INSTALLATIONS                    | 26               | 2,978,927               | 2,701,410         | 270,487                 | -             | 5,779              | 1,251              | -              |
| 40                        | 385.00                     | IND M&R EQUIPMENT                          | 17               | 3,252,946               | 0                 | 798,436                 | -             | 1,086,581          | 1,367,929          | -              |
| 41                        | 385.00                     | DIRECT - IND M&R EQUIPMENT                 |                  | 69,254                  | -                 | -                       | -             | -                  | -                  | 69,254         |
| 42                        | 385.10                     | IND M&R EQUIPMENT - LG VOLUME              | 17               | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 43                        | 387.10                     | OTHER EQUIP DISTRIBUTION                   | 11               | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 44                        | 387.20                     | OTHER EQUIP ODORIZATION                    | 11               | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 45                        | 387.42                     | OTHER EQUIP RADIO                          | 11               | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 46                        | 387.44                     | OTHER EQUIP COMMUNICATION                  | 11               | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 47                        | 387.46                     | OTHER EQUIP CUSTOMER INFO SERVICE          | 11               | 930,202                 | 616,398           | 173,445                 | -             | 52,166             | 87,904             | 288            |
| 48                        | 387.45                     | DIRECT - OTHER EQUIP CUSTOMER INFO SERVICE | 11               | 919                     | -                 | -                       | -             | -                  | -                  | 919            |
| 49                        | TOTAL DISTRIBUTION PLANT   |                                            |                  | 362,478,558             | 252,583,869       | 63,803,476              | -             | 17,334,928         | 28,513,351         | 242,934        |
| 50                        | 389-398                    | GENERAL PLANT                              | 11               | 12,347,815              | 8,182,280         | 2,302,374               | -             | 692,466            | 1,166,869          | 3,828          |
| 51                        | TOTAL DEPRECIATION RESERVE |                                            |                  | 388,737,768             | 268,833,217       | 68,468,290              | -             | 18,602,879         | 30,580,233         | 253,149        |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
DEPRECIATION AND AMORTIZATION EXPENSE  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016

ALLOCATED COST OF SERVICE  
PEAK & AVERAGE

111, SCHEDULE 2  
PAGE 5 OF 13  
WITNESS: B. E. ELLIOTT

| LINE NO.                  | ACCT. NO. (A) | ACCOUNT TITLE (B)                           | ALLOC FACTOR (C) | TOTAL COMPANY (D)<br>\$ | RSS/RDS (E)<br>\$ | SGSS/SCD/SGDS (F)<br>\$ | N/A (G)<br>\$ | SDS/LGSS (H)<br>\$ | LDS/LGSS (I)<br>\$ | MLDS (J)<br>\$ |
|---------------------------|---------------|---------------------------------------------|------------------|-------------------------|-------------------|-------------------------|---------------|--------------------|--------------------|----------------|
| 1                         | 301-305       | INTANGIBLE PLANT                            | 11               | 3,857,309               | 2,556,046         | 719,234                 | -             | 216,318            | 364,516            | 1,196          |
| 2                         | 350-362       | UNDERGROUND STORAGE PLANT                   | 25               | 164,852                 | 120,838           | 40,168                  | -             | 3,078              | 537                | 231            |
| <u>DISTRIBUTION PLANT</u> |               |                                             |                  |                         |                   |                         |               |                    |                    |                |
| 3                         | 374.10        | LAND - CITY GATE & M/L IND M&R              | 5                | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 4                         | 374.20        | LAND - OTHER DISTRIBUTION                   | 5                | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 5                         | 374.30        | LAND RIGHTS - CITY GATE MAIN LINE           | 5                | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 6                         | 374.40        | LAND RIGHTS - OTHER DISTRIBUTION            | 5                | 40,965                  | 23,233            | 9,061                   | -             | 3,192              | 5,479              | -              |
| 7                         | 374.40        | DIRECT - LAND RIGHTS-OTHER DISTRIBUTION     | 5                | 0                       | -                 | -                       | -             | -                  | -                  | 0              |
| 8                         | 374.41        | LAND RIGHTS - OTHER DISTRIBUTION LOC        | 5                | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 9                         | 374.50        | RIGHTS OF WAY                               | 5                | 42,143                  | 23,901            | 9,322                   | -             | 3,284              | 5,636              | -              |
| 10                        | 374.50        | DIRECT - RIGHTS OF WAY                      | 5                | 16                      | -                 | -                       | -             | -                  | -                  | 16             |
| 11                        | 375.20        | M & R STRUCTURES - CITY GATE                | 5                | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 12                        | 375.31        | M & R STRUCTURES - LOCAL GAS PURCH          | 5                | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 13                        | 375.40        | M & R STRUCTURES - REGULATING               | 5                | 85,147                  | 48,290            | 18,835                  | -             | 6,635              | 11,388             | -              |
| 14                        | 375.40        | DIRECT - M & R STRUCTURES - REGULATING      | 5                | 415                     | -                 | -                       | -             | -                  | -                  | 415            |
| 15                        | 375.60        | M & R STRUCTURES - DIST. IND. M & R         | 17               | 850                     | 0                 | 209                     | -             | 284                | 357                | -              |
| 16                        | 375.70        | M & R STRUCTURES - OTHER                    | 11               | 450,305                 | 298,395           | 83,964                  | -             | 25,253             | 42,554             | 140            |
| 17                        | 375.71        | M & R STRUCTURES - OTHER LEASED             | 11               | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 18                        | 375.80        | M & R STRUCTURES - COMMUNICATION            | 5                | 331                     | 188               | 73                      | -             | 26                 | 44                 | -              |
| 19                        | 376.00        | MAINS                                       | 5                | 23,803,903              | 13,500,146        | 5,265,423               | -             | 1,854,800          | 3,183,534          | -              |
| 20                        | 376.00        | DIRECT - MAINS - MDS                        | 5                | 859                     | -                 | -                       | -             | -                  | -                  | 859            |
| 21                        | 376.00        | DIRECT - MAINS - LDS                        | 5                | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 22                        | 376.08        | MAINS-CSL REPLACEMENTS                      | 5                | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 23                        | 376.30        | MAINS-BARE STEEL                            | 5                | 1,849,518               | 1,048,936         | 409,113                 | -             | 144,115            | 247,355            | -              |
| 24                        | 376.30        | DIRECT - MAINS-BARE STEEL                   | 5                | 3,556                   | -                 | -                       | -             | -                  | -                  | 3,556          |
| 25                        | 376.80        | MAINS-CAST IRON                             | 5                | 14,809                  | 8,399             | 3,276                   | -             | 1,154              | 1,981              | -              |
| 26                        | 378.10        | M & R EQUIP - GENERAL                       | 5                | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 27                        | 378.20        | M & R EQUIP - GENERAL - REGULATING          | 5                | 1,247,152               | 707,310           | 275,870                 | -             | 97,178             | 166,794            | -              |
| 28                        | 378.20        | DIRECT - M & R EQUIP-GEN-REG                | 5                | 27                      | -                 | -                       | -             | -                  | -                  | 27             |
| 29                        | 378.30        | M & R EQUIP - LOCAL GAS PURCHASES           | 5                | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 30                        | 379.10        | M & R EQUIP - CITY GATE                     | 5                | 4,384                   | 2,486             | 970                     | -             | 342                | 586                | -              |
| 31                        | 379.11        | M & R EQUIP - EXCHANGE GAS                  | 5                | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 32                        | 380.00        | SERVICES                                    | 15               | 12,923,606              | 11,884,161        | 1,012,952               | -             | 20,161             | 6,333              | -              |
| 33                        | 380.00        | DIRECT - SERVICES                           | 15               | 971                     | -                 | -                       | -             | -                  | -                  | 971            |
| 34                        | 380.12        | CSL REPLACEMENT                             | 15               | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 35                        | 381.00        | METERS                                      | 16               | 877,483                 | 655,471           | 211,640                 | -             | 7,810              | 2,422              | 140            |
| 36                        | 381.10        | AUTOMATIC METER READING                     | 16               | 1,748,019               | 1,305,753         | 421,605                 | -             | 15,557             | 4,825              | 280            |
| 37                        | 382.00        | METER INSTALLATIONS                         | 16               | 708,729                 | 529,414           | 170,938                 | -             | 6,308              | 1,956              | 113            |
| 38                        | 383.00        | HOUSE REGULATORS                            | 26               | 300,138                 | 272,177           | 27,253                  | -             | 582                | 126                | -              |
| 39                        | 384.00        | HOUSE REG INSTALLATIONS                     | 26               | 66,436                  | 60,247            | 6,032                   | -             | 129                | 28                 | -              |
| 40                        | 385.00        | IND M&R EQUIPMENT                           | 17               | 235,982                 | -                 | 57,922                  | -             | 78,825             | 99,235             | -              |
| 41                        | 385.00        | DIRECT - IND M&R EQUIPMENT                  | 17               | 10,475                  | -                 | -                       | -             | -                  | -                  | 10,475         |
| 42                        | 385.10        | IND M&R EQUIPMENT - LG VOLUME               | 17               | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 43                        | 387.10        | OTHER EQUIP DISTRIBUTION                    | 11               | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 44                        | 387.20        | OTHER EQUIP ODORIZATION                     | 11               | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 45                        | 387.42        | OTHER EQUIP RADIO                           | 11               | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 46                        | 387.44        | OTHER EQUIP COMMUNICATION                   | 11               | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 47                        | 387.46        | OTHER EQUIP CUSTOMER INFO SERVICE           | 11               | 143,937                 | 95,380            | 26,839                  | -             | 8,072              | 13,602             | 45             |
| 48                        | 387.45        | DIRECT - OTHER EQUIP CUSTOMER INFO SERVICE  | 11               | 896                     | -                 | -                       | -             | -                  | -                  | 896            |
| 49                        |               | TOTAL DISTRIBUTION PLANT                    |                  | 44,561,052              | 30,463,884        | 8,011,297               | -             | 2,273,705          | 3,794,234          | 17,932         |
| 50                        | 389-398       | GENERAL PLANT                               | 11               | 1,532,773               | 1,015,692         | 285,801                 | -             | 85,958             | 144,847            | 475            |
| 51                        |               | NET DEPRECIATION & AMORTIZATION EXPENSE     |                  | 50,115,986              | 34,156,460        | 9,056,499               | -             | 2,579,059          | 4,304,134          | 19,834         |
| 52                        |               | AMORTIZATION OF NET NEGATIVE SALVAGE        | 11               | 4,635,342               | 3,071,609         | 884,306                 | -             | 259,950            | 438,040            | 1,437          |
| 53                        |               | TOTAL AMORTIZATION AND DEPRECIATION EXPENSE |                  | 54,751,328              | 37,228,070        | 9,920,805               | -             | 2,839,009          | 4,742,174          | 21,271         |



COLUMBIA GAS OF PENNSYLVANIA, INC  
OPERATING REVENUE @ PROPOSED & CURRENT RATES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016

ALLOCATED COST OF SERVICE  
PEAK & AVERAGE

111, SCHEDULE 2  
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WITNESS: B. E. ELLIOTT

| LINE NO.                          | ACCT NO. (A) | ACCOUNT TITLE (B)                | ALLOC FACTOR (C) | TOTAL COMPANY (D)<br>\$ | RSS/RDS (E)<br>\$ | SGSS/SCD/SGDS (F)<br>\$ | N/A (G)<br>\$ | SDS/LGSS (H)<br>\$ | LDS/LGSS (I)<br>\$ | MLDS (J)<br>\$ |
|-----------------------------------|--------------|----------------------------------|------------------|-------------------------|-------------------|-------------------------|---------------|--------------------|--------------------|----------------|
| <u>PROPOSED OPERATING REVENUE</u> |              |                                  |                  |                         |                   |                         |               |                    |                    |                |
| 1                                 |              | SALES REVENUE                    |                  |                         |                   |                         |               |                    |                    |                |
| 2                                 | 480/481      | SALES BASE REVENUE               |                  | 220,048,699             | 179,812,274       | 40,216,579              | -             | -                  | -                  | 19,846         |
| 3                                 |              | USP REVENUE                      |                  | 22,763,845              | 22,763,845        | -                       | -             | -                  | -                  | -              |
| 4                                 |              | STAS REVENUE                     |                  | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 5                                 |              | RIDER CC - CUSTOMER CHOICE       |                  | 32,410                  | 23,281            | 9,129                   | -             | -                  | -                  | -              |
| 6                                 |              | GAS PROCUREMENT REVENUE          |                  | 554,837                 | 386,459           | 151,534                 | -             | 14,343             | 2,501              | -              |
| 7                                 |              | MERCHANT FUNCTION REVENUE        |                  | 1,752,694               | 1,573,774         | 178,920                 | -             | -                  | -                  | -              |
| 8                                 |              | GAS COST REVENUE                 |                  | 182,223,258             | 127,287,819       | 49,194,765              | -             | 4,656,534          | 812,004            | 272,136        |
|                                   |              | TOTAL SALES REVENUE              |                  | 427,375,743             | 331,847,452       | 89,750,927              | -             | 4,670,877          | 14,505             | 291,982        |
| 9                                 | 489.00       | TRANSPORTATION REVENUE           |                  |                         |                   |                         |               |                    |                    |                |
| 10                                |              | TRANSPORTATION BASE REVENUE      |                  | 129,330,933             | 75,456,244        | 23,591,082              | -             | 15,616,576         | 14,471,682         | 195,349        |
| 11                                |              | USP REVENUE                      |                  | 7,953,451               | 7,953,451         | -                       | -             | -                  | -                  | -              |
| 12                                |              | STAS REVENUE                     |                  | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 13                                |              | RIDER CC - CUSTOMER CHOICE       |                  | 14,146                  | 8,134             | 6,012                   | -             | -                  | -                  | -              |
| 14                                |              | CHOICE ADMINISTRATIVE CHARGE     |                  | 960,011                 | 405,888           | 477,366                 | -             | 63,087             | 13,014             | 656            |
| 15                                |              | FLEX REVENUE                     |                  | 5,162,702               | -                 | 34,785                  | -             | 199,061            | 3,679,929          | 1,248,927      |
| 16                                |              | GAS COST REVENUE                 |                  | 8,256,502               | 5,910,184         | 2,346,318               | -             | -                  | -                  | -              |
|                                   |              | TOTAL TRANSPORTATION REVENUE     |                  | 151,677,745             | 89,733,901        | 26,455,563              | -             | 15,878,724         | 18,164,625         | 1,444,932      |
| 17                                | 487.00       | MISCELLANEOUS REVENUE            |                  |                         |                   |                         |               |                    |                    |                |
| 18                                | 488.00       | FORFEITED DISCOUNTS              | 10               | 1,431,975               | 1,036,578         | 296,519                 | -             | 50,420             | 44,577             | 3,881          |
| 19                                | 488.00       | MISCELLANEOUS REVENUE            | 6                | 150,000                 | 136,727           | 13,068                  | -             | 165                | 36                 | 5              |
| 20                                | 493.00       | RENTS                            | 11               | 144,269                 | 95,600            | 26,900                  | -             | 8,091              | 13,633             | 45             |
| 21                                | 495.00       | OTHER                            | 6                | 290,645                 | 264,926           | 25,321                  | -             | 320                | 70                 | 9              |
|                                   |              | TOTAL MISCELLANEOUS REVENUE      |                  | 2,016,889               | 1,533,830         | 381,809                 | -             | 58,995             | 58,317             | 3,939          |
| 22                                |              | TOTAL PROPOSED OPERATING REVENUE |                  | 581,070,377             | 423,115,183       | 116,568,299             | -             | 20,608,596         | 19,037,447         | 1,740,853      |
| <u>CURRENT OPERATING REVENUE</u>  |              |                                  |                  |                         |                   |                         |               |                    |                    |                |
| 23                                |              | SALES REVENUE                    |                  |                         |                   |                         |               |                    |                    |                |
| 24                                | 480/481      | SALES BASE REVENUE               |                  | 193,569,580             | 154,667,108       | 36,418,008              | -             | 2,147,971          | 316,621            | 19,872         |
| 25                                |              | USP REVENUE                      |                  | 20,486,995              | 20,486,995        | -                       | -             | -                  | -                  | -              |
| 26                                |              | STAS REVENUE                     |                  | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 27                                |              | RIDER CC - CUSTOMER CHOICE       |                  | 29,169                  | 20,953            | 8,216                   | -             | -                  | -                  | -              |
| 28                                |              | GAS PROCUREMENT REVENUE          |                  | 2,322,967               | 1,618,007         | 634,435                 | -             | 60,053             | 10,472             | -              |
| 29                                |              | MERCHANT FUNCTION REVENUE        |                  | 1,752,694               | 1,573,774         | 178,920                 | -             | -                  | -                  | -              |
| 30                                |              | GAS COST REVENUE                 |                  | 182,223,258             | 127,287,819       | 49,194,765              | -             | 4,656,534          | 812,004            | 272,136        |
|                                   |              | TOTAL SALES REVENUE              |                  | 400,384,663             | 305,654,656       | 86,434,344              | -             | 6,864,558          | 1,139,097          | 292,008        |
| 31                                | 489.00       | TRANSPORTATION REVENUE           |                  |                         |                   |                         |               |                    |                    |                |
| 32                                |              | TRANSPORTATION BASE REVENUE      |                  | 112,021,621             | 67,084,594        | 21,252,414              | -             | 11,705,399         | 11,773,260         | 195,954        |
| 33                                |              | USP REVENUE                      |                  | 7,157,943               | 7,157,943         | -                       | -             | -                  | -                  | -              |
| 34                                |              | STAS REVENUE                     |                  | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 35                                |              | RIDER CC - CUSTOMER CHOICE       |                  | 12,731                  | 7,321             | 5,410                   | -             | -                  | -                  | -              |
| 36                                |              | CHOICE ADMINISTRATIVE CHARGE     |                  | -                       | -                 | -                       | -             | -                  | -                  | -              |
| 37                                |              | FLEX REVENUE                     |                  | 5,162,702               | -                 | 34,785                  | -             | 199,061            | 3,679,929          | 1,248,927      |
| 38                                |              | GAS COST REVENUE                 |                  | 8,256,502               | 5,910,184         | 2,346,318               | -             | -                  | -                  | -              |
|                                   |              | TOTAL TRANSPORTATION REVENUE     |                  | 132,611,499             | 80,170,042        | 23,638,927              | -             | 11,904,460         | 15,453,189         | 1,444,881      |
| 39                                | 487.00       | MISCELLANEOUS REVENUE            |                  |                         |                   |                         |               |                    |                    |                |
| 40                                | 488.00       | FORFEITED DISCOUNTS              | 10               | 1,318,074               | 954,127           | 272,934                 | -             | 46,409             | 41,032             | 3,572          |
| 41                                | 488.00       | MISCELLANEOUS REVENUE            | 6                | 150,000                 | 136,727           | 13,068                  | -             | 165                | 36                 | 5              |
| 42                                | 493.00       | RENTS                            | 11               | 144,269                 | 95,600            | 26,900                  | -             | 8,091              | 13,633             | 45             |
| 43                                | 495.00       | OTHER                            | 6                | 290,645                 | 264,926           | 25,321                  | -             | 320                | 70                 | 9              |
|                                   |              | TOTAL MISCELLANEOUS REVENUE      |                  | 1,902,988               | 1,451,380         | 338,223                 | -             | 54,985             | 54,771             | 3,630          |
| 44                                |              | TOTAL CURRENT OPERATING REVENUE  |                  | 534,899,150             | 387,276,078       | 110,411,494             | -             | 18,824,003         | 16,647,057         | 1,740,519      |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
PRODUCTION & DISTRIBUTION O&M EXPENSES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016

ALLOCATED COST OF SERVICE  
PEAK & AVERAGE

111, SCHEDULE 2

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WITNESS: B. E. ELLIOTT

| LINE NO.                                        | ACCT NO.<br>(A) | ACCOUNT TITLE<br>(B)                  | ALLOC FACTOR<br>(C) | TOTAL COMPANY<br>(D)<br>\$ | RSS/RDS<br>(E)<br>\$ | SGSS/SCD/SGDS<br>(F)<br>\$ | N/A<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                    |                     | 190,479,760                | 133,198,003          | 51,541,083                 | -                | 4,656,534             | 812,004               | 272,136           |
| 2                                               | 807.00          | PURCHASED GAS EXPENSE                 | 4                   | 431,011                    | 301,393              | 116,627                    | -                | 10,538                | 1,836                 | 616               |
| 3                                               | 807.00          | GAS PROCUREMENT EXPENSE               | 4                   | 554,837                    | 387,981              | 150,133                    | -                | 13,566                | 2,364                 | 793               |
| 4                                               |                 | TOTAL PURCHASED GAS                   |                     | 191,465,608                | 133,887,377          | 51,807,844                 | -                | 4,680,638             | 816,204               | 273,546           |
| <u>UNDERGROUND STORAGE OPERATIONS EXPENSES</u>  |                 |                                       |                     |                            |                      |                            |                  |                       |                       |                   |
| 5                                               | 816.00          | WELLS                                 | 25                  | 2,599                      | 1,905                | 633                        | -                | 49                    | 9                     | 4                 |
| 6                                               | 817.00          | LINES                                 | 25                  | 8,430                      | 6,179                | 2,054                      | -                | 157                   | 28                    | 12                |
| 7                                               | 818.00          | COMPRESSOR STATION                    | 25                  | 418,704                    | 306,914              | 102,021                    | -                | 7,817                 | 1,365                 | 586               |
| 8                                               | 820.00          | M & R                                 | 25                  | 11,942                     | 8,754                | 2,910                      | -                | 223                   | 39                    | 17                |
| 9                                               | 821.00          | PURIFICATION                          | 25                  | 6,922                      | 5,074                | 1,687                      | -                | 129                   | 23                    | 10                |
| 10                                              | 823.00          | GAS LOSSES                            | 25                  | 3,705                      | 2,716                | 903                        | -                | 69                    | 12                    | 5                 |
| 11                                              | 825.00          | STORAGE WELL ROYALTIES                | 25                  | 16,959                     | 12,431               | 4,132                      | -                | 317                   | 55                    | 24                |
| 12                                              |                 | TOTAL UNDERGROUND STORAGE OPERATIONS  |                     | 469,261                    | 343,973              | 114,340                    | -                | 8,761                 | 1,530                 | 657               |
| <u>UNDERGROUND STORAGE MAINTENANCE EXPENSES</u> |                 |                                       |                     |                            |                      |                            |                  |                       |                       |                   |
| 13                                              | 832.00          | WELLS                                 | 25                  | 10,380                     | 7,609                | 2,529                      | -                | 194                   | 34                    | 15                |
| 14                                              | 834.00          | COMPRESSOR STATION                    | 25                  | 11,204                     | 8,213                | 2,730                      | -                | 209                   | 37                    | 16                |
| 15                                              | 836.00          | PURIFICATION                          | 25                  | 9,107                      | 6,676                | 2,219                      | -                | 170                   | 30                    | 13                |
| 16                                              |                 | TOTAL UNDERGROUND STORAGE MAINTENANCE |                     | 30,691                     | 22,497               | 7,478                      | -                | 573                   | 100                   | 43                |
| 17                                              |                 | TOTAL UNDERGROUND STORAGE             |                     | 499,952                    | 366,470              | 121,818                    | -                | 9,334                 | 1,630                 | 700               |
| <u>DISTRIBUTION OPERATIONS EXPENSES</u>         |                 |                                       |                     |                            |                      |                            |                  |                       |                       |                   |
| 18                                              | 870.00          | SUPERVISION & ENGINEERING             | 18                  | 9,498,476                  | 6,338,048            | 1,744,870                  | -                | 531,155               | 883,263               | 1,140             |
| 19                                              | 871.00          | LOAD DISPATCHING                      | 13                  | 294,268                    | 166,862              | 65,083                     | -                | 22,926                | 39,350                | 47                |
| 20                                              | 874.00          | MAINS & SERVICES                      | 14                  | 14,496,818                 | 9,585,586            | 2,653,063                  | -                | 833,712               | 1,422,428             | 2,030             |
| 21                                              | 875.00          | M & R - GENERAL                       | 13                  | 613,642                    | 347,960              | 135,719                    | -                | 47,809                | 82,056                | 98                |
| 22                                              | 876.00          | M & R - INDUSTRIAL                    | 17                  | 274,004                    | (0)                  | 67,254                     | -                | 91,526                | 115,224               | -                 |
| 23                                              | 878.00          | METERS & HOUSE REGULATORS             | 27                  | 2,538,487                  | 1,952,274            | 559,508                    | -                | 20,156                | 6,194                 | 355               |
| 24                                              | 879.00          | CUSTOMER INSTALLATIONS                | 15                  | 5,575,022                  | 5,126,623            | 436,970                    | -                | 8,697                 | 2,732                 | -                 |
| 25                                              | 880.00          | OTHER                                 | 18                  | 6,779,266                  | 4,523,601            | 1,245,351                  | -                | 379,097               | 630,404               | 814               |
| 26                                              | 881.00          | RENTS                                 | 18                  | 623,551                    | 416,077              | 114,546                    | -                | 34,869                | 57,984                | 75                |
| 27                                              |                 | TOTAL DISTRIBUTION OPERATIONS         |                     | 40,693,534                 | 28,457,030           | 7,022,365                  | -                | 1,969,946             | 3,239,635             | 4,558             |
| <u>DISTRIBUTION MAINTENANCE EXPENSES</u>        |                 |                                       |                     |                            |                      |                            |                  |                       |                       |                   |
| 28                                              | 885.00          | SUPERVISION & ENGINEERING             | 18                  | 88,211                     | 58,861               | 16,204                     | -                | 4,933                 | 8,203                 | 11                |
| 29                                              | 886.00          | STRUCTURES AND IMPROVEMENTS           | 13                  | 34,799                     | 19,732               | 7,697                      | -                | 2,711                 | 4,653                 | 6                 |
| 30                                              | 887.00          | MAINS                                 | 13                  | 15,560,041                 | 8,823,166            | 3,441,414                  | -                | 1,212,283             | 2,080,689             | 2,490             |
| 31                                              | 889.00          | M & R - GENERAL                       | 13                  | 521,191                    | 295,536              | 115,272                    | -                | 40,606                | 69,694                | 83                |
| 32                                              | 890.00          | M & R - INDUSTRIAL                    | 17                  | 185,003                    | -                    | 45,409                     | -                | 61,797                | 77,798                | -                 |
| 33                                              | 892.00          | SERVICES                              | 15                  | 1,626,214                  | 1,495,418            | 127,463                    | -                | 2,537                 | 797                   | -                 |
| 34                                              | 893.00          | METERS & HOUSE REGULATORS             | 27                  | 244,982                    | 188,408              | 53,997                     | -                | 1,945                 | 598                   | 34                |
| 35                                              | 894.00          | OTHER EQUIPMENT                       | 18                  | 1,046,046                  | 697,995              | 192,159                    | -                | 58,495                | 97,272                | 126               |
| 36                                              |                 | TOTAL DISTRIBUTION MAINTENANCE        |                     | 19,306,487                 | 11,579,116           | 3,999,614                  | -                | 1,385,306             | 2,339,702             | 2,749             |
| 37                                              |                 | TOTAL DISTRIBUTION                    |                     | 60,000,021                 | 40,036,146           | 11,021,979                 | -                | 3,355,252             | 5,579,337             | 7,307             |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
OTHER O&M EXPENSES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016

ALLOCATED COST OF SERVICE  
PEAK & AVERAGE

111, SCHEDULE 2  
PAGE 8 OF 13  
WITNESS: B. E. ELLIOTT

| 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>\$ | SGSS/SCD/SGDS<br>(F)<br>\$ | N/A<br>(G)<br>\$ | SDS/LGSS<br>(H)<br>\$ | LDS/LGSS<br>(I)<br>\$ | MLDS<br>(J)<br>\$ |
|------------------------------------------------|--------------------|------------------------------------------|------------------------|-------------------------------|----------------------|----------------------------|------------------|-----------------------|-----------------------|-------------------|
| <u>CUSTOMER ACCOUNTS EXPENSES</u>              |                    |                                          |                        |                               |                      |                            |                  |                       |                       |                   |
| 1                                              | 901.00             | SUPERVISION                              | 6                      | -                             | -                    | -                          | -                | -                     | -                     | -                 |
| 2                                              | 902.00             | METER READING                            | 6                      | 836,787                       | 762,740              | 72,901                     | -                | 921                   | 201                   | 25                |
| 3                                              | 903.00             | CUSTOMER RECORDS AND COLLECTION EXPENSES | 6                      | 9,650,214                     | 8,796,267            | 840,727                    | -                | 10,615                | 2,316                 | 290               |
| 4                                              | 903.00             | INTEREST ON CUSTOMER DEPOSITS            | 9                      | 89,468                        | 65,556               | 23,912                     | -                | -                     | -                     | -                 |
| 5                                              | 904.00             | UNCOLLECTIBLES-DIS REVENUE               | 7                      | 4,450,409                     | 4,093,887            | 356,522                    | -                | -                     | -                     | -                 |
| 6                                              | 904.00             | UNCOLLECTIBLES-GMB/GTS REVENUE           | 8                      | 78,025                        | 1                    | 6,157                      | -                | 36,360                | 32,143                | 3,364             |
| 7                                              | 904.00             | UNCOLLECTIBLES-UNBUNDLED GAS             | 23                     | 1,752,694                     | 1,573,779            | 178,915                    | -                | -                     | -                     | -                 |
| 8                                              | 904.00             | DIRECT USP UNCOLLECTIBLES                |                        | 18,412,353                    | 18,412,353           | -                          | -                | -                     | -                     | -                 |
| 9                                              | 905.00             | MISCELLANEOUS                            | 6                      | 36,677                        | 33,432               | 3,195                      | -                | 40                    | 9                     | 1                 |
| 10                                             | 921.00             | OFFICE SUPPLIES & EXPENSES               | 6                      | -                             | -                    | -                          | -                | -                     | -                     | -                 |
| 11                                             |                    | TOTAL CUSTOMER ACCOUNTS                  |                        | 35,306,627                    | 33,738,013           | 1,482,329                  | -                | 47,936                | 34,669                | 3,680             |
| <u>CUST SERVICE &amp; INFORMATION EXPENSES</u> |                    |                                          |                        |                               |                      |                            |                  |                       |                       |                   |
| 12                                             | 907.00             | SUPERVISION                              | 6                      | -                             | -                    | -                          | -                | -                     | -                     | -                 |
| 13                                             | 908.00             | CUSTOMER ASSISTANCE                      | 6                      | 576,029                       | 525,074              | 50,184                     | -                | 634                   | 138                   | -                 |
| 14                                             | 908.00             | DIRECT USP/LIURP/HEEP                    |                        | 9,232,585                     | 9,232,585            | -                          | -                | -                     | -                     | -                 |
| 15                                             | 909.00             | INFORMATIONAL & INSTRUCTIONAL EXPENSES   | 6                      | 73,183                        | 66,707               | 6,376                      | -                | 81                    | 18                    | 2                 |
| 16                                             | 910.00             | MISCELLANEOUS                            | 6                      | 1,102,347                     | 1,004,800            | 96,037                     | -                | 1,213                 | 265                   | 33                |
| 17                                             | 910.00             | LARGE CUSTOMER RELATIONS                 | 21                     | -                             | -                    | -                          | -                | -                     | -                     | -                 |
| 18                                             | 921.00             | OFFICE SUPPLIES & EXPENSES               | 6                      | -                             | -                    | -                          | -                | -                     | -                     | -                 |
| 19                                             | 931.00             | RENTS - GENERAL                          | 6                      | -                             | -                    | -                          | -                | -                     | -                     | -                 |
| 20                                             | 932.00             | MAINTENANCE                              | 6                      | -                             | -                    | -                          | -                | -                     | -                     | -                 |
| 21                                             |                    | TOTAL CUST SERVICE & INFORMATION         |                        | 10,984,144                    | 10,829,166           | 152,596                    | -                | 1,927                 | 420                   | 35                |
| <u>SALES EXPENSES</u>                          |                    |                                          |                        |                               |                      |                            |                  |                       |                       |                   |
| 22                                             | 912.00             | DEMONSTRATION                            | 6                      | 677,253                       | 617,323              | 59,002                     | -                | 745                   | 163                   | 20                |
| 23                                             | 913.00             | ADVERTISING                              | 6                      | 19,504                        | 17,778               | 1,699                      | -                | 22                    | 5                     | 1                 |
| 24                                             |                    | TOTAL SALES                              |                        | 696,757                       | 635,101              | 60,702                     | -                | 767                   | 167                   | 21                |
| <u>ADMINISTRATIVE AND GENERAL EXPENSES</u>     |                    |                                          |                        |                               |                      |                            |                  |                       |                       |                   |
| 25                                             | 920.00             | SALARIES                                 | 19                     | 4,579,280                     | 3,254,540            | 771,838                    | -                | 209,044               | 343,263               | 595               |
| 26                                             | 921.00             | OFFICE SUPPLIES & EXPENSES               | 19                     | 2,524,255                     | 1,794,013            | 425,463                    | -                | 115,232               | 189,218               | 328               |
| 27                                             | 922.00             | ADMIN. EXPENSE TRANSFERRED               | 19                     | -                             | -                    | -                          | -                | -                     | -                     | -                 |
| 28                                             | 923.00             | OUTSIDE SERVICES EMPLOYED                | 19                     | 47,925,970                    | 34,061,466           | 8,077,922                  | -                | 2,187,821             | 3,592,531             | 6,230             |
| 29                                             | 924.00             | PROPERTY INSURANCE                       | 19                     | 212,955                       | 151,349              | 35,894                     | -                | 9,721                 | 15,963                | 28                |
| 30                                             | 925.00             | INJURIES AND DAMAGES                     | 19                     | 3,443,195                     | 2,447,113            | 580,351                    | -                | 157,182               | 258,102               | 448               |
| 31                                             | 926.00             | EMPLOYEE PENSIONS & BENEFITS             | 24                     | 5,561,874                     | 3,925,626            | 944,796                    | -                | 261,464               | 429,377               | 612               |
| 32                                             | 928.00             | REGULATORY COMMISSION EXPENSES           | 19                     | 2,330,000                     | 1,655,954            | 392,722                    | -                | 106,365               | 174,657               | 303               |
| 33                                             | 930.00             | MISCELLANEOUS GENERAL                    | 19                     | 402,186                       | 285,838              | 67,789                     | -                | 18,360                | 30,148                | 52                |
| 34                                             | 931.00             | RENTS-GENERAL                            | 19                     | 1,664,699                     | 1,183,118            | 280,585                    | -                | 75,994                | 124,786               | 216               |
| 35                                             | 932.00             | MAINTENANCE                              | 19                     | 182,053                       | 129,387              | 30,685                     | -                | 8,311                 | 13,647                | 24                |
| 36                                             |                    | TOTAL ADMINISTRATIVE & GENERAL           |                        | 68,826,467                    | 48,888,405           | 11,608,043                 | -                | 3,149,492             | 5,171,691             | 8,836             |
| 37                                             |                    | TOTAL O & M EXPENSES                     |                        | 367,779,576                   | 268,380,677          | 76,255,310                 | -                | 11,245,346            | 11,604,118            | 294,126           |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
TAXES OTHER THAN INCOME TAXES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016

ALLOCATED COST OF SERVICE  
PEAK & AVERAGE

111, SCHEDULE 2  
PAGE 9 OF 13

WITNESS: B. E. ELLIOTT

| 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) | SGSS/SCD/SGDS<br>(F) | N/A<br>(G) | SDS/LGSS<br>(H) | LDS/LGSS<br>(I) | MLDS<br>(J) |
|-------------|--------------------|-------------------------------|------------------------|-------------------------|----------------|----------------------|------------|-----------------|-----------------|-------------|
|             |                    | <u>FEDERAL TAXES</u>          |                        | \$                      | \$             | \$                   | \$         | \$              | \$              | \$          |
| 1           | 408.00             | FEDERAL/STATE UNEMPLOYMENT    | 24                     | 221,927                 | 156,638        | 37,699               | -          | 10,433          | 17,133          | 24          |
| 2           | 408.00             | FICA                          | 24                     | 2,333,377               | 1,646,921      | 396,371              | -          | 109,692         | 180,137         | 257         |
| 3           |                    | TOTAL FEDERAL TAXES           |                        | 2,555,304               | 1,803,559      | 434,069              | -          | 120,125         | 197,270         | 281         |
|             |                    | <u>STATE TAXES</u>            |                        |                         |                |                      |            |                 |                 |             |
| 4           | 408.00             | PA PROPERTY TAXES             | 11                     | 550,207                 | 364,595        | 102,592              | -          | 30,856          | 51,995          | 171         |
| 5           | 408.00             | PA STATE UNEMPLOYMENT         | 24                     | -                       | -              | -                    | -          | -               | -               | -           |
| 6           | 408.00             | STATE CAPITAL STOCK TAX       | 11                     | -                       | -              | -                    | -          | -               | -               | -           |
| 7           | 408.00             | LICENSE AND FRANCHISE TAX     | 11                     | 279                     | 185            | 52                   | -          | 16              | 26              | 0           |
| 8           | 408.00             | STATE SALES AND USE TAX       | 19                     | 108,396                 | 77,038         | 18,270               | -          | 4,948           | 8,125           | 14          |
| 9           | 408.00             | OTHER                         | 19                     | 6,899                   | 4,903          | 1,163                | -          | 315             | 517             | 1           |
| 10          |                    | TOTAL STATE TAXES             |                        | 665,781                 | 446,721        | 122,077              | -          | 36,134          | 60,664          | 186         |
| 11          |                    | TOTAL TAXES OTHER THAN INCOME |                        | 3,221,085               | 2,250,280      | 556,146              | -          | 156,259         | 257,933         | 467         |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
RATE BASE  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016

ALLOCATED COST OF SERVICE  
PEAK & AVERAGE

111, SCHEDULE 2  
PAGE 10 OF 13  
WITNESS: B. E. ELLIOTT

| LINE NO.                     | ACCT NO.<br>(A) | ACCOUNT TITLE<br>(B)                 | ALLOC FACTOR<br>(C) | TOTAL COMPANY<br>(D)<br>\$ | RSS/RDS<br>(E)<br>\$ | SGSS/SCD/SGDS<br>(F)<br>\$ | N/A<br>(G)<br>\$ | SDS/LGSS<br>(H)<br>\$ | LDS/LGSS<br>(I)<br>\$ | MLDS<br>(J)<br>\$ |
|------------------------------|-----------------|--------------------------------------|---------------------|----------------------------|----------------------|----------------------------|------------------|-----------------------|-----------------------|-------------------|
| 1                            | 101-107         | GROSS PLANT [PAGE 3]                 |                     | 1,945,029,486              | 1,289,269,265        | 363,020,902                | -                | 108,848,397           | 183,245,911           | 645,010           |
| 2                            | 117.00          | GAS STORED UNDERGROUND - NON CURRENT | 25                  | 3,794,693                  | 2,781,548            | 924,615                    | -                | 70,847                | 12,371                | 5,313             |
| 3                            | 108-111         | DEPRECIATION RESERVE [PAGE 4]        |                     | (386,737,768)              | (268,833,217)        | (68,468,290)               | -                | (18,602,879)          | (30,580,233)          | (253,149)         |
| 4                            | 117.00          | GAS LOST-UNDERGROUND STORAGE         | 25                  | (163,467)                  | (119,823)            | (39,830)                   | -                | (3,052)               | (533)                 | (229)             |
| 5                            |                 | NET PLANT                            |                     | 1,561,922,944              | 1,023,097,773        | 295,437,397                | -                | 90,313,313            | 152,677,516           | 396,944           |
| <u>WORKING CAPITAL</u>       |                 |                                      |                     |                            |                      |                            |                  |                       |                       |                   |
| 6                            | 154.00          | MATERIALS & SUPPLIES                 | 11                  | 648,987                    | 430,051              | 121,010                    | -                | 36,395                | 61,329                | 201               |
| 7                            | 164.00          | GAS STORED UNDERGROUND - FSS         | 25                  | 58,489,294                 | 42,873,237           | 14,251,501                 | -                | 1,091,995             | 190,675               | 81,885            |
| 8                            | 165.00          | PREPAYMENTS                          | 19                  | 2,107,010                  | 1,497,473            | 355,137                    | -                | 96,185                | 157,942               | 274               |
| 9                            |                 | CASH WORKING CAPITAL - GAS PURCHASES | 4                   | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 10                           |                 | CASH WORKING CAPITAL - ALL OTHER     | 19                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 11                           |                 | TOTAL WORKING CAPITAL                |                     | 61,245,291                 | 44,800,762           | 14,727,648                 | -                | 1,224,575             | 409,946               | 82,360            |
| <u>DEFERRED INCOME TAXES</u> |                 |                                      |                     |                            |                      |                            |                  |                       |                       |                   |
| 12                           | 190.00          | ACCUMULATED DEF INCOME TAX           | 12                  | 8,949,377                  | 5,932,184            | 1,670,312                  | -                | 500,807               | 843,121               | 2,953             |
| 13                           | 282.00          | ACCUMULATED DEF INCOME TAX           | 12                  | (303,643,348)              | (201,273,030)        | (56,671,995)               | -                | (16,991,882)          | (28,606,240)          | (100,202)         |
| 14                           | 283.00          | ACCUMULATED DEF INCOME TAX           | 12                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 15                           |                 | TOTAL DEFERRED INCOME TAXES          |                     | (294,693,971)              | (195,340,846)        | (55,001,683)               | -                | (16,491,075)          | (27,763,119)          | (97,249)          |
| 16                           | 235.00          | CUSTOMER DEPOSITS                    | 9                   | (3,131,607)                | (2,294,622)          | (836,985)                  | -                | -                     | -                     | -                 |
| 17                           | 252.00          | CUSTOMER ADVANCES                    | 11                  | (211,729)                  | (140,302)            | (39,479)                   | -                | (11,874)              | (20,008)              | (66)              |
| 18                           |                 | RATE BASE                            |                     | 1,325,130,928              | 870,122,765          | 254,286,899                | -                | 75,034,940            | 125,304,335           | 381,990           |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
STATE/FEDERAL INCOME TAXES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016

ALLOCATED COST OF SERVICE  
PEAK & AVERAGE

111, SCHEDULE 2  
PAGE 11 OF 13  
WITNESS: B. E. ELLIOTT

| LINE<br>NO.               | ACCT<br>NO.<br>(A)                            | ALLOC<br>FACTOR<br>(B) | TOTAL<br>COMPANY<br>(C)<br>\$ | RSS/RDS<br>(D)<br>\$ | SGSS/SCD/SGDS<br>(E)<br>\$ | N/A<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, |                        | 109,147,161                   | 79,417,051           | 23,679,233                 | -                | 4,583,389             | 42,833                | 1,424,656         |
| 2                         | STATUTORY ADJUSTMENTS                         | 12                     | (50,280,540)                  | (33,328,959)         | (9,384,360)                | -                | (2,813,699)           | (4,736,930)           | (16,593)          |
| 3                         | INTEREST ON DEBT                              |                        | (34,320,891)                  | (22,536,180)         | (6,586,031)                | -                | (1,943,405)           | (3,245,382)           | (9,894)           |
| 4                         | PA BONUS DEPRECIATION ADJUSTMENT              | 12                     | (7,572,748)                   | (5,019,672)          | (1,413,378)                | -                | (423,771)             | (713,429)             | (2,499)           |
| 5                         | STATE TAXABLE INCOME                          |                        | 16,972,982                    | 18,532,240           | 6,295,465                  | -                | (597,486)             | (8,652,908)           | 1,395,871         |
| 6                         | NET OPERATING LOSS DEDUCTION                  | 12                     | (5,091,895)                   | (3,375,214)          | (950,351)                  | -                | (284,942)             | (479,707)             | (1,680)           |
|                           | STATE TAXABLE INCOME                          |                        | 11,881,087                    | 15,157,027           | 5,345,113                  | -                | (882,428)             | (9,132,615)           | 1,393,990         |
| 7                         | STATE NET INCOME TAX @ 9.99%                  |                        | 1,186,921                     | 1,514,187            | 533,977                    | -                | (88,155)              | (912,348)             | 139,260           |
| 8                         | DEFERRED INCOME TAXES                         | 12                     | (51,103)                      | (33,874)             | (9,538)                    | -                | (2,860)               | (4,814)               | (17)              |
| 9                         | STATE INCOME TAX                              |                        | 1,135,818                     | 1,480,313            | 524,439                    | -                | (91,014)              | (917,163)             | 139,243           |
| <u>FEDERAL INCOME TAX</u> |                                               |                        |                               |                      |                            |                  |                       |                       |                   |
| 10                        | OPERATING INCOME BEFORE TAXES (PG. 2, LINE 8, |                        | 109,147,161                   | 79,417,051           | 23,679,233                 | -                | 4,583,389             | 42,833                | 1,424,656         |
| 11                        | STATE NET INCOME TAX (LINE 7,                 |                        | (1,186,921)                   | (1,514,187)          | (533,977)                  | -                | 88,155                | 912,348               | (139,260)         |
| 12                        | STATUTORY ADJUSTMENTS (LINES 2 & 3,           | 12                     | (84,601,431)                  | (55,865,139)         | (15,970,391)               | -                | (4,757,104)           | (7,982,312)           | (26,486)          |
| 13                        | FEDERAL TAXABLE INCOME                        |                        | 23,358,809                    | 22,037,725           | 7,174,866                  | -                | (85,560)              | (7,027,131)           | 1,258,910         |
| 14                        | FEDERAL INCOME TAX @ 35%                      |                        | 8,175,583                     | 7,713,204            | 2,511,203                  | -                | (29,946)              | (2,459,496)           | 440,819           |
| 15                        | DEFERRED INCOME TAXES                         | 12                     | 20,631,255                    | 13,675,634           | 3,850,618                  | -                | 1,154,525             | 1,943,671             | 6,808             |
| 16                        | TAX REFUND AMORTIZATION                       | 12                     | (681,571)                     | (451,786)            | (127,208)                  | -                | (38,141)              | (64,211)              | (225)             |
| 17                        | FLOW BACK OF EXCESS DEFERRED TAXES            | 12                     | (88,396)                      | (58,594)             | (16,498)                   | -                | (4,947)               | (8,328)               | (29)              |
| 18                        | EFFECT OF CNIT DEFERRED TAX ON FIT            | 12                     | 17,886                        | 11,856               | 3,338                      | -                | 1,001                 | 1,685                 | 6                 |
| 19                        | FEDERAL INCOME TAX                            |                        | 28,054,758                    | 20,890,313           | 6,221,452                  | -                | 1,082,493             | (586,879)             | 447,179           |
| 20                        | STATE NET INCOME TAX (LINE 9)                 |                        | 1,135,818                     | 1,480,313            | 524,439                    | -                | (91,014)              | (917,163)             | 139,243           |
| 21                        | TOTAL INCOME TAXES                            |                        | 29,190,575                    | 22,370,626           | 6,745,891                  | -                | 991,478               | (1,503,842)           | 586,421           |

COLUMBIA GAS OF PENNSYLVANIA, INC  
ALLOCATION FACTORS  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016

ALLOCATED COST OF SERVICE  
PEAK & AVERAGE

111, SCHEDULE 2  
PAGE 12 OF 13  
WITNESS: B. E. ELLIOTT

| LINE<br>NO. | DESCRIPTION<br>(A)                           | ALLOC<br>FACTOR<br>(B) | TOTAL<br>COMPANY<br>(C) | RSS/RDS<br>(D) | SGSS/SCD/SGDS<br>(E) | N/A<br>(F) | SDS/LGSS<br>(G) | LDS/LGSS<br>(H) | MLDS<br>(I) |
|-------------|----------------------------------------------|------------------------|-------------------------|----------------|----------------------|------------|-----------------|-----------------|-------------|
| 1           | DESIGN DAY                                   | 1                      | 791,995,000             | 458,700,000    | 189,733,000          | -          | 65,702,000      | 77,860,000      | 0           |
| 2           | PERCENT                                      |                        | 100.000%                | 57.917%        | 23.956%              | 0.000%     | 8.296%          | 9.831%          | 0.000%      |
| 3           | THROUGHPUT EXCLUDING TRANSPORTATION          | 2                      | 33,488,984              | 23,280,676     | 9,128,568            | -          | 864,065         | 150,675         | 65,000      |
| 4           | PERCENT                                      |                        | 100.000%                | 69.517%        | 27.258%              | 0.000%     | 2.580%          | 0.450%          | 0.194%      |
| 5           | THROUGHPUT EXCLUDING MDS                     | 3                      | 75,381,022              | 33,927,676     | 15,162,538           | -          | 6,865,950       | 19,424,858      | 0           |
| 6           | PERCENT                                      |                        | 100.000%                | 45.008%        | 20.115%              | 0.000%     | 9.108%          | 25.769%         | 0.000%      |
| 7           | GAS PURCHASED EXPENSE                        | 4                      | 190,479,760             | 133,198,003    | 51,541,083           | -          | 4,656,534       | 812,004         | 272,136     |
| 8           | PERCENT                                      |                        | 100.000%                | 69.928%        | 27.059%              | 0.000%     | 2.445%          | 0.426%          | 0.143%      |
| 9           | PEAK & AVERAGE MAINS                         | 5                      |                         |                |                      |            |                 |                 |             |
| 10          | PERCENT                                      |                        | 100.000%                | 56.714%        | 22.120%              | 0.000%     | 7.792%          | 13.374%         | 0.000%      |
| 11          | AVERAGE NO. OF CUSTOMERS                     | 6                      | 423,809                 | 386,310        | 36,921               | -          | 467             | 100             | 11          |
| 12          | PERCENT                                      |                        | 100.000%                | 91.152%        | 8.712%               | 0.000%     | 0.110%          | 0.024%          | 0.003%      |
| 13          | DISTRIBUTION UNCOLLECTIBLES                  | 7                      | 7,675,643               | 7,060,733      | 614,910              | -          | -               | -               | -           |
| 14          | PERCENT                                      |                        | 100.000%                | 91.989%        | 8.011%               | 0.000%     | 0.000%          | 0.000%          | 0.000%      |
| 15          | CURRENT GMB/GTS REVENUE                      | 8                      | 40,276,456              | -              | 3,178,263            | -          | 18,769,018      | 16,592,286      | 1,736,889   |
| 16          | PERCENT                                      |                        | 100.000%                | 0.000%         | 7.891%               | 0.000%     | 46.600%         | 41.196%         | 4.312%      |
| 17          | DIRECT ASSIGNMENT - CUSTOMER DEPOSITS        | 9                      | 2,445,620               | 1,791,981      | 653,639              | -          | -               | -               | -           |
| 18          | PERCENT                                      |                        | 100.000%                | 73.273%        | 26.727%              | 0.000%     | 0.000%          | 0.000%          | 0.000%      |
| 19          | FORFEITED DISCOUNTS                          | 10                     | 1,318,074               | 954,126        | 272,928              | -          | 46,415          | 41,032          | 3,573       |
| 20          | PERCENT                                      |                        | 100.000%                | 72.388%        | 20.707%              | 0.000%     | 3.521%          | 3.113%          | 0.271%      |
| 21          | DIST. PLANT EXCL ACCTS 375.70, 375.71, & 387 | 11                     | 1,872,017,151           | 1,240,477,663  | 349,060,186          | -          | 104,987,547     | 176,914,551     | 577,205     |
| 22          | PERCENT                                      |                        | 100.000%                | 66.264%        | 18.646%              | 0.000%     | 5.608%          | 9.450%          | 0.031%      |
| 23          | GROSS PLANT                                  | 12                     | 1,945,029,486           | 1,289,269,265  | 363,020,902          | -          | 108,848,397     | 183,245,911     | 645,010     |
| 24          | PERCENT                                      |                        | 100.000%                | 66.285%        | 18.664%              | 0.000%     | 5.596%          | 9.421%          | 0.033%      |
| 25          | MAINS - ACCOUNT 376                          | 13                     | 1,247,713,802           | 707,517,669    | 275,951,103          | -          | 97,206,645      | 166,843,131     | 195,254     |
| 26          | PERCENT                                      |                        | 100.000%                | 56.705%        | 22.117%              | 0.000%     | 7.791%          | 13.372%         | 0.016%      |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
ALLOCATION FACTORS (CONT.)  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016

ALLOCATED COST OF SERVICE  
PEAK & AVERAGE

111, SCHEDULE 2  
PAGE 13 OF 13  
WITNESS: B. E. ELLIOTT

| LINE NO. | DESCRIPTION (A)                             | ALLOC FACTOR (B) | TOTAL COMPANY (C) | RSS/RDS (D)   | SGSS/SCD/SGDS (E) | N/A (F) | SDS/LGSS (G) | LDS/LGSS (H) | MLDS (I) |
|----------|---------------------------------------------|------------------|-------------------|---------------|-------------------|---------|--------------|--------------|----------|
| 1        | COMPOSITE DIRECT PLANT - ACCTS 376 & 38C    | 14               | 1,702,740,850     | 1,125,912,289 | 311,613,173       | -       | 97,916,429   | 167,066,075  | 232,884  |
| 2        | PERCENT                                     |                  | 100.000%          | 66.124%       | 18.301%           | 0.000%  | 5.751%       | 9.812%       | 0.014%   |
| 3        | DIRECT ASSIGNMENT - SERVICES                | 15               | 282,022,729       | 259,337,993   | 22,106,116        | -       | 441,317      | 137,303      | -        |
| 4        | PERCENT                                     |                  | 100.000%          | 91.956%       | 7.838%            | 0.000%  | 0.156%       | 0.049%       | 0.000%   |
| 5        | DIRECT ASSIGNMENT - METERS                  | 16               | 25,782,967        | 19,259,659    | 6,218,634         | -       | 229,488      | 71,085       | 4,101    |
| 6        | PERCENT                                     |                  | 100.000%          | 74.699%       | 24.119%           | 0.000%  | 0.890%       | 0.276%       | 0.016%   |
| 7        | DIRECT ASSIGNMENT - IND M & F               | 17               | 5,629,652         | -             | 1,381,785         | -       | 1,880,479    | 2,367,388    | -        |
| 8        | PERCENT                                     |                  | 100.000%          | 0.000%        | 24.545%           | 0.000%  | 33.403%      | 42.052%      | 0.000%   |
| 9        | OTHER DISTRIBUTION O & M EXPENSES           | 18               | 41,964,471        | 28,001,564    | 7,708,848         | -       | 2,346,704    | 3,902,211    | 5,143    |
| 10       | PERCENT                                     |                  | 100.000%          | 66.727%       | 18.370%           | 0.000%  | 5.592%       | 9.299%       | 0.012%   |
| 11       | O & M EXCL GAS PUR, UNCOLLECTIBLES, & A & G | 19               | 74,547,283        | 52,981,665    | 12,564,590        | -       | 3,402,960    | 5,588,280    | 9,789    |
| 12       | PERCENT                                     |                  | 100.000%          | 71.071%       | 16.855%           | 0.000%  | 4.565%       | 7.496%       | 0.013%   |
| 13       | CUSTOMER/DEMAND MAINS                       | 20               |                   |               |                   |         |              |              |          |
| 14       | PERCENT                                     |                  | 100.000%          | 75.694%       | 16.318%           | 0.000%  | 4.113%       | 3.875%       | 0.000%   |
| 15       | LARGE CUSTOMER RELATIONS                    | 21               | 161               | -             | 19                | -       | 37           | 94           | 11       |
| 16       | PERCENT                                     |                  | 100.00%           | 0.000%        | 11.801%           | 0.000%  | 22.981%      | 58.385%      | 6.832%   |
| 17       | AVERAGE - ALLOCATORS 5 & 20                 | 22               |                   |               |                   |         |              |              |          |
| 18       | PERCENT                                     |                  | 100.00%           | 66.203%       | 19.219%           | 0.000%  | 5.953%       | 8.625%       | 0.000%   |
| 19       | UNBUNDLED UNCOLLECTIBLES                    | 23               | 1,752,694         | 1,573,774     | 178,920           | -       | -            | -            | -        |
| 20       | PERCENT                                     |                  | 100.000%          | 89.792%       | 10.208%           | 0.000%  | 0.000%       | 0.000%       | 0.000%   |
| 21       | LABOR                                       | 24               | 27,300,655        | 19,269,164    | 4,637,567         | -       | 1,283,327    | 2,107,533    | 3,064    |
| 22       | PERCENT                                     |                  | 100.000%          | 70.581%       | 16.987%           | 0.000%  | 4.701%       | 7.720%       | 0.011%   |
| 23       | SALES AND CHOICE TRANSPORTATION             | 25               | 46,285,029        | 33,927,676    | 11,277,612        | -       | 864,065      | 150,675      | 65,000   |
| 24       | PERCENT                                     |                  | 100.000%          | 73.302%       | 24.366%           | 0.000%  | 1.867%       | 0.326%       | 0.140%   |
| 25       | HOUSE REGULATORS                            | 26               | 2,761,797         | 2,504,494     | 250,777           | -       | 5,364        | 1,162        | -        |
| 26       | PERCENT                                     |                  | 100.000%          | 90.683%       | 9.080%            | 0.000%  | 0.194%       | 0.042%       | 0.000%   |
| 27       | METERS & HOUSE REGULATORS                   | 27               | 111,890,537       | 86,052,701    | 24,661,560        | -       | 888,211      | 272,637      | 15,429   |
| 28       | PERCENT                                     |                  | 100.000%          | 76.908%       | 22.041%           | 0.000%  | 0.794%       | 0.244%       | 0.014%   |



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

DOCKET NO.: R-2015-2468056

WITNESS: B. E. ELLIOTT

STUDY TYPE: AVERAGE STUDY- ALLOCATORS 5 & 20

FORECASTED TEST YEAR: DECEMBER 31, 2016

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.)                          |

DATE: 12-Mar-15  
TIME: 01:14:32 PM

COLUMBIA GAS OF PENNSYLVANIA, INC  
RATE OF RETURN BY CLASS - PROFORMA @ PROPOSED RATES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016

ALLOCATED COST OF SERVICE  
AVERAGE STUDY- ALLOCATORS 5 & 20

111, SCHEDULE 3  
PAGE 1 OF 13  
WITNESS: B. E. ELLIOTT

| LINE<br>NO. | ACCOUNT TITLE<br>(A)                           | ALLOC<br>FACTOR<br>(B) | TOTAL<br>COMPANY<br>(C)<br>\$ | RSS/RDS<br>(D)<br>\$ | SGSS/SCD/SGDS<br>(E)<br>\$ | N/A<br>(F)<br>\$ | SDS/LGSS<br>(G)<br>\$ | LDS/LGSS<br>(H)<br>\$ | MLDS<br>(I)<br>\$ |
|-------------|------------------------------------------------|------------------------|-------------------------------|----------------------|----------------------------|------------------|-----------------------|-----------------------|-------------------|
| 1           | TOTAL REVENUE [PAGE 6]                         |                        | 581,070,377                   | 423,124,673          | 116,565,397                | -                | 20,606,757            | 19,032,697            | 1,740,853         |
| 2           | PRODUCTS PURCHASED [PAGE 7]                    |                        | 190,479,760                   | 133,198,003          | 51,541,083                 | -                | 4,656,534             | 812,004               | 272,136           |
| 3           | OPERATING & MAINTENANCE EXPENSES [PAGES 7 & 8] |                        | 177,902,792                   | 142,869,181          | 22,587,165                 | -                | 5,212,980             | 7,211,472             | 21,994            |
| 4           | DEPRECIATION & AMORTIZATION [PAGE 5]           |                        | 54,751,328                    | 40,497,045           | 8,921,410                  | -                | 2,205,453             | 3,106,148             | 21,271            |
| 5           | TAXES OTHER THAN INCOME [PAGE 9]               |                        | 3,221,085                     | 2,423,174            | 503,285                    | -                | 122,742               | 171,416               | 487               |
| 6           | TOTAL EXPENSES & TAXES OTHER THAN INCOME       |                        | 426,354,965                   | 318,987,403          | 83,552,943                 | -                | 12,197,710            | 11,301,041            | 315,867           |
| 7           | OPERATING INCOME BEFORE TAXES                  |                        | 154,715,412                   | 104,137,270          | 33,012,454                 | -                | 8,409,047             | 7,731,656             | 1,424,985         |
| 8           | INCOME TAXES                                   |                        | 47,210,745                    | 30,873,506           | 10,825,899                 | -                | 2,751,035             | 2,173,754             | 586,552           |
| 9           | INVESTMENT TAX CREDIT                          | 12                     | (360,240)                     | (262,410)            | (60,012)                   | -                | (15,580)              | (22,119)              | (119)             |
| 10          | NET INCOME TAXES                               |                        | 46,850,505                    | 30,611,096           | 10,765,886                 | -                | 2,735,454             | 2,151,636             | 586,433           |
| 11          | OPERATING INCOME                               |                        | 107,864,907                   | 73,526,174           | 22,246,568                 | -                | 5,673,593             | 5,580,021             | 838,552           |
| 12          | RATE BASE [PAGE 10]                            |                        | 1,325,130,928                 | 957,922,206          | 227,445,754                | -                | 58,019,730            | 81,361,248            | 381,990           |
| 13          | RATE OF RETURN EARNED ON RATE BASE             |                        | 8.140%                        | 7.676%               | 9.781%                     | 0.000%           | 9.779%                | 6.858%                | 219.522%          |
| 14          | UNITIZED RETURN                                |                        | 1.00                          | 0.94                 | 1.20                       | 0.00             | 1.20                  | 0.84                  | 26.97             |

COLUMBIA GAS OF PENNSYLVANIA, INC  
RATE OF RETURN BY CLASS - CURRENT @ CURRENT RATES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016

ALLOCATED COST OF SERVICE  
AVERAGE STUDY- ALLOCATORS 5 & 20

111, SCHEDULE 3

PAGE 2 OF 13

WITNESS: B. E. ELLIOTT

| LINE<br>NO. | ACCOUNT TITLE<br>(A)                           | ALLOC<br>FACTOR<br>(B) | TOTAL<br>COMPANY<br>(C)<br>\$ | RSS/RDS<br>(D)<br>\$ | SGSS/SCD/SGDS<br>(E)<br>\$ | N/A<br>(F)<br>\$ | SDS/LGSS<br>(G)<br>\$ | LDS/LGSS<br>(H)<br>\$ | MLDS<br>(I)<br>\$ |
|-------------|------------------------------------------------|------------------------|-------------------------------|----------------------|----------------------------|------------------|-----------------------|-----------------------|-------------------|
| 1           | TOTAL REVENUE [PAGE 6]                         |                        | 534,899,150                   | 387,285,568          | 110,408,593                | -                | 18,822,163            | 16,642,308            | 1,740,519         |
| 2           | PRODUCTS PURCHASED [PAGE 7]                    |                        | 190,479,760                   | 133,198,003          | 51,541,083                 | -                | 4,656,534             | 812,004               | 272,136           |
| 3           | OPERATING & MAINTENANCE EXPENSES [PAGES 7 & 8] |                        | 177,299,816                   | 142,401,138          | 22,506,760                 | -                | 5,189,674             | 7,180,255             | 21,990            |
| 4           | DEPRECIATION & AMORTIZATION [PAGE 5]           |                        | 54,751,328                    | 40,497,045           | 8,921,410                  | -                | 2,205,453             | 3,106,148             | 21,271            |
| 5           | TAXES OTHER THAN INCOME [PAGE 9]               |                        | 3,221,085                     | 2,423,174            | 503,285                    | -                | 122,742               | 171,416               | 467               |
| 6           | TOTAL EXPENSES & TAXES OTHER THAN INCOME       |                        | 425,751,989                   | 318,519,360          | 83,472,538                 | -                | 12,174,404            | 11,269,824            | 315,863           |
| 7           | OPERATING INCOME BEFORE TAXES                  |                        | 109,147,161                   | 68,766,208           | 26,936,055                 | -                | 6,647,760             | 5,372,484             | 1,424,656         |
| 8           | INCOME TAXES [PAGE 11]                         |                        | 29,190,575                    | 16,885,860           | 8,422,959                  | -                | 2,054,526             | 1,240,809             | 586,421           |
| 9           | INVESTMENT TAX CREDIT                          | 12                     | (360,240)                     | (262,410)            | (60,012)                   | -                | (15,580)              | (22,119)              | (119)             |
| 10          | NET INCOME TAXES                               |                        | 28,830,335                    | 16,623,451           | 8,362,947                  | -                | 2,038,945             | 1,218,690             | 586,302           |
| 11          | OPERATING INCOME                               |                        | 80,316,826                    | 52,142,757           | 18,573,108                 | -                | 4,608,814             | 4,153,794             | 838,353           |
| 12          | RATE BASE [PAGE 10]                            |                        | 1,325,130,928                 | 957,922,206          | 227,445,754                | -                | 58,019,730            | 81,361,248            | 381,990           |
| 13          | RATE OF RETURN EARNED ON RATE BASE             |                        | 6.061%                        | 5.443%               | 8.166%                     | 0.000%           | 7.944%                | 5.105%                | 219.470%          |
| 14          | UNITIZED RETURN                                |                        | 1.00                          | 0.90                 | 1.35                       | 0.00             | 1.31                  | 0.84                  | 36.21             |

COLUMBIA GAS OF PENNSYLVANIA, INC  
GROSS PLANT (Accounts 101 & 106)  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016

ALLOCATED COST OF SERVICE  
AVERAGE STUDY- ALLOCATORS 5 & 20

111, SCHEDULE 3  
PAGE 3 OF 13  
WITNESS: B. E. ELLIOTT

| LINE NO. | ACCT. NO.<br>(A) | ACCOUNT TITLE<br>(B)                       | ALLOC FACTOR<br>(C) | TOTAL COMPANY<br>(D)<br>\$ | RSS/RDS<br>(E)<br>\$ | SGSS/SCD/SGDS<br>(F)<br>\$ | N/A<br>(G)<br>\$ | SDS/LGSS<br>(H)<br>\$ | LDS/LGSS<br>(I)<br>\$ | MLDS<br>(J)<br>\$ |
|----------|------------------|--------------------------------------------|---------------------|----------------------------|----------------------|----------------------------|------------------|-----------------------|-----------------------|-------------------|
| 1        | 301-305          | INTANGIBLE PLANT                           | 11                  | 25,650,455                 | 18,684,561           | 4,266,953                  | -                | 1,111,434             | 1,579,555             | 7,952             |
| 2        | 350-362          | UNDERGROUND STORAGE PLANT                  | 25                  | 6,188,872                  | 4,536,505            | 1,507,981                  | -                | 115,546               | 20,176                | 8,664             |
|          |                  | <u>DISTRIBUTION PLANT</u>                  |                     |                            |                      |                            |                  |                       |                       |                   |
| 3        | 374.10           | LAND - CITY GATE & M/L IND M&R             | 22                  | 21,944                     | 14,527               | 4,217                      | -                | 1,306                 | 1,893                 | -                 |
| 4        | 374.20           | LAND - OTHER DISTRIBUTION                  | 22                  | 680,675                    | 450,628              | 130,819                    | -                | 40,521                | 58,708                | -                 |
| 5        | 374.30           | LAND RIGHTS - CITY GATE MAIN LINE          | 22                  | 95,361                     | 63,132               | 18,327                     | -                | 5,677                 | 8,225                 | -                 |
| 6        | 374.40           | LAND RIGHTS - OTHER DISTRIBUTION           | 22                  | 2,128,780                  | 1,409,316            | 409,130                    | -                | 126,726               | 183,607               | -                 |
| 7        | 374.40           | DIRECT - LAND RIGHTS-OTHER DISTRIBUTION    |                     | 3                          | -                    | -                          | -                | -                     | -                     | 3                 |
| 8        | 374.41           | LAND RIGHTS - OTHER DISTRIBUTION LOC       | 22                  | 13                         | 9                    | 3                          | -                | -                     | 1                     | -                 |
| 9        | 374.50           | RIGHTS OF WAY                              | 22                  | 3,208,212                  | 2,123,932            | 616,586                    | -                | 190,985               | 276,708               | -                 |
| 10       | 374.50           | DIRECT - RIGHTS OF WAY                     |                     | 1,195                      | -                    | -                          | -                | -                     | -                     | 1,195             |
| 11       | 375.20           | M & R STRUCTURES - CITY GATE               | 22                  | 503,526                    | 333,350              | 96,773                     | -                | 29,975                | 43,429                | -                 |
| 12       | 375.31           | M & R STRUCTURES - LOCAL GAS PURCH         | 22                  | 4,012                      | 2,656                | 771                        | -                | 239                   | 346                   | -                 |
| 13       | 375.40           | M & R STRUCTURES - REGULATING              | 22                  | 3,330,552                  | 2,204,925            | 640,099                    | -                | 198,268               | 287,260               | -                 |
| 14       | 375.40           | DIRECT - M & R STRUCTURES - REGULATING     | 22                  | 27,227                     | -                    | -                          | -                | -                     | -                     | 27,227            |
| 15       | 375.60           | M & R STRUCTURES - DIST. IND. M & R        | 17                  | 87,670                     | (0)                  | 21,519                     | -                | 29,284                | 36,867                | -                 |
| 16       | 375.70           | M & R STRUCTURES - OTHER                   | 11                  | 9,396,038                  | 6,844,356            | 1,563,031                  | -                | 407,130               | 578,608               | 2,913             |
| 17       | 375.71           | M & R STRUCTURES - OTHER LEASED            | 11                  | 1,125,911                  | 820,147              | 187,295                    | -                | 48,786                | 69,334                | 349               |
| 18       | 375.80           | M & R STRUCTURES - COMMUNICATION           | 22                  | 16,515                     | 10,934               | 3,174                      | -                | 983                   | 1,424                 | -                 |
| 19       | 376.00           | MAINS                                      | 22                  | 1,152,690,445              | 763,115,655          | 221,535,577                | -                | 68,619,662            | 99,419,551            | -                 |
| 20       | 376.00           | DIRECT - MAINS - MDS                       |                     | 47,434                     | -                    | -                          | -                | -                     | -                     | 47,434            |
| 21       | 376.00           | DIRECT - MAINS - LDS                       |                     | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 22       | 376.08           | MAINS-CSL REPLACEMENTS                     | 22                  | 23,786,341                 | 15,747,271           | 4,571,497                  | -                | 1,416,001             | 2,051,572             | -                 |
| 23       | 376.30           | MAINS-BARE STEEL                           | 22                  | 70,471,162                 | 46,654,024           | 13,543,853                 | -                | 4,195,148             | 6,078,138             | -                 |
| 24       | 376.30           | DIRECT - MAINS-BARE STEEL                  |                     | 147,819                    | -                    | -                          | -                | -                     | -                     | 147,819           |
| 25       | 376.80           | MAINS-CAST IRON                            | 22                  | 570,601                    | 377,755              | 109,664                    | -                | 33,968                | 49,214                | -                 |
| 26       | 378.10           | M & R EQUIP - GENERAL                      | 22                  | 56,453                     | 37,374               | 10,850                     | -                | 3,361                 | 4,869                 | -                 |
| 27       | 378.20           | M & R EQUIP - GENERAL - REGULATING         | 22                  | 39,630,043                 | 26,236,278           | 7,616,498                  | -                | 2,359,177             | 3,418,091             | -                 |
| 28       | 378.20           | DIRECT - M & R EQUIP-GEN-REG               |                     | 1,178                      | -                    | -                          | -                | -                     | -                     | 1,178             |
| 29       | 378.30           | M & R EQUIP - LOCAL GAS PURCHASES          | 22                  | 457,281                    | 302,734              | 87,885                     | -                | 27,222                | 39,441                | -                 |
| 30       | 379.10           | M & R EQUIP - CITY GATE                    | 22                  | 141,567                    | 93,722               | 27,208                     | -                | 8,428                 | 12,210                | -                 |
| 31       | 379.11           | M & R EQUIP - EXCHANGE GAS                 | 22                  | (450)                      | (298)                | (86)                       | -                | (27)                  | (39)                  | -                 |
| 32       | 380.00           | SERVICES                                   | 15                  | 454,989,419                | 418,394,620          | 35,662,071                 | -                | 709,784               | 222,945               | -                 |
| 33       | 380.00           | DIRECT - SERVICES                          |                     | 37,630                     | -                    | -                          | -                | -                     | -                     | 37,630            |
| 34       | 380.12           | CSL REPLACEMENT                            | 15                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 35       | 381.00           | METERS                                     | 16                  | 36,181,256                 | 27,027,036           | 8,726,557                  | -                | 322,013               | 99,860                | 5,789             |
| 36       | 381.10           | AUTOMATIC METER READING                    | 16                  | 23,761,067                 | 17,749,280           | 5,730,932                  | -                | 211,474               | 65,581                | 3,802             |
| 37       | 382.00           | METER INSTALLATIONS                        | 16                  | 36,486,290                 | 27,254,893           | 8,800,128                  | -                | 324,728               | 100,702               | 5,838             |
| 38       | 383.00           | HOUSE REGULATORS                           | 26                  | 11,597,152                 | 10,516,762           | 1,053,021                  | -                | 22,499                | 4,871                 | -                 |
| 39       | 384.00           | HOUSE REG INSTALLATIONS                    | 26                  | 3,864,772                  | 3,504,730            | 350,921                    | -                | 7,498                 | 1,623                 | -                 |
| 40       | 385.00           | IND M&R EQUIPMENT                          | 17                  | 5,504,725                  | -                    | 1,351,135                  | -                | 1,838,743             | 2,314,847             | -                 |
| 41       | 385.00           | DIRECT - IND M&R EQUIPMENT                 |                     | 299,289                    | -                    | -                          | -                | -                     | -                     | 299,289           |
| 42       | 385.10           | IND M&R EQUIPMENT - LG VOLUME              | 17                  | 1,189,992                  | -                    | 292,084                    | -                | 397,493               | 500,415               | -                 |
| 43       | 387.10           | OTHER EQUIP DISTRIBUTION                   | 11                  | 16,603                     | 12,094               | 2,762                      | -                | 719                   | 1,022                 | 5                 |
| 44       | 387.20           | OTHER EQUIP ODORIZATION                    | 11                  | 117,248                    | 85,407               | 19,504                     | -                | 5,080                 | 7,220                 | 36                |
| 45       | 387.42           | OTHER EQUIP RADIO                          | 11                  | 121,945                    | 88,829               | 20,286                     | -                | 5,284                 | 7,509                 | 38                |
| 46       | 387.44           | OTHER EQUIP COMMUNICATION                  | 11                  | 656,004                    | 477,853              | 109,126                    | -                | 28,425                | 40,397                | 203               |
| 47       | 387.46           | OTHER EQUIP CUSTOMER INFO SERVICE          | 11                  | 2,297,341                  | 1,673,452            | 382,163                    | -                | 99,544                | 141,470               | 712               |
| 48       | 387.45           | DIRECT - OTHER EQUIP CUSTOMER INFO SERVICE | 11                  | 38,438                     | -                    | -                          | -                | -                     | -                     | 38,438            |
| 49       |                  | TOTAL DISTRIBUTION PLANT                   |                     | 1,885,786,679              | 1,373,627,382        | 313,695,377                | -                | 81,716,102            | 116,127,920           | 619,899           |
| 50       | 389-398          | GENERAL PLANT                              | 11                  | 27,403,480                 | 19,961,517           | 4,558,569                  | -                | 1,187,393             | 1,687,506             | 8,495             |
| 51       |                  | TOTAL GROSS PLANT                          |                     | 1,945,029,486              | 1,416,809,964        | 324,028,879                | -                | 84,130,475            | 119,415,157           | 645,010           |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
DEPRECIATION RESERVE  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016

ALLOCATED COST OF SERVICE  
AVERAGE STUDY- ALLOCATORS 5 & 20

111, SCHEDULE 3

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WITNESS: B. E. ELLIOTT

| LINE NO. | ACCT. NO.<br>(A) | ACCOUNT TITLE<br>(B)                       | ALLOC FACTOR<br>(C) | TOTAL COMPANY<br>(D)<br>\$ | RSS/RDS<br>(E)<br>\$ | SGSS/SCD/SGDS<br>(F)<br>\$ | N/A<br>(G)<br>\$ | SDS/LGSS<br>(H)<br>\$ | LDS/LGSS<br>(I)<br>\$ | MLDS<br>(J)<br>\$ |
|----------|------------------|--------------------------------------------|---------------------|----------------------------|----------------------|----------------------------|------------------|-----------------------|-----------------------|-------------------|
| 1        | 301-305          | INTANGIBLE PLANT                           | 11                  | 9,438,648                  | 6,875,394            | 1,570,119                  | -                | 408,977               | 581,232               | 2,926             |
| 2        | 350-362          | UNDERGROUND STORAGE PLANT                  | 25                  | 2,472,747                  | 1,812,548            | 602,510                    | -                | 46,166                | 8,061                 | 3,462             |
|          |                  | <u>DISTRIBUTION PLANT</u>                  |                     |                            |                      |                            |                  |                       |                       |                   |
| 3        | 374.10           | LAND - CITY GATE & M/L IND M&R             | 22                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 4        | 374.20           | LAND - OTHER DISTRIBUTION                  | 22                  | 235,240                    | 155,736              | 45,211                     | -                | 14,004                | 20,290                | -                 |
| 5        | 374.30           | LAND RIGHTS - CITY GATE MAIN LINE          | 22                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 6        | 374.40           | LAND RIGHTS - OTHER DISTRIBUTION           | 22                  | 681,964                    | 451,480              | 131,067                    | -                | 40,597                | 58,819                | -                 |
| 7        | 374.40           | DIRECT - LAND RIGHTS-OTHER DISTRIBUTION    |                     | 1                          | -                    | -                          | -                | -                     | -                     | 1                 |
| 8        | 374.41           | LAND RIGHTS - OTHER DISTRIBUTION LOC       | 22                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 9        | 374.50           | RIGHTS OF WAY                              | 22                  | 1,601,194                  | 1,060,039            | 307,734                    | -                | 95,319                | 138,103               | -                 |
| 10       | 374.50           | DIRECT - RIGHTS OF WAY                     |                     | 707                        | -                    | -                          | -                | -                     | -                     | 707               |
| 11       | 375.20           | M & R STRUCTURES - CITY GATE               | 22                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 12       | 375.31           | M & R STRUCTURES - LOCAL GAS PURCH         | 22                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 13       | 375.40           | M & R STRUCTURES - REGULATING              | 22                  | 881,823                    | 583,793              | 169,478                    | -                | 52,495                | 76,057                | -                 |
| 14       | 375.40           | DIRECT - M & R STRUCTURES - REGULATING     | 22                  | 1,222                      | -                    | -                          | -                | -                     | -                     | 1,222             |
| 15       | 375.60           | M & R STRUCTURES - DIST. IND. M & R        | 17                  | 73,869                     | -                    | 18,131                     | -                | 24,675                | 31,063                | -                 |
| 16       | 375.70           | M & R STRUCTURES - OTHER                   | 11                  | 2,031,701                  | 1,479,952            | 337,974                    | -                | 88,034                | 125,112               | 630               |
| 17       | 375.71           | M & R STRUCTURES - OTHER LEASED            | 11                  | 1,125,911                  | 820,147              | 187,295                    | -                | 48,786                | 69,334                | 349               |
| 18       | 375.80           | M & R STRUCTURES - COMMUNICATION           | 22                  | 6,540                      | 4,330                | 1,257                      | -                | 389                   | 564                   | -                 |
| 19       | 376.00           | MAINS                                      | 22                  | 145,631,838                | 96,412,646           | 27,988,983                 | -                | 8,669,463             | 12,560,746            | -                 |
| 20       | 376.00           | DIRECT - MAINS - MDS                       |                     | 19,707                     | -                    | -                          | -                | -                     | -                     | 19,707            |
| 21       | 376.00           | DIRECT - MAINS - LDS                       |                     | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 22       | 376.08           | MAINS-CSL REPLACEMENTS                     | 22                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 23       | 376.30           | MAINS-BARE STEEL                           | 22                  | 39,288,673                 | 26,010,281           | 7,550,890                  | -                | 2,338,855             | 3,388,648             | -                 |
| 24       | 376.30           | DIRECT - MAINS-BARE STEEL                  |                     | 119,815                    | -                    | -                          | -                | -                     | -                     | 119,815           |
| 25       | 376.80           | MAINS-CAST IRON                            | 22                  | 342,363                    | 226,655              | 65,799                     | -                | 20,381                | 29,529                | -                 |
| 26       | 378.10           | M & R EQUIP - GENERAL                      | 22                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 27       | 378.20           | M & R EQUIP - GENERAL - REGULATING         | 22                  | 9,897,091                  | 6,552,171            | 1,902,122                  | -                | 589,174               | 853,624               | -                 |
| 28       | 378.20           | DIRECT - M & R EQUIP-GEN-REG               |                     | 720                        | -                    | -                          | -                | -                     | -                     | 720               |
| 29       | 378.30           | M & R EQUIP - LOCAL GAS PURCHASES          | 22                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 30       | 379.10           | M & R EQUIP - CITY GATE                    | 22                  | 94,150                     | 62,330               | 18,095                     | -                | 5,605                 | 8,120                 | -                 |
| 31       | 379.11           | M & R EQUIP - EXCHANGE GAS                 | 22                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 32       | 380.00           | SERVICES                                   | 15                  | 113,033,699                | 103,942,399          | 8,859,581                  | -                | 176,333               | 55,387                | -                 |
| 33       | 380.00           | DIRECT - SERVICES                          |                     | 23,465                     | -                    | -                          | -                | -                     | -                     | 23,465            |
| 34       | 380.12           | CSL REPLACEMENT                            | 15                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 35       | 381.00           | METERS                                     | 16                  | 15,981,682                 | 11,938,157           | 3,854,622                  | -                | 142,237               | 44,109                | 2,557             |
| 36       | 381.10           | AUTOMATIC METER READING                    | 16                  | 8,698,973                  | 6,498,046            | 2,098,105                  | -                | 77,421                | 24,009                | 1,392             |
| 37       | 382.00           | METER INSTALLATIONS                        | 16                  | 11,922,861                 | 8,906,258            | 2,875,675                  | -                | 106,114               | 32,907                | 1,908             |
| 38       | 383.00           | HOUSE REGULATORS                           | 26                  | 3,551,101                  | 3,220,280            | 322,440                    | -                | 6,869                 | 1,492                 | -                 |
| 39       | 384.00           | HOUSE REG INSTALLATIONS                    | 26                  | 2,978,927                  | 2,701,410            | 270,487                    | -                | 5,779                 | 1,251                 | -                 |
| 40       | 385.00           | IND M&R EQUIPMENT                          | 17                  | 3,252,946                  | 0                    | 798,436                    | -                | 1,086,581             | 1,367,929             | -                 |
| 41       | 385.00           | DIRECT - IND M&R EQUIPMENT                 |                     | 69,254                     | -                    | -                          | -                | -                     | -                     | 69,254            |
| 42       | 385.10           | IND M&R EQUIPMENT - LG VOLUME              | 17                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 43       | 387.10           | OTHER EQUIP DISTRIBUTION                   | 11                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 44       | 387.20           | OTHER EQUIP ODORIZATION                    | 11                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 45       | 387.42           | OTHER EQUIP RADIO                          | 11                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 46       | 387.44           | OTHER EQUIP COMMUNICATION                  | 11                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 47       | 387.46           | OTHER EQUIP CUSTOMER INFO SERVICE          | 11                  | 930,202                    | 677,587              | 154,739                    | -                | 40,306                | 57,282                | 288               |
| 48       | 387.45           | DIRECT - OTHER EQUIP CUSTOMER INFO SERVICE | 11                  | 919                        | -                    | -                          | -                | -                     | -                     | 919               |
| 49       |                  | TOTAL DISTRIBUTION PLANT                   |                     | 362,478,558                | 271,703,697          | 57,958,118                 | -                | 13,629,435            | 18,944,375            | 242,934           |
| 50       | 389-398          | GENERAL PLANT                              | 11                  | 12,347,815                 | 8,994,519            | 2,054,059                  | -                | 535,031               | 760,378               | 3,828             |
| 51       |                  | TOTAL DEPRECIATION RESERVE                 |                     | 386,737,768                | 289,386,158          | 62,184,806                 | -                | 14,619,608            | 20,294,047            | 253,149           |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
DEPRECIATION AND AMORTIZATION EXPENSE  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016

ALLOCATED COST OF SERVICE  
AVERAGE STUDY- ALLOCATORS 6 & 20

111, SCHEDULE 3  
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WITNESS: B. E. ELLIOTT

| LINE NO. | ACCT. NO.<br>(A) | ACCOUNT TITLE<br>(B)                        | ALLOC FACTOR<br>(C) | TOTAL COMPANY<br>(D)<br>\$ | RSS/RDS<br>(E)<br>\$ | SGSS/SCD/SGDS<br>(F)<br>\$ | N/A<br>(G)<br>\$ | SDS/LGSS<br>(H)<br>\$ | LDS/LGSS<br>(I)<br>\$ | MLDS<br>(J)<br>\$ |
|----------|------------------|---------------------------------------------|---------------------|----------------------------|----------------------|----------------------------|------------------|-----------------------|-----------------------|-------------------|
| 1        | 301-305          | INTANGIBLE PLANT                            | 11                  | 3,857,309                  | 2,809,780            | 641,663                    | -                | 167,137               | 237,533               | 1,196             |
| 2        | 350-362          | UNDERGROUND STORAGE PLANT                   | 25                  | 164,852                    | 120,838              | 40,168                     | -                | 3,078                 | 537                   | 231               |
|          |                  | <u>DISTRIBUTION PLANT</u>                   |                     |                            |                      |                            |                  |                       |                       |                   |
| 3        | 374.10           | LAND - CITY GATE & M/L IND M&R              | 22                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 4        | 374.20           | LAND - OTHER DISTRIBUTION                   | 22                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 5        | 374.30           | LAND RIGHTS - CITY GATE MAIN LINE           | 22                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 6        | 374.40           | LAND RIGHTS - OTHER DISTRIBUTION            | 22                  | 40,965                     | 27,120               | 7,873                      | -                | 2,439                 | 3,533                 | -                 |
| 7        | 374.40           | DIRECT - LAND RIGHTS-OTHER DISTRIBUTION     | 22                  | 0                          | -                    | -                          | -                | -                     | -                     | 0                 |
| 8        | 374.41           | LAND RIGHTS - OTHER DISTRIBUTION LOC        | 22                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 9        | 374.50           | RIGHTS OF WAY                               | 22                  | 42,143                     | 27,900               | 8,100                      | -                | 2,509                 | 3,635                 | -                 |
| 10       | 374.50           | DIRECT - RIGHTS OF WAY                      | 22                  | 16                         | -                    | -                          | -                | -                     | -                     | 16                |
| 11       | 375.20           | M & R STRUCTURES - CITY GATE                | 22                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 12       | 375.31           | M & R STRUCTURES - LOCAL GAS PURCH          | 22                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 13       | 375.40           | M & R STRUCTURES - REGULATING               | 22                  | 85,147                     | 56,370               | 16,364                     | -                | 5,069                 | 7,344                 | -                 |
| 14       | 375.40           | DIRECT - M & R STRUCTURES - REGULATING      | 22                  | 415                        | -                    | -                          | -                | -                     | -                     | 415               |
| 15       | 375.60           | M & R STRUCTURES - DIST. IND. M & R         | 17                  | 850                        | 0                    | 209                        | -                | 284                   | 357                   | -                 |
| 16       | 375.70           | M & R STRUCTURES - OTHER                    | 11                  | 450,305                    | 328,016              | 74,908                     | -                | 19,512                | 27,730                | 140               |
| 17       | 375.71           | M & R STRUCTURES - OTHER LEASED             | 11                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 18       | 375.80           | M & R STRUCTURES - COMMUNICATION            | 22                  | 331                        | 219                  | 64                         | -                | 20                    | 29                    | -                 |
| 19       | 376.00           | MAINS                                       | 22                  | 23,803,903                 | 15,758,898           | 4,574,872                  | -                | 1,417,046             | 2,053,087             | -                 |
| 20       | 376.00           | DIRECT - MAINS - MDS                        | 22                  | 859                        | -                    | -                          | -                | -                     | -                     | 859               |
| 21       | 376.00           | DIRECT - MAINS - LDS                        | 22                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 22       | 376.08           | MAINS-CSL REPLACEMENTS                      | 22                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 23       | 376.30           | MAINS-BARE STEEL                            | 22                  | 1,849,518                  | 1,224,437            | 355,459                    | -                | 110,102               | 159,521               | -                 |
| 24       | 376.30           | DIRECT - MAINS-BARE STEEL                   | 22                  | 3,556                      | -                    | -                          | -                | -                     | -                     | 3,556             |
| 25       | 376.80           | MAINS-CAST IRON                             | 22                  | 14,809                     | 9,804                | 2,846                      | -                | 882                   | 1,277                 | -                 |
| 26       | 378.10           | M & R EQUIP - GENERAL                       | 22                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 27       | 378.20           | M & R EQUIP - GENERAL - REGULATING          | 22                  | 1,247,152                  | 825,652              | 239,690                    | -                | 74,243                | 107,587               | -                 |
| 28       | 378.20           | DIRECT - M & R EQUIP-GEN-REG                | 22                  | 27                         | -                    | -                          | -                | -                     | -                     | 27                |
| 29       | 378.30           | M & R EQUIP - LOCAL GAS PURCHASES           | 22                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 30       | 379.10           | M & R EQUIP - CITY GATE                     | 22                  | 4,384                      | 2,902                | 843                        | -                | 261                   | 378                   | -                 |
| 31       | 379.11           | M & R EQUIP - EXCHANGE GAS                  | 22                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 32       | 380.00           | SERVICES                                    | 15                  | 12,923,606                 | 11,884,161           | 1,012,952                  | -                | 20,161                | 6,333                 | -                 |
| 33       | 380.00           | DIRECT - SERVICES                           | 15                  | 971                        | -                    | -                          | -                | -                     | -                     | 971               |
| 34       | 380.12           | CSL REPLACEMENT                             | 15                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 35       | 381.00           | METERS                                      | 16                  | 877,483                    | 655,471              | 211,640                    | -                | 7,810                 | 2,422                 | 140               |
| 36       | 381.10           | AUTOMATIC METER READING                     | 16                  | 1,748,019                  | 1,305,753            | 421,605                    | -                | 15,557                | 4,825                 | 280               |
| 37       | 382.00           | METER INSTALLATIONS                         | 16                  | 708,729                    | 529,414              | 170,938                    | -                | 6,308                 | 1,956                 | 113               |
| 38       | 383.00           | HOUSE REGULATORS                            | 26                  | 300,138                    | 272,177              | 27,253                     | -                | 582                   | 126                   | -                 |
| 39       | 384.00           | HOUSE REG INSTALLATIONS                     | 26                  | 66,436                     | 60,247               | 6,032                      | -                | 129                   | 28                    | -                 |
| 40       | 385.00           | IND M&R EQUIPMENT                           | 17                  | 235,982                    | -                    | 57,922                     | -                | 78,825                | 99,235                | -                 |
| 41       | 385.00           | DIRECT - IND M&R EQUIPMENT                  | 17                  | 10,475                     | -                    | -                          | -                | -                     | -                     | 10,475            |
| 42       | 385.10           | IND M&R EQUIPMENT - LG VOLUME               | 17                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 43       | 387.10           | OTHER EQUIP DISTRIBUTION                    | 11                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 44       | 387.20           | OTHER EQUIP ODORIZATION                     | 11                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 45       | 387.42           | OTHER EQUIP RADIO                           | 11                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 46       | 387.44           | OTHER EQUIP COMMUNICATION                   | 11                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 47       | 387.46           | OTHER EQUIP CUSTOMER INFO SERVICE           | 11                  | 143,937                    | 104,848              | 23,944                     | -                | 6,237                 | 8,864                 | 45                |
| 48       | 387.45           | DIRECT - OTHER EQUIP CUSTOMER INFO SERVICE  | 11                  | 896                        | -                    | -                          | -                | -                     | -                     | 896               |
| 49       |                  | TOTAL DISTRIBUTION PLANT                    |                     | 44,561,052                 | 33,073,388           | 7,213,513                  | -                | 1,767,974             | 2,488,245             | 17,932            |
| 50       | 389-398          | GENERAL PLANT                               | 11                  | 1,532,773                  | 1,116,518            | 254,977                    | -                | 66,415                | 94,388                | 475               |
| 51       |                  | NET DEPRECIATION & AMORTIZATION EXPENSE     |                     | 50,115,986                 | 37,120,523           | 8,150,321                  | -                | 2,004,604             | 2,820,704             | 19,834            |
| 52       |                  | AMORTIZATION OF NET NEGATIVE SALVAGE        | 11                  | 4,635,342                  | 3,376,522            | 771,089                    | -                | 200,849               | 285,444               | 1,437             |
| 53       |                  | TOTAL AMORTIZATION AND DEPRECIATION EXPENSE |                     | 54,751,328                 | 40,497,045           | 8,921,410                  | -                | 2,205,453             | 3,106,148             | 21,271            |

COLUMBIA GAS OF PENNSYLVANIA, INC  
OPERATING REVENUE @ PROPOSED & CURRENT RATES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016

ALLOCATED COST OF SERVICE  
AVERAGE STUDY- ALLOCATORS 5 & 20

111, SCHEDULE 3  
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WITNESS: B. E. ELLIOTT

| LINE NO.                          | ACCT NO.<br>(A) | ACCOUNT TITLE<br>(B)             | ALLOC FACTOR<br>(C) | TOTAL COMPANY<br>(D)<br>\$ | RSS/RDS<br>(E)<br>\$ | SGSS/SCD/SGDS<br>(F)<br>\$ | N/A<br>(G)<br>\$ | SDS/LGSS<br>(H)<br>\$ | LDS/LGSS<br>(I)<br>\$ | MLDS<br>(J)<br>\$ |
|-----------------------------------|-----------------|----------------------------------|---------------------|----------------------------|----------------------|----------------------------|------------------|-----------------------|-----------------------|-------------------|
| <u>PROPOSED OPERATING REVENUE</u> |                 |                                  |                     |                            |                      |                            |                  |                       |                       |                   |
|                                   |                 | SALES REVENUE                    |                     |                            |                      |                            |                  |                       |                       |                   |
| 1                                 | 480/481         | SALES BASE REVENUE               |                     | 220,048,699                | 179,812,274          | 40,216,579                 | -                | -                     | -                     | 19,846            |
| 2                                 |                 | USP REVENUE                      |                     | 22,763,845                 | 22,763,845           | -                          | -                | -                     | -                     | -                 |
| 3                                 |                 | STAS REVENUE                     |                     | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 4                                 |                 | RIDER CC - CUSTOMER CHOICE       |                     | 32,410                     | 23,281               | 9,129                      | -                | -                     | -                     | -                 |
| 5                                 |                 | GAS PROCUREMENT REVENUE          |                     | 554,837                    | 386,459              | 151,534                    | -                | 14,343                | 2,501                 | -                 |
| 6                                 |                 | MERCHANT FUNCTION REVENUE        |                     | 1,752,694                  | 1,573,774            | 178,920                    | -                | -                     | -                     | -                 |
| 7                                 |                 | GAS COST REVENUE                 |                     | 182,223,258                | 127,287,819          | 49,194,765                 | -                | 4,656,534             | 812,004               | 272,136           |
| 8                                 |                 | TOTAL SALES REVENUE              |                     | 427,375,743                | 331,847,452          | 89,750,927                 | -                | 4,670,877             | 814,505               | 291,982           |
|                                   |                 | TRANSPORTATION REVENUE           |                     |                            |                      |                            |                  |                       |                       |                   |
| 9                                 | 489.00          | TRANSPORTATION BASE REVENUE      |                     | 129,330,933                | 75,456,244           | 23,591,082                 | -                | 15,616,576            | 14,471,682            | 195,349           |
| 10                                |                 | USP REVENUE                      |                     | 7,953,451                  | 7,953,451            | -                          | -                | -                     | -                     | -                 |
| 11                                |                 | STAS REVENUE                     |                     | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 12                                |                 | RIDER CC - CUSTOMER CHOICE       |                     | 14,146                     | 8,134                | 6,012                      | -                | -                     | -                     | -                 |
| 13                                |                 | CHOICE ADMINISTRATIVE CHARGE     |                     | 960,011                    | 405,888              | 477,366                    | -                | 63,087                | 13,014                | 656               |
| 14                                |                 | FLEX REVENUE                     |                     | 5,162,702                  | -                    | 34,785                     | -                | 199,061               | 3,679,929             | 1,248,927         |
| 15                                |                 | GAS COST REVENUE                 |                     | 8,256,502                  | 5,910,184            | 2,346,318                  | -                | -                     | -                     | -                 |
| 16                                |                 | TOTAL TRANSPORTATION REVENUE     |                     | 151,677,745                | 89,733,901           | 26,455,563                 | -                | 15,878,724            | 18,164,625            | 1,444,932         |
|                                   |                 | MISCELLANEOUS REVENUE            |                     |                            |                      |                            |                  |                       |                       |                   |
| 17                                | 487.00          | FORFEITED DISCOUNTS              | 10                  | 1,431,975                  | 1,036,578            | 290,519                    | -                | 50,420                | 44,577                | 3,881             |
| 18                                | 488.00          | MISCELLANEOUS REVENUE            | 6                   | 150,000                    | 136,727              | 13,068                     | -                | 165                   | 36                    | 5                 |
| 19                                | 493.00          | RENTS                            | 11                  | 144,269                    | 105,090              | 23,999                     | -                | 6,251                 | 8,884                 | 45                |
| 20                                | 495.00          | OTHER                            | 6                   | 290,645                    | 264,926              | 25,321                     | -                | 320                   | 70                    | 9                 |
| 21                                |                 | TOTAL MISCELLANEOUS REVENUE      |                     | 2,016,889                  | 1,543,320            | 358,907                    | -                | 57,156                | 53,567                | 3,939             |
| 22                                |                 | TOTAL PROPOSED OPERATING REVENUE |                     | 581,070,377                | 423,124,673          | 116,565,397                | -                | 20,606,757            | 19,032,697            | 1,740,853         |
| <u>CURRENT OPERATING REVENUE</u>  |                 |                                  |                     |                            |                      |                            |                  |                       |                       |                   |
|                                   |                 | SALES REVENUE                    |                     |                            |                      |                            |                  |                       |                       |                   |
| 23                                | 480/481         | SALES BASE REVENUE               |                     | 193,569,580                | 154,667,108          | 36,418,008                 | -                | 2,147,971             | 316,621               | 19,872            |
| 24                                |                 | USP REVENUE                      |                     | 20,486,995                 | 20,486,995           | -                          | -                | -                     | -                     | -                 |
| 25                                |                 | STAS REVENUE                     |                     | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 26                                |                 | RIDER CC - CUSTOMER CHOICE       |                     | 29,169                     | 20,953               | 8,216                      | -                | -                     | -                     | -                 |
| 27                                |                 | GAS PROCUREMENT REVENUE          |                     | 2,322,967                  | 1,618,007            | 634,435                    | -                | 60,053                | 10,472                | -                 |
| 28                                |                 | MERCHANT FUNCTION REVENUE        |                     | 1,752,694                  | 1,573,774            | 178,920                    | -                | -                     | -                     | -                 |
| 29                                |                 | GAS COST REVENUE                 |                     | 182,223,258                | 127,287,819          | 49,194,765                 | -                | 4,656,534             | 812,004               | 272,136           |
| 30                                |                 | TOTAL SALES REVENUE              |                     | 400,384,663                | 305,654,656          | 86,434,344                 | -                | 6,864,558             | 1,139,097             | 292,008           |
|                                   |                 | TRANSPORTATION REVENUE           |                     |                            |                      |                            |                  |                       |                       |                   |
| 31                                | 489.00          | TRANSPORTATION BASE REVENUE      |                     | 112,021,621                | 67,094,584           | 21,252,414                 | -                | 11,705,399            | 11,773,260            | 195,854           |
| 32                                |                 | USP REVENUE                      |                     | 7,157,943                  | 7,157,943            | -                          | -                | -                     | -                     | -                 |
| 33                                |                 | STAS REVENUE                     |                     | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 34                                |                 | RIDER CC - CUSTOMER CHOICE       |                     | 12,731                     | 7,321                | 5,410                      | -                | -                     | -                     | -                 |
| 35                                |                 | CHOICE ADMINISTRATIVE CHARGE     |                     | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 36                                |                 | FLEX REVENUE                     |                     | 5,162,702                  | -                    | 34,785                     | -                | 199,061               | 3,679,929             | 1,248,927         |
| 37                                |                 | GAS COST REVENUE                 |                     | 8,256,502                  | 5,910,184            | 2,346,318                  | -                | -                     | -                     | -                 |
| 38                                |                 | TOTAL TRANSPORTATION REVENUE     |                     | 132,611,499                | 80,170,042           | 23,638,927                 | -                | 11,904,460            | 15,453,189            | 1,444,881         |
|                                   |                 | MISCELLANEOUS REVENUE            |                     |                            |                      |                            |                  |                       |                       |                   |
| 39                                | 487.00          | FORFEITED DISCOUNTS              | 10                  | 1,318,074                  | 954,127              | 272,834                    | -                | 46,409                | 41,032                | 3,572             |
| 40                                | 488.00          | MISCELLANEOUS REVENUE            | 6                   | 150,000                    | 136,727              | 13,068                     | -                | 165                   | 36                    | 5                 |
| 41                                | 493.00          | RENTS                            | 11                  | 144,269                    | 105,090              | 23,999                     | -                | 6,251                 | 8,884                 | 45                |
| 42                                | 495.00          | OTHER                            | 6                   | 290,645                    | 264,926              | 25,321                     | -                | 320                   | 70                    | 9                 |
| 43                                |                 | TOTAL MISCELLANEOUS REVENUE      |                     | 1,902,988                  | 1,460,870            | 335,322                    | -                | 53,145                | 50,022                | 3,630             |
| 44                                |                 | TOTAL CURRENT OPERATING REVENUE  |                     | 534,899,150                | 387,285,568          | 110,408,593                | -                | 18,822,163            | 16,642,308            | 1,740,519         |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
PRODUCTION & DISTRIBUTION O&M EXPENSES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016

ALLOCATED COST OF SERVICE  
AVERAGE STUDY- ALLOCATORS 5 & 2c

111, SCHEDULE 3

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WITNESS: B. E. ELLIOTT

| LINE NO.                                        | ACCT NO.<br>(A) | ACCOUNT TITLE<br>(B)                  | ALLOC FACTOR<br>(C) | TOTAL COMPANY<br>(D)<br>\$ | RSS/RDS<br>(E)<br>\$ | SGSS/SCD/SGDS<br>(F)<br>\$ | N/A<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                    |                     | 190,479,760                | 133,198,003          | 51,541,083                 | -                | 4,656,534             | 812,004               | 272,136           |
| 2                                               | 807.00          | PURCHASED GAS EXPENSE                 | 4                   | 431,011                    | 301,393              | 116,627                    | -                | 10,538                | 1,836                 | 616               |
| 3                                               | 807.00          | GAS PROCUREMENT EXPENSE               | 4                   | 554,837                    | 387,981              | 150,133                    | -                | 13,566                | 2,364                 | 793               |
| 4                                               |                 | TOTAL PURCHASED GAS                   |                     | 191,465,608                | 133,887,377          | 51,807,844                 | -                | 4,680,638             | 816,204               | 273,546           |
| <u>UNDERGROUND STORAGE OPERATIONS EXPENSES</u>  |                 |                                       |                     |                            |                      |                            |                  |                       |                       |                   |
| 5                                               | 816.00          | WELLS                                 | 25                  | 2,599                      | 1,905                | 633                        | -                | 49                    | 9                     | 4                 |
| 6                                               | 817.00          | LINES                                 | 25                  | 8,430                      | 6,179                | 2,054                      | -                | 157                   | 28                    | 12                |
| 7                                               | 818.00          | COMPRESSOR STATION                    | 25                  | 418,704                    | 306,914              | 102,021                    | -                | 7,817                 | 1,365                 | 586               |
| 8                                               | 820.00          | M & R                                 | 25                  | 11,942                     | 8,754                | 2,910                      | -                | 223                   | 39                    | 17                |
| 9                                               | 821.00          | PURIFICATION                          | 25                  | 6,922                      | 5,074                | 1,687                      | -                | 129                   | 23                    | 10                |
| 10                                              | 823.00          | GAS LOSSES                            | 25                  | 3,705                      | 2,716                | 903                        | -                | 69                    | 12                    | 5                 |
| 11                                              | 825.00          | STORAGE WELL ROYALTIES                | 25                  | 16,959                     | 12,431               | 4,132                      | -                | 317                   | 55                    | 24                |
| 12                                              |                 | TOTAL UNDERGROUND STORAGE OPERATIONS  |                     | 469,261                    | 343,973              | 114,340                    | -                | 8,761                 | 1,530                 | 657               |
| <u>UNDERGROUND STORAGE MAINTENANCE EXPENSES</u> |                 |                                       |                     |                            |                      |                            |                  |                       |                       |                   |
| 13                                              | 832.00          | WELLS                                 | 25                  | 10,380                     | 7,609                | 2,529                      | -                | 194                   | 34                    | 15                |
| 14                                              | 834.00          | COMPRESSOR STATION                    | 25                  | 11,204                     | 8,213                | 2,730                      | -                | 209                   | 37                    | 16                |
| 15                                              | 836.00          | PURIFICATION                          | 25                  | 9,107                      | 6,676                | 2,219                      | -                | 170                   | 30                    | 13                |
| 16                                              |                 | TOTAL UNDERGROUND STORAGE MAINTENANCE |                     | 30,691                     | 22,497               | 7,478                      | -                | 573                   | 100                   | 43                |
| 17                                              |                 | TOTAL UNDERGROUND STORAGE             |                     | 499,952                    | 366,470              | 121,818                    | -                | 9,334                 | 1,630                 | 700               |
| <u>DISTRIBUTION OPERATIONS EXPENSES</u>         |                 |                                       |                     |                            |                      |                            |                  |                       |                       |                   |
| 18                                              | 870.00          | SUPERVISION & ENGINEERING             | 18                  | 9,498,476                  | 6,931,798            | 1,563,354                  | -                | 416,033               | 586,151               | 1,140             |
| 19                                              | 871.00          | LOAD DISPATCHING                      | 13                  | 294,268                    | 194,782              | 56,547                     | -                | 17,515                | 25,378                | 47                |
| 20                                              | 874.00          | MAINS & SERVICES                      | 14                  | 14,496,818                 | 10,593,695           | 2,344,860                  | -                | 638,295               | 917,939               | 2,030             |
| 21                                              | 875.00          | M & R - GENERAL                       | 13                  | 613,642                    | 406,182              | 117,917                    | -                | 36,524                | 52,921                | 98                |
| 22                                              | 876.00          | M & R - INDUSTRIAL                    | 17                  | 274,004                    | (0)                  | 67,254                     | -                | 91,526                | 115,224               | -                 |
| 23                                              | 878.00          | METERS & HOUSE REGULATORS             | 27                  | 2,538,487                  | 1,952,274            | 559,508                    | -                | 20,156                | 6,194                 | 355               |
| 24                                              | 879.00          | CUSTOMER INSTALLATIONS                | 15                  | 5,575,022                  | 5,126,623            | 436,970                    | -                | 8,697                 | 2,732                 | -                 |
| 25                                              | 880.00          | OTHER                                 | 18                  | 6,779,266                  | 4,947,373            | 1,115,799                  | -                | 296,932               | 418,349               | 814               |
| 26                                              | 881.00          | RENTS                                 | 18                  | 623,551                    | 455,055              | 102,630                    | -                | 27,312                | 38,479                | 75                |
| 27                                              |                 | TOTAL DISTRIBUTION OPERATIONS         |                     | 40,693,534                 | 30,607,781           | 6,364,841                  | -                | 1,552,989             | 2,163,365             | 4,558             |
| <u>DISTRIBUTION MAINTENANCE EXPENSES</u>        |                 |                                       |                     |                            |                      |                            |                  |                       |                       |                   |
| 28                                              | 885.00          | SUPERVISION & ENGINEERING             | 18                  | 88,211                     | 64,375               | 14,519                     | -                | 3,864                 | 5,444                 | 11                |
| 29                                              | 886.00          | STRUCTURES AND IMPROVEMENTS           | 13                  | 34,799                     | 23,034               | 6,687                      | -                | 2,071                 | 3,001                 | 6                 |
| 30                                              | 887.00          | MAINS                                 | 13                  | 15,560,041                 | 10,299,502           | 2,990,018                  | -                | 926,134               | 1,341,898             | 2,490             |
| 31                                              | 889.00          | M & R - GENERAL                       | 13                  | 521,191                    | 344,987              | 100,152                    | -                | 31,021                | 44,948                | 83                |
| 32                                              | 890.00          | M & R - INDUSTRIAL                    | 17                  | 185,003                    | -                    | 45,409                     | -                | 61,797                | 77,798                | -                 |
| 33                                              | 892.00          | SERVICES                              | 15                  | 1,626,214                  | 1,495,418            | 127,463                    | -                | 2,537                 | 797                   | -                 |
| 34                                              | 893.00          | METERS & HOUSE REGULATORS             | 27                  | 244,982                    | 188,408              | 53,997                     | -                | 1,945                 | 598                   | 34                |
| 35                                              | 894.00          | OTHER EQUIPMENT                       | 18                  | 1,046,046                  | 763,384              | 172,169                    | -                | 45,817                | 64,552                | 126               |
| 36                                              |                 | TOTAL DISTRIBUTION MAINTENANCE        |                     | 19,306,487                 | 13,179,107           | 3,510,412                  | -                | 1,075,185             | 1,539,034             | 2,749             |
| 37                                              |                 | TOTAL DISTRIBUTION                    |                     | 60,000,021                 | 43,786,888           | 9,875,253                  | -                | 2,628,174             | 3,702,399             | 7,307             |



COLUMBIA GAS OF PENNSYLVANIA, INC.  
OTHER O&M EXPENSES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016

ALLOCATED COST OF SERVICE  
AVERAGE STUDY- ALLOCATORS 5 & 2c

111, SCHEDULE 3

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WITNESS: B. E. ELLIOTT

| LINE NO.                                       | ACCT NO. (A) | ACCOUNT TITLE (B)                        | ALLOC FACTOR (C) | TOTAL COMPANY (D) | RSS/RDS (E) | SGSS/SCD/SGDS (F) | N/A (G) | SDS/LGSS (H) | LDS/LGSS (I) | MLDS (J) |
|------------------------------------------------|--------------|------------------------------------------|------------------|-------------------|-------------|-------------------|---------|--------------|--------------|----------|
|                                                |              |                                          |                  | \$                | \$          | \$                | \$      | \$           | \$           | \$       |
| <u>CUSTOMER ACCOUNTS EXPENSES</u>              |              |                                          |                  |                   |             |                   |         |              |              |          |
| 1                                              | 901.00       | SUPERVISION                              | 6                | -                 | -           | -                 | -       | -            | -            | -        |
| 2                                              | 902.00       | METER READING                            | 6                | 836,787           | 762,740     | 72,901            | -       | 921          | 201          | 25       |
| 3                                              | 903.00       | CUSTOMER RECORDS AND COLLECTION EXPENSES | 6                | 9,650,214         | 8,796,267   | 840,727           | -       | 10,615       | 2,316        | 290      |
| 4                                              | 903.00       | INTEREST ON CUSTOMER DEPOSITS            | 9                | 89,468            | 65,556      | 23,912            | -       | -            | -            | -        |
| 5                                              | 904.00       | UNCOLLECTIBLES-DIS REVENUE               | 7                | 4,450,409         | 4,093,887   | 356,522           | -       | -            | -            | -        |
| 6                                              | 904.00       | UNCOLLECTIBLES-GMB/GTS REVENUE           | 8                | 78,025            | 1           | 6,157             | -       | 36,360       | 32,143       | 3,364    |
| 7                                              | 904.00       | UNCOLLECTIBLES-UNBUNDLED GAS             | 23               | 1,752,694         | 1,573,779   | 178,915           | -       | -            | -            | -        |
| 8                                              | 904.00       | DIRECT USP UNCOLLECTIBLES                |                  | 18,412,353        | 18,412,353  | -                 | -       | -            | -            | -        |
| 9                                              | 905.00       | MISCELLANEOUS                            | 6                | 36,677            | 33,432      | 3,195             | -       | 40           | 9            | 1        |
| 10                                             | 921.00       | OFFICE SUPPLIES & EXPENSES               | 6                | -                 | -           | -                 | -       | -            | -            | -        |
| 11                                             |              | TOTAL CUSTOMER ACCOUNTS                  |                  | 35,306,627        | 33,738,013  | 1,482,329         | -       | 47,936       | 34,669       | 3,680    |
| <u>CUST SERVICE &amp; INFORMATION EXPENSES</u> |              |                                          |                  |                   |             |                   |         |              |              |          |
| 12                                             | 907.00       | SUPERVISION                              | 6                | -                 | -           | -                 | -       | -            | -            | -        |
| 13                                             | 908.00       | CUSTOMER ASSISTANCE                      | 6                | 576,029           | 525,074     | 50,184            | -       | 634          | 138          | -        |
| 14                                             | 908.00       | DIRECT USP/LIURP/HEEP                    |                  | 9,232,585         | 9,232,585   | -                 | -       | -            | -            | -        |
| 15                                             | 909.00       | INFORMATIONAL & INSTRUCTIONAL EXPENSES   | 6                | 73,183            | 66,707      | 6,376             | -       | 81           | 18           | 2        |
| 16                                             | 910.00       | MISCELLANEOUS                            | 6                | 1,102,347         | 1,004,800   | 96,037            | -       | 1,213        | 265          | 33       |
| 17                                             | 910.00       | LARGE CUSTOMER RELATIONS                 | 21               | -                 | -           | -                 | -       | -            | -            | -        |
| 18                                             | 921.00       | OFFICE SUPPLIES & EXPENSES               | 6                | -                 | -           | -                 | -       | -            | -            | -        |
| 19                                             | 931.00       | RENTS - GENERAL                          | 6                | -                 | -           | -                 | -       | -            | -            | -        |
| 20                                             | 932.00       | MAINTENANCE                              | 6                | -                 | -           | -                 | -       | -            | -            | -        |
| 21                                             |              | TOTAL CUST SERVICE & INFORMATION         |                  | 10,984,144        | 10,829,166  | 152,596           | -       | 1,927        | 420          | 35       |
| <u>SALES EXPENSES</u>                          |              |                                          |                  |                   |             |                   |         |              |              |          |
| 22                                             | 912.00       | DEMONSTRATION                            | 6                | 677,253           | 617,323     | 59,002            | -       | 745          | 163          | 20       |
| 23                                             | 913.00       | ADVERTISING                              | 6                | 19,504            | 17,778      | 1,699             | -       | 22           | 5            | 1        |
| 24                                             |              | TOTAL SALES                              |                  | 696,757           | 635,101     | 60,702            | -       | 767          | 167          | 21       |
| <u>ADMINISTRATIVE AND GENERAL EXPENSES</u>     |              |                                          |                  |                   |             |                   |         |              |              |          |
| 25                                             | 920.00       | SALARIES                                 | 19               | 4,579,280         | 3,484,924   | 701,363           | -       | 164,396      | 228,002      | 595      |
| 26                                             | 921.00       | OFFICE SUPPLIES & EXPENSES               | 19               | 2,524,255         | 1,921,008   | 386,615           | -       | 90,621       | 125,683      | 328      |
| 27                                             | 922.00       | ADMIN. EXPENSE TRANSFERRED               | 19               | -                 | -           | -                 | -       | -            | -            | -        |
| 28                                             | 923.00       | OUTSIDE SERVICES EMPLOYED                | 19               | 47,925,970        | 36,472,622  | 7,340,342         | -       | 1,720,542    | 2,386,234    | 6,230    |
| 29                                             | 924.00       | PROPERTY INSURANCE                       | 19               | 212,955           | 162,063     | 32,616            | -       | 7,645        | 10,603       | 28       |
| 30                                             | 925.00       | INJURIES AND DAMAGES                     | 19               | 3,443,195         | 2,620,340   | 527,360           | -       | 123,611      | 171,437      | 448      |
| 31                                             | 926.00       | EMPLOYEE PENSIONS & BENEFITS             | 24               | 5,561,874         | 4,210,506   | 857,697           | -       | 206,234      | 286,826      | 612      |
| 32                                             | 928.00       | REGULATORY COMMISSION EXPENSES           | 19               | 2,330,000         | 1,773,177   | 356,863           | -       | 83,647       | 116,011      | 303      |
| 33                                             | 930.00       | MISCELLANEOUS GENERAL                    | 19               | 402,186           | 306,072     | 61,599            | -       | 14,439       | 20,025       | 52       |
| 34                                             | 931.00       | RENTS-GENERAL                            | 19               | 1,664,699         | 1,266,869   | 254,965           | -       | 59,763       | 82,885       | 216      |
| 35                                             | 932.00       | MAINTENANCE                              | 19               | 182,053           | 138,546     | 27,883            | -       | 6,536        | 9,064        | 24       |
| 36                                             |              | TOTAL ADMINISTRATIVE & GENERAL           |                  | 68,826,467        | 52,356,126  | 10,547,302        | -       | 2,477,433    | 3,436,770    | 8,836    |
| 37                                             |              | TOTAL O & M EXPENSES                     |                  | 367,779,576       | 275,599,141 | 74,047,843        | -       | 9,846,208    | 7,992,259    | 294,126  |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
TAXES OTHER THAN INCOME TAXES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016

ALLOCATED COST OF SERVICE  
AVERAGE STUDY- ALLOCATORS 5 & 20

111, SCHEDULE 3  
PAGE 9 OF 13  
WITNESS: B. E. ELLIOTT

| 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) | SGSS/SCD/SGDS<br>(F) | N/A<br>(G) | SDS/LGSS<br>(H) | LDS/LGSS<br>(I) | MLDS<br>(J) |
|-------------|--------------------|-------------------------------|------------------------|-------------------------|----------------|----------------------|------------|-----------------|-----------------|-------------|
|             |                    | <u>FEDERAL TAXES</u>          |                        | \$                      | \$             | \$                   | \$         | \$              | \$              | \$          |
| 1           | 408.00             | FEDERAL/STATE UNEMPLOYMENT    | 24                     | 221,927                 | 168,005        | 34,223               | -          | 8,229           | 11,445          | 24          |
| 2           | 408.00             | FICA                          | 24                     | 2,333,377               | 1,766,436      | 359,830              | -          | 86,522          | 120,332         | 257         |
| 3           |                    | TOTAL FEDERAL TAXES           |                        | 2,555,304               | 1,934,442      | 394,053              | -          | 94,751          | 131,777         | 281         |
|             |                    | <u>STATE TAXES</u>            |                        |                         |                |                      |            |                 |                 |             |
| 4           | 408.00             | PA PROPERTY TAXES             | 11                     | 550,207                 | 400,787        | 91,527               | -          | 23,841          | 33,882          | 171         |
| 5           | 408.00             | PA STATE UNEMPLOYMENT         | 24                     | -                       | -              | -                    | -          | -               | -               | -           |
| 6           | 408.00             | STATE CAPITAL STOCK TAX       | 11                     | -                       | -              | -                    | -          | -               | -               | -           |
| 7           | 408.00             | LICENSE AND FRANCHISE TAX     | 11                     | 279                     | 203            | 46                   | -          | 12              | 17              | 0           |
| 8           | 408.00             | STATE SALES AND USE TAX       | 19                     | 108,396                 | 82,492         | 16,602               | -          | 3,891           | 5,397           | 14          |
| 9           | 408.00             | OTHER                         | 19                     | 6,899                   | 5,250          | 1,057                | -          | 248             | 344             | 1           |
| 10          |                    | TOTAL STATE TAXES             |                        | 665,781                 | 488,732        | 109,232              | -          | 27,992          | 39,639          | 186         |
| 11          |                    | TOTAL TAXES OTHER THAN INCOME |                        | 3,221,085               | 2,423,174      | 503,285              | -          | 122,742         | 171,416         | 467         |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
RATE BASE  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016

ALLOCATED COST OF SERVICE  
AVERAGE STUDY- ALLOCATORS 5 & 2C

111, SCHEDULE 3  
PAGE 10 OF 13  
WITNESS: B. E. ELLIOTT

| LINE NO. | ACCT NO.<br>(A) | ACCOUNT TITLE<br>(B)                 | ALLOC FACTOR<br>(C) | TOTAL COMPANY<br>(D)<br>\$ | RSS/RDS<br>(E)<br>\$ | SGSS/SCD/SGDS<br>(F)<br>\$ | N/A<br>(G)<br>\$ | SDS/LGSS<br>(H)<br>\$ | LDS/LGSS<br>(I)<br>\$ | MLDS<br>(J)<br>\$ |
|----------|-----------------|--------------------------------------|---------------------|----------------------------|----------------------|----------------------------|------------------|-----------------------|-----------------------|-------------------|
| 1        | 101-107         | GROSS PLANT [PAGE 3]                 |                     | 1,945,029,486              | 1,416,809,964        | 324,028,879                | -                | 84,130,475            | 119,415,157           | 645,010           |
| 2        | 117.00          | GAS STORED UNDERGROUND - NON CURRENT | 25                  | 3,794,693                  | 2,781,548            | 924,615                    | -                | 70,847                | 12,371                | 5,313             |
| 3        | 108-111         | DEPRECIATION RESERVE [PAGE 4]        |                     | (386,737,768)              | (289,386,158)        | (62,184,806)               | -                | (14,619,608)          | (20,294,047)          | (253,149)         |
| 4        | 117.00          | GAS LOST-UNDERGROUND STORAGE         | 25                  | (163,467)                  | (119,823)            | (39,830)                   | -                | (3,052)               | (533)                 | (229)             |
| 5        |                 | NET PLANT                            |                     | 1,561,922,944              | 1,130,085,531        | 262,728,858                | -                | 69,578,661            | 99,132,949            | 396,944           |
|          |                 | <u>WORKING CAPITAL</u>               |                     |                            |                      |                            |                  |                       |                       |                   |
| 6        | 154.00          | MATERIALS & SUPPLIES                 | 11                  | 648,987                    | 472,742              | 107,959                    | -                | 28,121                | 39,965                | 201               |
| 7        | 164.00          | GAS STORED UNDERGROUND - FSS         | 25                  | 58,489,294                 | 42,873,237           | 14,251,501                 | -                | 1,091,995             | 190,675               | 81,885            |
| 8        | 165.00          | PREPAYMENTS                          | 19                  | 2,107,010                  | 1,603,477            | 322,710                    | -                | 75,642                | 104,908               | 274               |
| 9        |                 | CASH WORKING CAPITAL - GAS PURCHASES | 4                   | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 10       |                 | CASH WORKING CAPITAL - ALL OTHER     | 19                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 11       |                 | TOTAL WORKING CAPITAL                |                     | 61,245,291                 | 44,949,456           | 14,682,170                 | -                | 1,195,757             | 335,548               | 82,360            |
|          |                 | <u>DEFERRED INCOME TAXES</u>         |                     |                            |                      |                            |                  |                       |                       |                   |
| 12       | 190.00          | ACCUMULATED DEF INCOME TAX           | 12                  | 8,949,377                  | 6,518,995            | 1,490,877                  | -                | 387,061               | 549,492               | 2,953             |
| 13       | 282.00          | ACCUMULATED DEF INCOME TAX           | 12                  | (303,643,348)              | (221,182,924)        | (50,583,945)               | -                | (13,132,575)          | (18,643,702)          | (100,202)         |
| 14       | 283.00          | ACCUMULATED DEF INCOME TAX           | 12                  | -                          | -                    | -                          | -                | -                     | -                     | -                 |
| 15       |                 | TOTAL DEFERRED INCOME TAXES          |                     | (294,693,971)              | (214,663,929)        | (49,093,069)               | -                | (12,745,514)          | (18,094,210)          | (97,249)          |
| 16       | 235.00          | CUSTOMER DEPOSITS                    | 9                   | (3,131,607)                | (2,294,622)          | (836,985)                  | -                | -                     | -                     | -                 |
| 17       | 252.00          | CUSTOMER ADVANCES                    | 11                  | (211,729)                  | (154,230)            | (35,221)                   | -                | (9,174)               | (13,038)              | (66)              |
| 18       |                 | RATE BASE                            |                     | 1,325,130,928              | 957,922,206          | 227,445,754                | -                | 58,019,730            | 81,361,248            | 381,990           |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
STATE/FEDERAL INCOME TAXES  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016

ALLOCATED COST OF SERVICE  
AVERAGE STUDY- ALLOCATORS 5 & 20

111, SCHEDULE 3  
PAGE 11 OF 13  
WITNESS: B. E. ELLIOTT

| LINE NO.                  | ACCT NO.<br>(A)                               | ALLOC FACTOR<br>(B) | TOTAL COMPANY<br>(C)<br>\$ | RSS/RDS<br>(D)<br>\$ | SGSS/SCD/SGDS<br>(E)<br>\$ | N/A<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) |                     | 109,147,181                | 68,766,208           | 26,936,055                 | -                | 6,647,760             | 5,372,484             | 1,424,656         |
| 2                         | STATUTORY ADJUSTMENTS                         | 12                  | (50,280,540)               | (36,625,854)         | (8,376,235)                | -                | (2,174,633)           | (3,087,225)           | (16,593)          |
| 3                         | INTEREST ON DEBT                              |                     | (34,320,891)               | (24,810,185)         | (5,890,845)                | -                | (1,502,711)           | (2,107,256)           | (9,894)           |
| 4                         | PA BONUS DEPRECIATION ADJUSTMENT              | 12                  | (7,572,748)                | (5,516,217)          | (1,261,544)                | -                | (327,521)             | (464,967)             | (2,499)           |
| 5                         | STATE TAXABLE INCOME                          |                     | 16,972,982                 | 1,813,952            | 11,407,430                 | -                | 2,642,894             | (286,965)             | 1,395,671         |
| 6                         | NET OPERATING LOSS DEDUCTION                  | 12                  | (5,091,895)                | (3,709,089)          | (848,259)                  | -                | (220,225)             | (312,642)             | (1,680)           |
|                           | STATE TAXABLE INCOME                          |                     | 11,881,087                 | (1,895,137)          | 10,559,171                 | -                | 2,422,669             | (599,607)             | 1,393,990         |
| 7                         | STATE NET INCOME TAX @ 9.99%                  |                     | 1,186,921                  | (189,324)            | 1,054,861                  | -                | 242,025               | (59,901)              | 139,260           |
| 8                         | DEFERRED INCOME TAXES                         | 12                  | (51,103)                   | (37,225)             | (8,513)                    | -                | (2,210)               | (3,138)               | (17)              |
| 9                         | STATE INCOME TAX                              |                     | 1,135,818                  | (226,549)            | 1,046,348                  | -                | 239,814               | (63,038)              | 139,243           |
| <u>FEDERAL INCOME TAX</u> |                                               |                     |                            |                      |                            |                  |                       |                       |                   |
| 10                        | OPERATING INCOME BEFORE TAXES (PG. 2, LINE 8) |                     | 109,147,161                | 68,766,208           | 26,936,055                 | -                | 6,647,760             | 5,372,484             | 1,424,656         |
| 11                        | STATE NET INCOME TAX (LINE 7)                 |                     | (1,186,921)                | 189,324              | (1,054,861)                | -                | (242,025)             | 59,901                | (139,260)         |
| 12                        | STATUTORY ADJUSTMENTS (LINES 2 & 3)           | 12                  | (84,601,431)               | (61,436,039)         | (14,267,080)               | -                | (3,677,344)           | (5,194,482)           | (26,486)          |
| 13                        | FEDERAL TAXABLE INCOME                        |                     | 23,358,809                 | 7,519,493            | 11,614,113                 | -                | 2,728,391             | 237,903               | 1,258,910         |
| 14                        | FEDERAL INCOME TAX @ 35%                      |                     | 8,175,583                  | 2,631,822            | 4,064,940                  | -                | 954,937               | 83,266                | 440,619           |
| 15                        | DEFERRED INCOME TAXES                         | 12                  | 20,631,255                 | 15,028,425           | 3,436,961                  | -                | 892,302               | 1,266,759             | 6,808             |
| 16                        | TAX REFUND AMORTIZATION                       | 12                  | (681,571)                  | (496,477)            | (113,543)                  | -                | (29,478)              | (41,849)              | (225)             |
| 17                        | FLOW BACK OF EXCESS DEFERRED TAXES            | 12                  | (88,396)                   | (64,390)             | (14,726)                   | -                | (3,823)               | (5,428)               | (29)              |
| 18                        | EFFECT OF CNIT DEFERRED TAX ON FIT            | 12                  | 17,886                     | 13,028               | 2,980                      | -                | 774                   | 1,096                 | 6                 |
| 19                        | FEDERAL INCOME TAX                            |                     | 28,054,758                 | 17,112,410           | 7,376,611                  | -                | 1,814,711             | 1,303,847             | 447,179           |
| 20                        | STATE NET INCOME TAX (LINE 9)                 |                     | 1,135,818                  | (226,549)            | 1,046,348                  | -                | 239,814               | (63,038)              | 139,243           |
| 21                        | TOTAL INCOME TAXES                            |                     | 29,190,575                 | 16,885,860           | 8,422,959                  | -                | 2,054,526             | 1,240,809             | 586,421           |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
ALLOCATION FACTORS  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016

ALLOCATED COST OF SERVICE  
AVERAGE STUDY- ALLOCATORS 5 & 20

111, SCHEDULE 3  
PAGE 12 OF 13  
WITNESS: B. E. ELLIOTT

| LINE NO. | DESCRIPTION (A)                              | ALLOC FACTOR (B) | TOTAL COMPANY (C) | RSS/RDS (D)   | SGSS/SCD/SGDS (E) | N/A (F) | SDS/LGSS (G) | LDS/LGSS (H) | MLDS (I)  |
|----------|----------------------------------------------|------------------|-------------------|---------------|-------------------|---------|--------------|--------------|-----------|
| 1        | DESIGN DAY                                   | 1                | 791,995,000       | 458,700,000   | 189,733,000       | -       | 65,702,000   | 77,860,000   | 0         |
| 2        | PERCENT                                      |                  | 100.000%          | 57.917%       | 23.956%           | 0.000%  | 8.296%       | 9.831%       | 0.000%    |
| 3        | THROUGHPUT EXCLUDING TRANSPORTATION          | 2                | 33,488,984        | 23,280,676    | 9,128,568         | -       | 864,065      | 150,675      | 65,000    |
| 4        | PERCENT                                      |                  | 100.000%          | 69.517%       | 27.258%           | 0.000%  | 2.580%       | 0.450%       | 0.194%    |
| 5        | THROUGHPUT EXCLUDING MDS                     | 3                | 75,381,022        | 33,927,676    | 15,162,538        | -       | 6,865,950    | 19,424,858   | 0         |
| 6        | PERCENT                                      |                  | 100.000%          | 45.008%       | 20.115%           | 0.000%  | 9.108%       | 25.769%      | 0.000%    |
| 7        | GAS PURCHASED EXPENSE                        | 4                | 190,479,760       | 133,198,003   | 51,541,083        | -       | 4,656,534    | 812,004      | 272,136   |
| 8        | PERCENT                                      |                  | 100.000%          | 69.928%       | 27.059%           | 0.000%  | 2.445%       | 0.426%       | 0.143%    |
| 9        | PEAK & AVERAGE MAINS                         | 5                |                   |               |                   |         |              |              |           |
| 10       | PERCENT                                      |                  | 100.000%          | 56.714%       | 22.120%           | 0.000%  | 7.792%       | 13.374%      | 0.000%    |
| 11       | AVERAGE NO. OF CUSTOMERS                     | 6                | 423,809           | 386,310       | 36,921            | -       | 467          | 100          | 11        |
| 12       | PERCENT                                      |                  | 100.000%          | 91.152%       | 8.712%            | 0.000%  | 0.110%       | 0.024%       | 0.003%    |
| 13       | DISTRIBUTION UNCOLLECTIBLES                  | 7                | 7,675,643         | 7,060,733     | 614,910           | -       | -            | -            | -         |
| 14       | PERCENT                                      |                  | 100.000%          | 91.989%       | 8.011%            | 0.000%  | 0.000%       | 0.000%       | 0.000%    |
| 15       | CURRENT GMB/GTS REVENUE                      | 8                | 40,276,456        | -             | 3,178,263         | -       | 18,769,018   | 16,592,286   | 1,736,889 |
| 16       | PERCENT                                      |                  | 100.000%          | 0.000%        | 7.891%            | 0.000%  | 46.600%      | 41.196%      | 4.312%    |
| 17       | DIRECT ASSIGNMENT - CUSTOMER DEPOSITS        | 9                | 2,445,620         | 1,791,981     | 653,639           | -       | -            | -            | -         |
| 18       | PERCENT                                      |                  | 100.000%          | 73.273%       | 26.727%           | 0.000%  | 0.000%       | 0.000%       | 0.000%    |
| 19       | FORFEITED DISCOUNTS                          | 10               | 1,318,074         | 954,126       | 272,928           | -       | 46,415       | 41,032       | 3,573     |
| 20       | PERCENT                                      |                  | 100.000%          | 72.388%       | 20.707%           | 0.000%  | 3.521%       | 3.113%       | 0.271%    |
| 21       | DIST. PLANT EXCL ACCTS 375.70, 375.71, & 387 | 11               | 1,872,017,151     | 1,363,625,243 | 311,411,210       | -       | 81,121,133   | 115,282,360  | 577,205   |
| 22       | PERCENT                                      |                  | 100.000%          | 72.843%       | 16.635%           | 0.000%  | 4.333%       | 6.158%       | 0.031%    |
| 23       | GROSS PLANT                                  | 12               | 1,945,029,486     | 1,416,809,964 | 324,028,879       | -       | 84,130,475   | 119,415,157  | 645,010   |
| 24       | PERCENT                                      |                  | 100.000%          | 72.843%       | 16.659%           | 0.000%  | 4.325%       | 6.140%       | 0.033%    |
| 25       | MAINS - ACCOUNT 376                          | 13               | 1,247,713,802     | 825,894,704   | 239,760,590       | -       | 74,264,779   | 107,598,475  | 195,254   |
| 26       | PERCENT                                      |                  | 100.000%          | 66.193%       | 19.216%           | 0.000%  | 5.952%       | 8.624%       | 0.016%    |

COLUMBIA GAS OF PENNSYLVANIA, INC.  
ALLOCATION FACTORS (CONT.)  
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016

ALLOCATED COST OF SERVICE  
AVERAGE STUDY- ALLOCATORS 5 & 20

111, SCHEDULE 3  
PAGE 13 OF 13  
WITNESS: B. E. ELLIOTT

| LINE<br>NO. | DESCRIPTION<br>(A)                          | ALLOC<br>FACTOR<br>(B) | TOTAL<br>COMPANY<br>(C) | RSS/RDS<br>(D) | SGSS/SCD/SGDS<br>(E) | N/A<br>(F) | SDS/LGSS<br>(G) | LDS/LGSS<br>(H) | MLDS<br>(I) |
|-------------|---------------------------------------------|------------------------|-------------------------|----------------|----------------------|------------|-----------------|-----------------|-------------|
| 1           | COMPOSITE DIRECT PLANT - ACCTS 376 & 380    | 14                     | 1,702,740,850           | 1,244,289,324  | 275,422,680          | -          | 74,974,563      | 107,821,420     | 232,884     |
| 2           | PERCENT                                     |                        | 100.000%                | 73.076%        | 16.175%              | 0.000%     | 4.403%          | 6.332%          | 0.014%      |
| 3           | DIRECT ASSIGNMENT - SERVICES                | 15                     | 282,022,729             | 259,337,993    | 22,106,116           | -          | 441,317         | 137,303         | -           |
| 4           | PERCENT                                     |                        | 100.000%                | 91.956%        | 7.838%               | 0.000%     | 0.156%          | 0.049%          | 0.000%      |
| 5           | DIRECT ASSIGNMENT - METERS                  | 16                     | 25,782,967              | 19,259,659     | 6,218,634            | -          | 229,488         | 71,085          | 4,101       |
| 6           | PERCENT                                     |                        | 100.000%                | 74.699%        | 24.119%              | 0.000%     | 0.890%          | 0.276%          | 0.016%      |
| 7           | DIRECT ASSIGNMENT - IND M & R               | 17                     | 5,629,652               | -              | 1,381,785            | -          | 1,880,479       | 2,367,388       | -           |
| 8           | PERCENT                                     |                        | 100.000%                | 0.000%         | 24.545%              | 0.000%     | 33.403%         | 42.052%         | 0.000%      |
| 9           | OTHER DISTRIBUTION O & M EXPENSES           | 18                     | 41,964,471              | 30,624,905     | 6,906,781            | -          | 1,838,217       | 2,589,425       | 5,143       |
| 10          | PERCENT                                     |                        | 100.000%                | 72.978%        | 16.459%              | 0.000%     | 4.380%          | 6.171%          | 0.012%      |
| 11          | O & M EXCL GAS PUR, UNCOLLECTIBLES, & A & G | 19                     | 74,547,283              | 56,732,408     | 11,417,864           | -          | 2,675,881       | 3,711,342       | 9,789       |
| 12          | PERCENT                                     |                        | 100.000%                | 76.103%        | 15.316%              | 0.000%     | 3.590%          | 4.979%          | 0.013%      |
| 13          | CUSTOMER/DEMAND MAINS                       | 20                     |                         |                |                      |            |                 |                 |             |
| 14          | PERCENT                                     |                        | 100.000%                | 75.694%        | 16.318%              | 0.000%     | 4.113%          | 3.875%          | 0.000%      |
| 15          | LARGE CUSTOMER RELATIONS                    | 21                     | 161                     | -              | 19                   | -          | 37              | 94              | 11          |
| 16          | PERCENT                                     |                        | 100.00%                 | 0.000%         | 11.801%              | 0.000%     | 22.981%         | 58.385%         | 6.832%      |
| 17          | AVERAGE - ALLOCATORS 5 & 20                 | 22                     |                         |                |                      |            |                 |                 |             |
| 18          | PERCENT                                     |                        | 100.00%                 | 66.203%        | 19.219%              | 0.000%     | 5.953%          | 8.625%          | 0.000%      |
| 19          | UNBUNDLED UNCOLLECTIBLES                    | 23                     | 1,752,694               | 1,573,774      | 178,920              | -          | -               | -               | -           |
| 20          | PERCENT                                     |                        | 100.000%                | 89.792%        | 10.208%              | 0.000%     | 0.000%          | 0.000%          | 0.000%      |
| 21          | LABOR                                       | 24                     | 27,300,655              | 20,667,425     | 4,210,039            | -          | 1,012,282       | 1,407,844       | 3,064       |
| 22          | PERCENT                                     |                        | 100.000%                | 75.703%        | 15.421%              | 0.000%     | 3.708%          | 5.157%          | 0.011%      |
| 23          | SALES AND CHOICE TRANSPORTATION             | 25                     | 46,285,029              | 33,927,676     | 11,277,612           | -          | 864,065         | 150,675         | 65,000      |
| 24          | PERCENT                                     |                        | 100.000%                | 73.302%        | 24.366%              | 0.000%     | 1.867%          | 0.326%          | 0.140%      |
| 25          | HOUSE REGULATORS                            | 26                     | 2,761,797               | 2,504,494      | 250,777              | -          | 5,364           | 1,162           | -           |
| 26          | PERCENT                                     |                        | 100.000%                | 90.683%        | 9.080%               | 0.000%     | 0.194%          | 0.042%          | 0.000%      |
| 27          | METERS & HOUSE REGULATORS                   | 27                     | 111,890,537             | 86,052,701     | 24,661,560           | -          | 888,211         | 272,637         | 15,429      |
| 28          | PERCENT                                     |                        | 100.000%                | 76.908%        | 22.041%              | 0.000%     | 0.794%          | 0.244%          | 0.014%      |

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**ALLOCATION FACTORS**  
**FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016**

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

**111, SCHEDULE 3**  
**PAGE 1 OF 2**  
**WITNESS: B. E. ELLIOTT**

| <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>SGSS/SCD/SGDS</u><br>(E) | <u>N/A</u><br>(F) | <u>SDS/LGSS</u><br>(G) | <u>LDS/LGSS</u><br>(H) | <u>MLDS</u><br>(I) |
|-----------------|----------------------------------------------|----------------------------|-----------------------------|-----------------------|-----------------------------|-------------------|------------------------|------------------------|--------------------|
| 1               | DESIGN DAY                                   | 1                          | 791,995,000                 | 458,700,000           | 189,733,000                 | 0                 | 65,702,000             | 77,860,000             | 0                  |
| 2               | PERCENT                                      |                            | 100.000%                    | 57.917%               | 23.956%                     | 0.000%            | 8.296%                 | 9.831%                 | 0.000%             |
| 3               | THROUGHPUT EXCLUDING TRANSPORTATION          | 2                          | 33,488,984                  | 23,280,676            | 9,128,568                   | 0                 | 864,065                | 150,675                | 65,000             |
| 4               | PERCENT                                      |                            | 100.000%                    | 69.517%               | 27.258%                     | 0.000%            | 2.580%                 | 0.450%                 | 0.194%             |
| 5               | THROUGHPUT EXCLUDING MDS                     | 3                          | 75,381,022                  | 33,927,676            | 15,162,538                  | 0                 | 6,865,950              | 19,424,858             | 0                  |
| 6               | PERCENT                                      |                            | 100.000%                    | 45.008%               | 20.115%                     | 0.000%            | 9.108%                 | 25.769%                | 0.000%             |
| 7               | GAS PURCHASED EXPENSE                        | 4                          | 190,479,760                 | 133,198,003           | 51,541,083                  | -                 | 4,656,534              | 812,004                | 272,136            |
| 8               | PERCENT                                      |                            | 100.000%                    | 69.928%               | 27.059%                     | 0.000%            | 2.445%                 | 0.426%                 | 0.143%             |
| 9               | PEAK & AVERAGE MAINS                         | 5                          |                             |                       |                             |                   |                        |                        |                    |
| 10              | PERCENT                                      |                            | 100.000%                    | 56.714%               | 22.120%                     | 0.000%            | 7.792%                 | 13.374%                | 0.000%             |
| 11              | AVERAGE NO. OF CUSTOMERS                     | 6                          | 423,809                     | 386,310               | 36,921                      | 0                 | 467                    | 100                    | 11                 |
| 12              | PERCENT                                      |                            | 100.000%                    | 91.152%               | 8.712%                      | 0.000%            | 0.110%                 | 0.024%                 | 0.003%             |
| 13              | DISTRIBUTION UNCOLLECTIBLES                  | 7                          | 7,675,643                   | 7,060,733             | 614,910                     | -                 | -                      | -                      | -                  |
| 14              | PERCENT                                      |                            | 100.000%                    | 91.989%               | 8.011%                      | 0.000%            | 0.000%                 | 0.000%                 | 0.000%             |
| 15              | CURRENT GMB/GTS REVENUE                      | 8                          | 40,276,456                  | -                     | 3,178,263                   | -                 | 18,769,018             | 16,592,286             | 1,736,889          |
| 16              | PERCENT                                      |                            | 100.000%                    | 0.000%                | 7.891%                      | 0.000%            | 46.600%                | 41.196%                | 4.312%             |
| 17              | DIRECT ASSIGNMENT - CUSTOMER DEPOSITS        | 9                          | 2,445,620                   | 1,791,981             | 653,639                     | -                 | -                      | -                      | -                  |
| 18              | PERCENT                                      |                            | 100.000%                    | 73.273%               | 26.727%                     | 0.000%            | 0.000%                 | 0.000%                 | 0.000%             |
| 19              | FORFEITED DISCOUNTS                          | 10                         | 1,318,074                   | 954,126               | 272,928                     | -                 | 46,415                 | 41,032                 | 3,573              |
| 20              | PERCENT                                      |                            | 100.000%                    | 72.388%               | 20.707%                     | 0.000%            | 3.521%                 | 3.113%                 | 0.271%             |
| 21              | DIST. PLANT EXCL ACCTS 375.70, 375.71, & 387 | 11                         | 1,872,017,151               | 1,363,625,243         | 311,411,210                 | -                 | 81,121,133             | 115,282,360            | 577,205            |
| 22              | PERCENT                                      |                            | 100.000%                    | 72.843%               | 16.635%                     | 0.000%            | 4.333%                 | 6.158%                 | 0.031%             |
| 23              | GROSS PLANT                                  | 12                         | 1,945,029,486               | 1,416,809,964         | 324,028,879                 | -                 | 84,130,475             | 119,415,157            | 645,010            |
| 24              | PERCENT                                      |                            | 100.000%                    | 72.843%               | 16.659%                     | 0.000%            | 4.325%                 | 6.140%                 | 0.033%             |
| 25              | MAINS - ACCOUNT 376                          | 13                         | 1,247,713,802               | 825,894,704           | 239,760,590                 | -                 | 74,264,779             | 107,598,475            | 195,254            |
| 26              | PERCENT                                      |                            | 100.000%                    | 66.193%               | 19.216%                     | 0.000%            | 5.952%                 | 8.624%                 | 0.016%             |

**COLUMBIA GAS OF PENNSYLVANIA, INC.**  
**ALLOCATION FACTORS (CONT.)**  
**FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016**

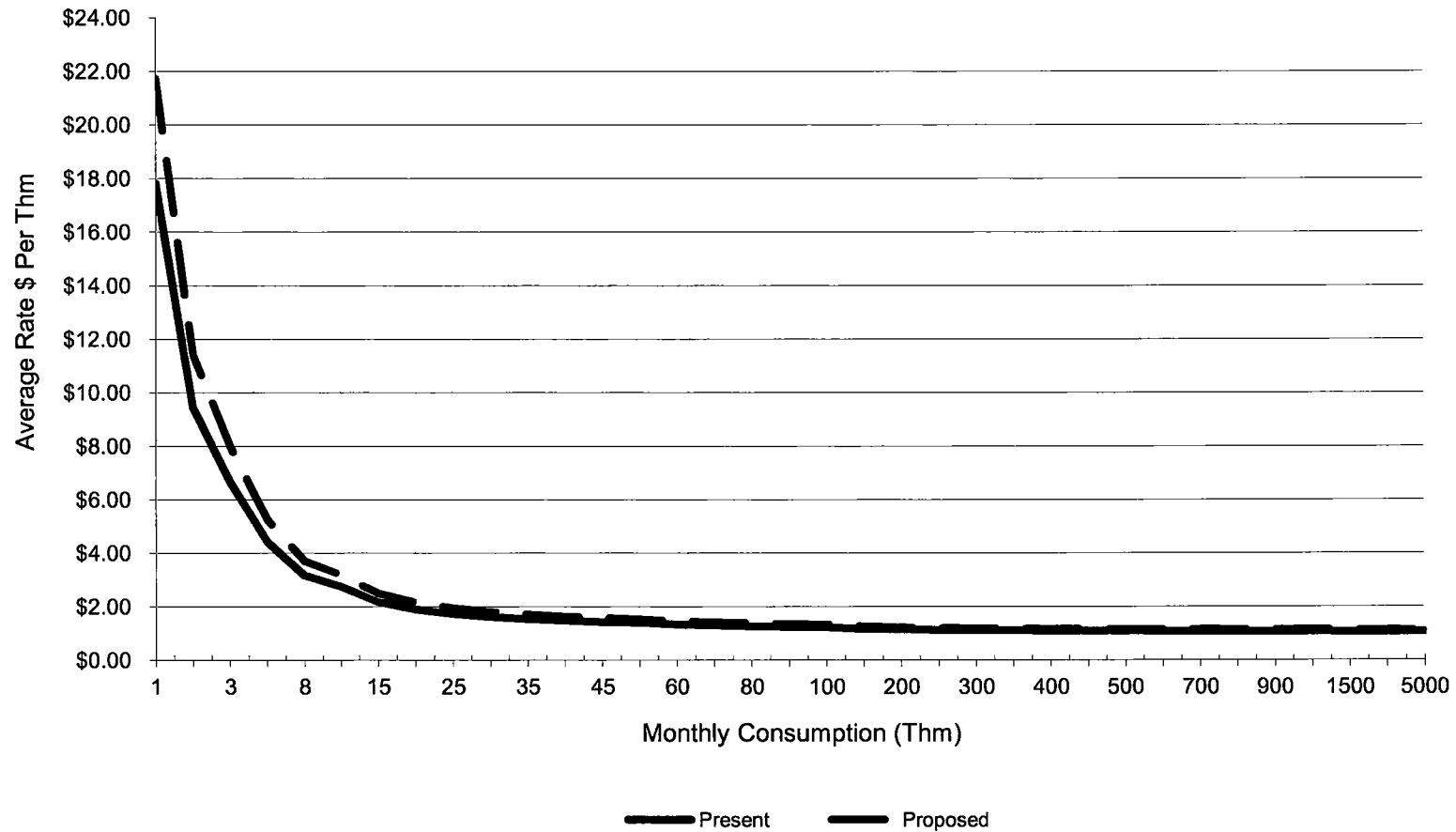
**ALLOCATED COST OF SERVICE**  
**AVERAGE STUDY- ALLOCATORS 5 & 20**

111, SCHEDULE 3  
PAGE 2 OF 2  
WITNESS: B. E. ELLIOTT

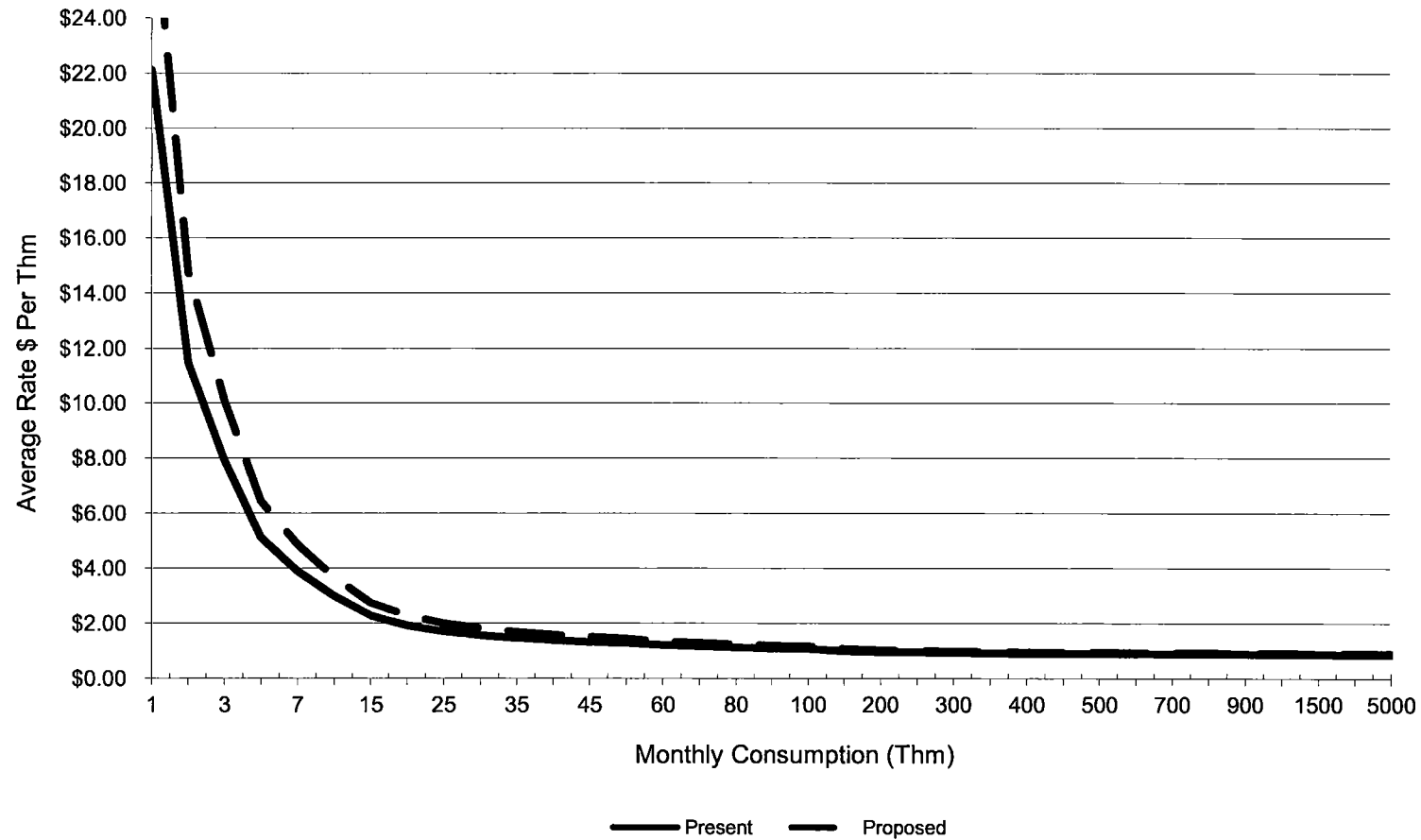
| LINE NO. | DESCRIPTION (A)                             | ALLOC FACTOR (B) | TOTAL COMPANY (C) | RSS/RDS (D)   | SGSS/SCD/SGDS (E) | N/A (F) | SDS/LGSS (G) | LDS/LGSS (H) | MLDS (I) |
|----------|---------------------------------------------|------------------|-------------------|---------------|-------------------|---------|--------------|--------------|----------|
| 1        | COMPOSITE DIRECT PLANT - ACCTS 376 & 380    | 14               | 1,702,740,850     | 1,244,289,324 | 275,422,660       | -       | 74,974,563   | 107,821,420  | 232,884  |
| 2        | PERCENT                                     |                  | 100.000%          | 73.076%       | 16.175%           | 0.000%  | 4.403%       | 6.332%       | 0.014%   |
| 3        | DIRECT ASSIGNMENT - SERVICES                | 15               | 282,022,729       | 259,337,993   | 22,106,116        | -       | 441,317      | 137,303      | -        |
| 4        | PERCENT                                     |                  | 100.000%          | 91.956%       | 7.838%            | 0.000%  | 0.156%       | 0.049%       | 0.000%   |
| 5        | DIRECT ASSIGNMENT - METERS                  | 16               | 25,782,967        | 19,259,659    | 6,218,634         | -       | 229,488      | 71,085       | 4,101    |
| 6        | PERCENT                                     |                  | 100.000%          | 74.699%       | 24.119%           | 0.000%  | 0.890%       | 0.276%       | 0.016%   |
| 7        | DIRECT ASSIGNMENT - IND M & R               | 17               | 5,629,652         | -             | 1,381,785         | -       | 1,880,479    | 2,367,388    | -        |
| 8        | PERCENT                                     |                  | 100.000%          | 0.000%        | 24.545%           | 0.000%  | 33.403%      | 42.052%      | 0.000%   |
| 9        | OTHER DISTRIBUTION O & M EXPENSES           | 18               | 41,964,471        | 30,624,905    | 6,906,781         | -       | 1,838,217    | 2,589,425    | 5,143    |
| 10       | PERCENT                                     |                  | 100.000%          | 72.978%       | 16.459%           | 0.000%  | 4.380%       | 6.171%       | 0.012%   |
| 11       | O & M EXCL GAS PUR, UNCOLLECTIBLES, & A & G | 19               | 74,547,283        | 56,732,408    | 11,417,864        | -       | 2,675,881    | 3,711,342    | 9,789    |
| 12       | PERCENT                                     |                  | 100.000%          | 76.103%       | 15.316%           | 0.000%  | 3.590%       | 4.979%       | 0.013%   |
| 13       | CUSTOMER/DEMAND MAINS                       | 20               |                   |               |                   |         |              |              |          |
| 14       | PERCENT                                     |                  | 100.000%          | 75.694%       | 16.318%           | 0.000%  | 4.113%       | 3.875%       | 0.000%   |
| 15       | LARGE CUSTOMER RELATIONS                    | 21               | 161               | -             | 19                | -       | 37           | 94           | 11       |
| 16       | PERCENT                                     |                  | 100.00%           | 0.000%        | 11.801%           | 0.000%  | 22.981%      | 58.385%      | 6.832%   |
| 17       | AVERAGE - ALLOCATORS 5 & 20                 | 22               |                   |               |                   |         |              |              |          |
| 18       | PERCENT                                     |                  | 100.00%           | 66.203%       | 19.219%           | 0.000%  | 5.953%       | 8.625%       | 0.000%   |
| 19       | UNBUNDLED UNCOLLECTIBLES                    | 23               | 1,752,694         | 1,573,774     | 178,920           | -       | -            | -            | -        |
| 20       | PERCENT                                     |                  | 100.000%          | 89.792%       | 10.208%           | 0.000%  | 0.000%       | 0.000%       | 0.000%   |
| 21       | LABOR                                       | 24               | 27,300,655        | 20,667,425    | 4,210,039         | -       | 1,012,282    | 1,407,844    | 3,064    |
| 22       | PERCENT                                     |                  | 100.000%          | 75.703%       | 15.421%           | 0.000%  | 3.708%       | 5.157%       | 0.011%   |
| 23       | SALES AND CHOICE TRANSPORTATION             | 25               | 46,285,029        | 33,927,676    | 11,277,612        | -       | 864,065      | 150,675      | 65,000   |
| 24       | PERCENT                                     |                  | 100.000%          | 73.302%       | 24.366%           | 0.000%  | 1.867%       | 0.326%       | 0.140%   |
| 25       | HOUSE REGULATORS                            | 26               | 2,761,797         | 2,504,494     | 250,777           | -       | 5,364        | 1,162        | -        |
| 26       | PERCENT                                     |                  | 100.000%          | 90.683%       | 9.080%            | 0.000%  | 0.194%       | 0.042%       | 0.000%   |
| 27       | METERS & HOUSE REGULATORS                   | 27               | 111,890,537       | 86,052,701    | 24,661,560        | -       | 888,211      | 272,637      | 15,429   |
| 28       | PERCENT                                     |                  | 100.000%          | 76.908%       | 22.041%           | 0.000%  | 0.794%       | 0.244%       | 0.014%   |



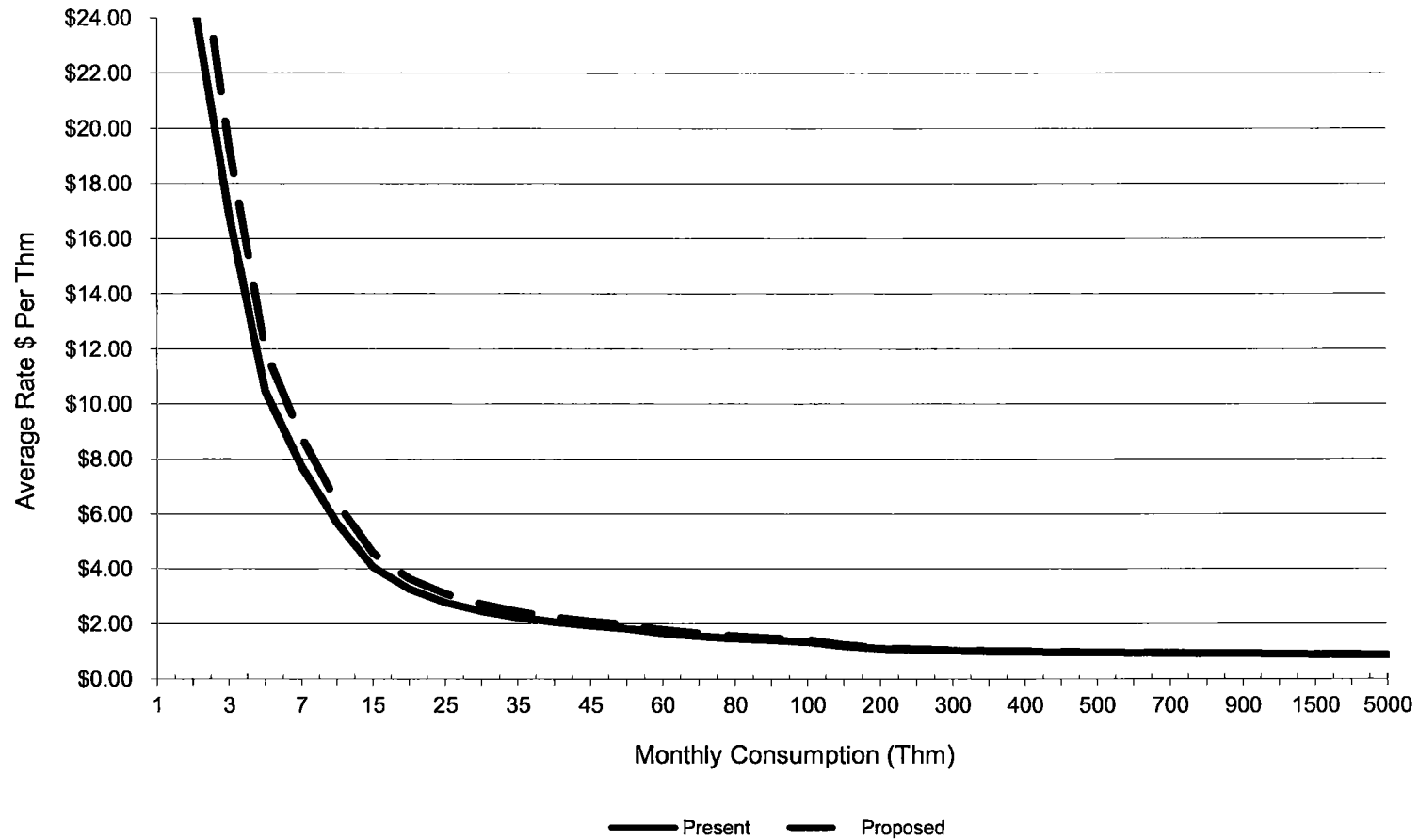
COLUMBIA GAS OF PENNSYLVANIA, INC  
PRESENT AND PROPOSED RATES  
Residential Sales Service



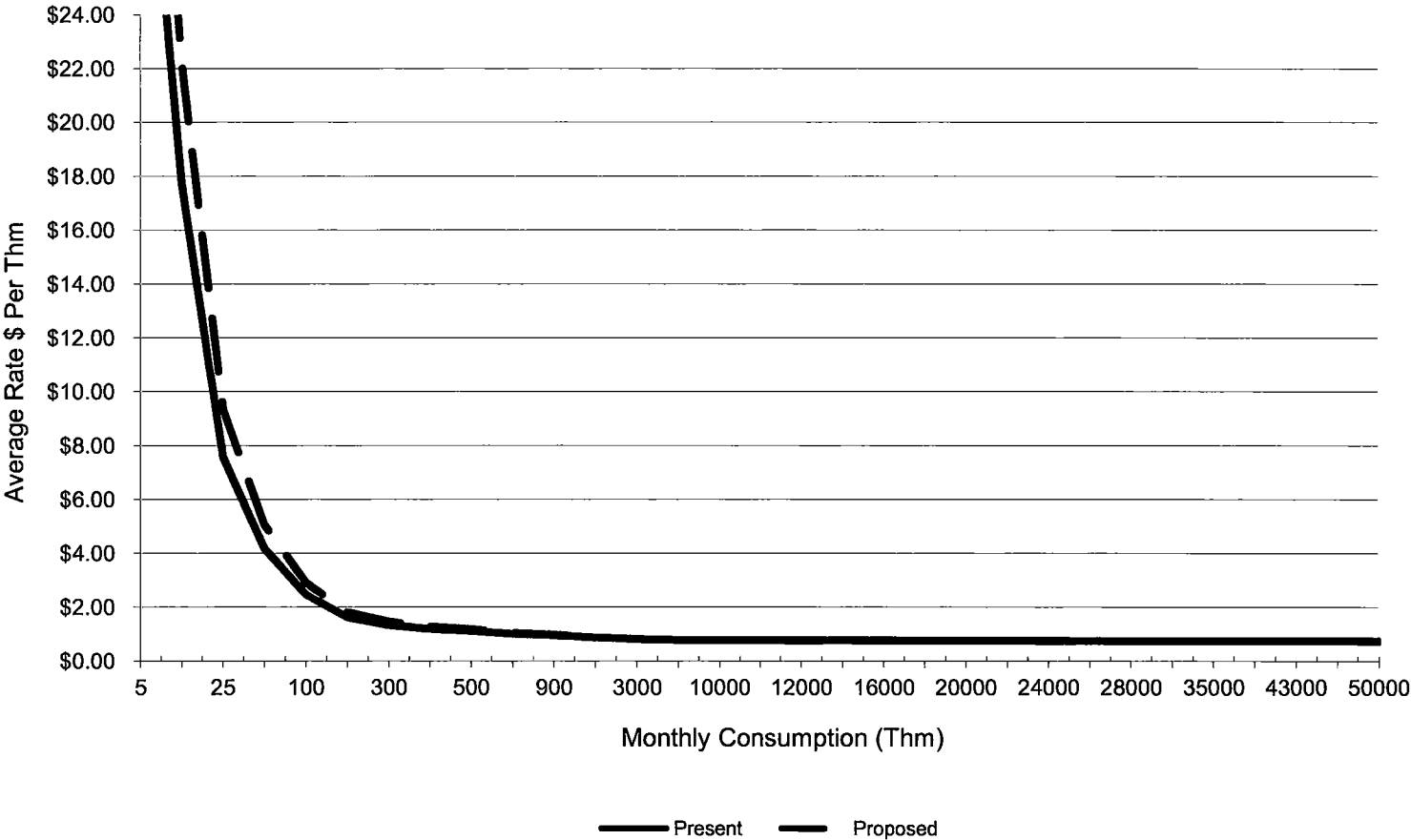
COLUMBIA GAS OF PENNSYLVANIA, INC  
PRESENT AND PROPOSED RATES  
Small General Sales Service ( $\leq 6,440$  Thms Annually)



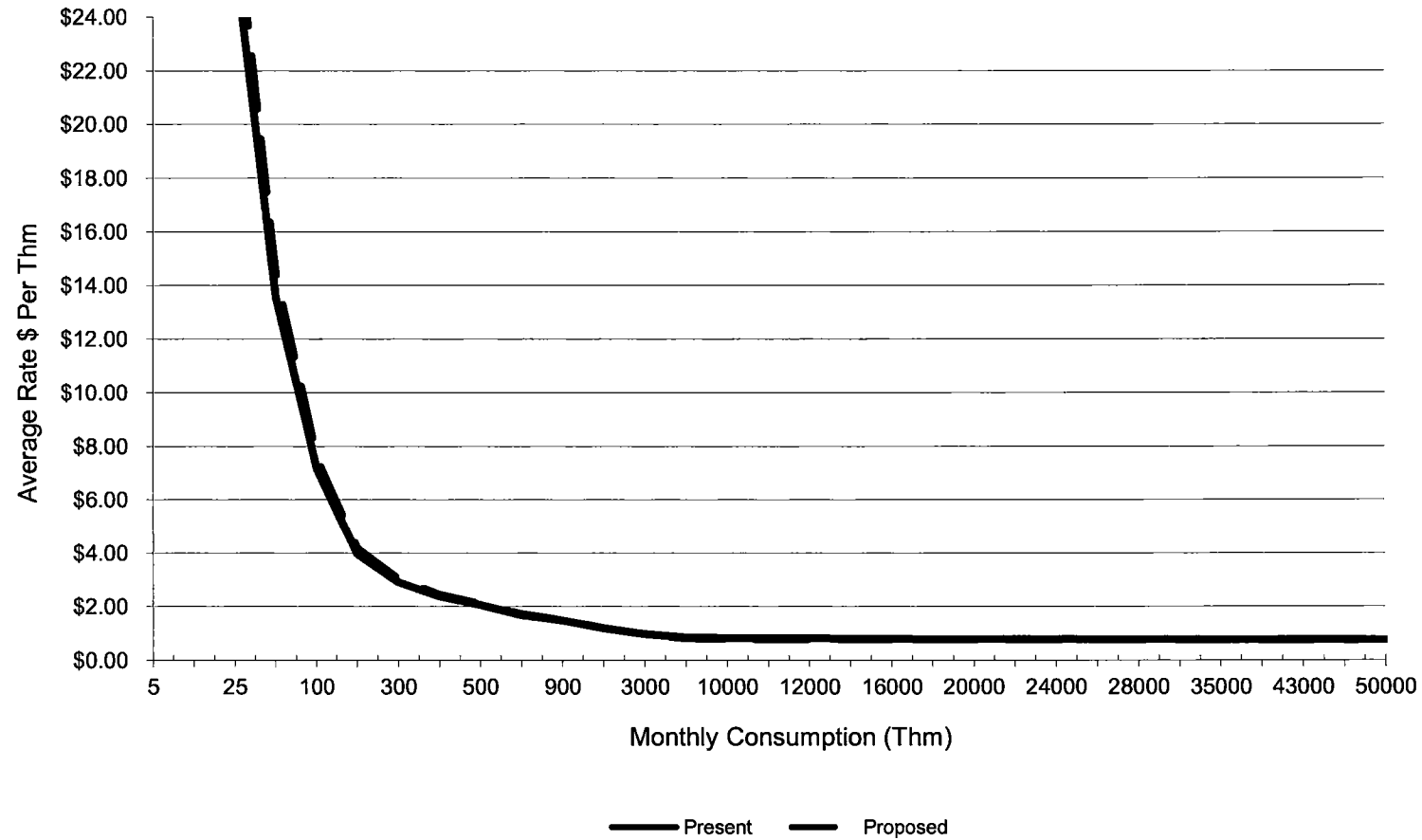
COLUMBIA GAS OF PENNSYLVANIA, INC  
PRESENT AND PROPOSED RATES  
Small General Sales Service (>6,440 and ≤64,400 Thms Annually)



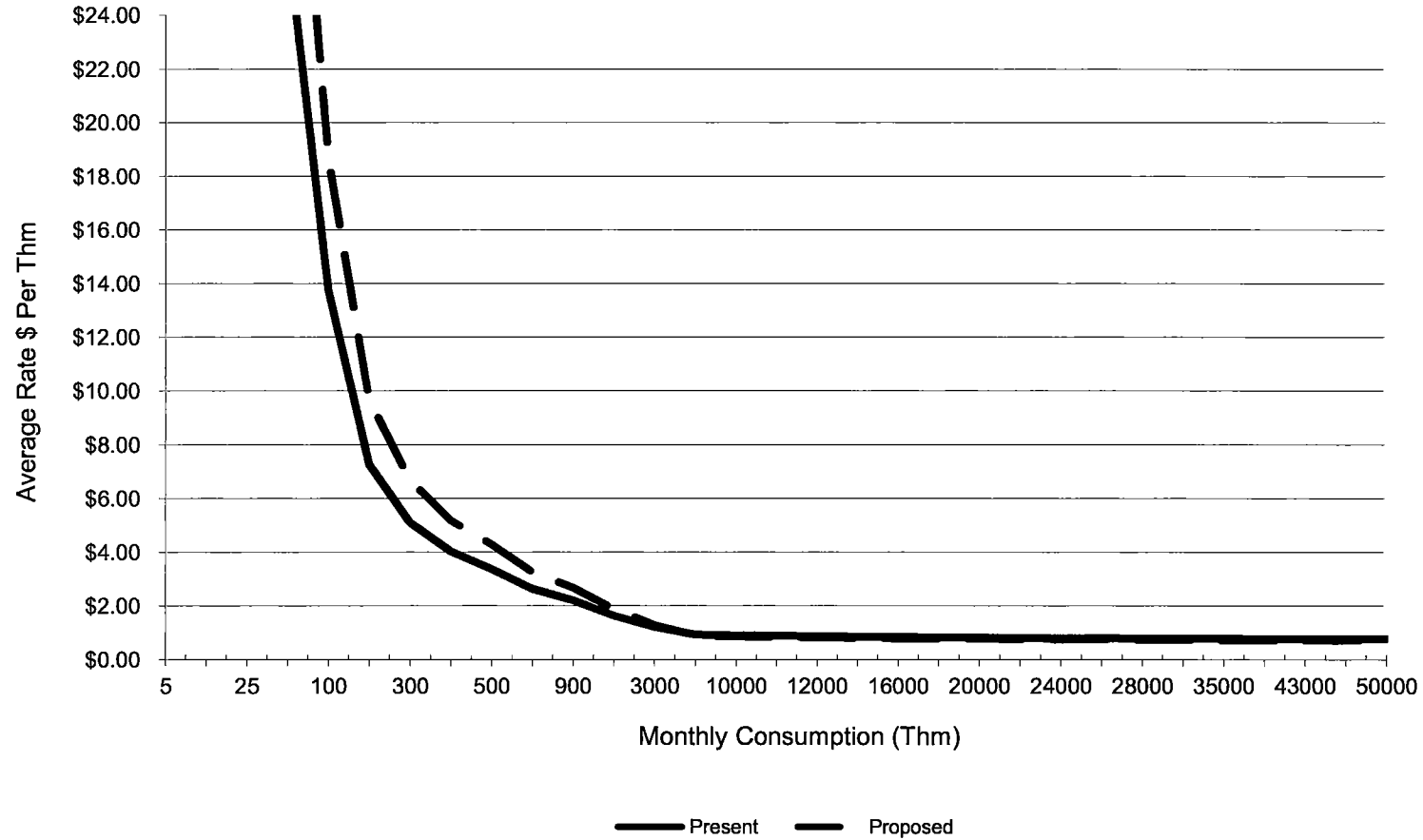
COLUMBIA GAS OF PENNSYLVANIA, INC  
PRESENT AND PROPOSED RATES  
Large General Sales Service ( $\leq 110,000$  Thms Annually)



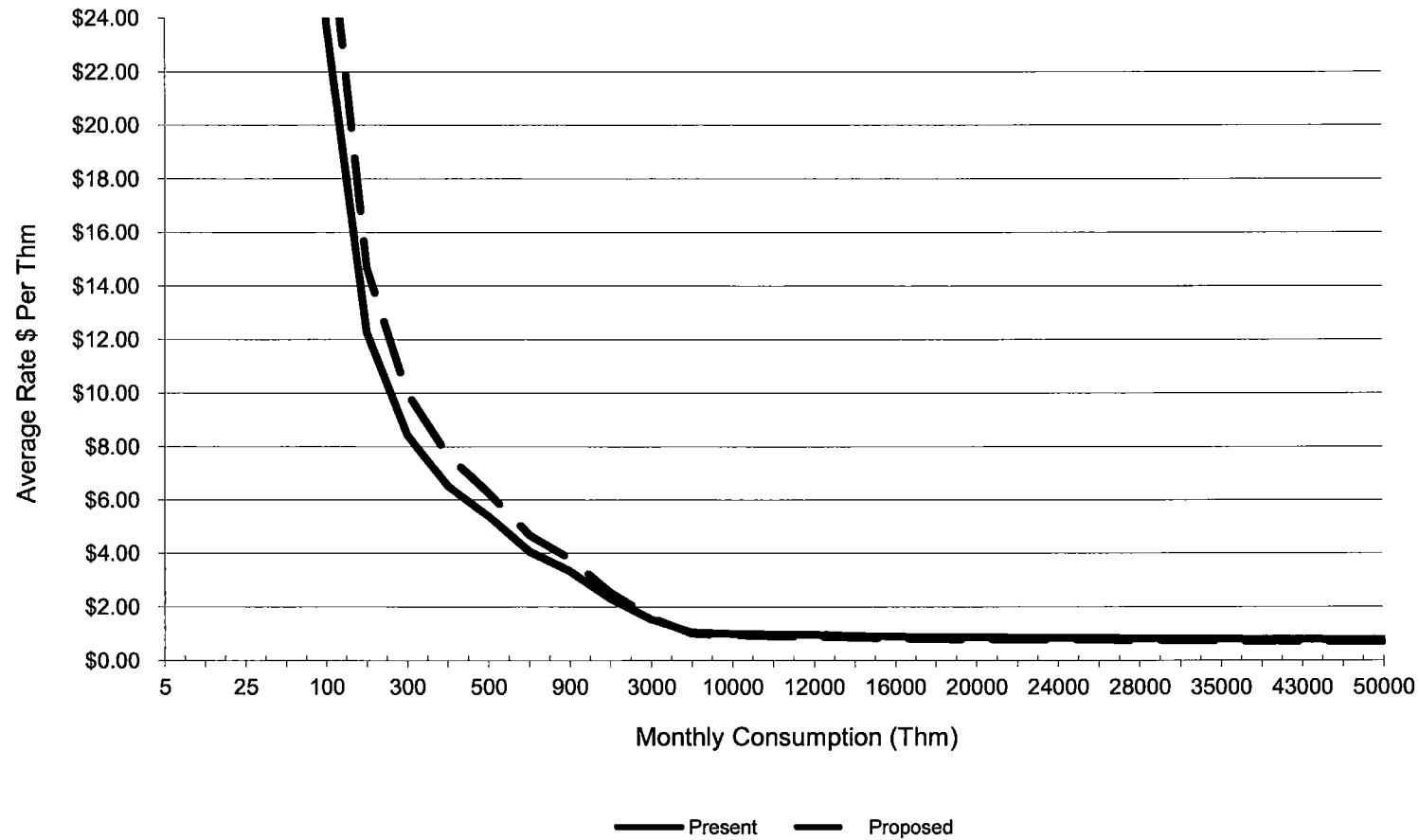
COLUMBIA GAS OF PENNSYLVANIA, INC  
PRESENT AND PROPOSED RATES  
Large General Sales Service (>110,000 and ≤540,000 Thms Annually)



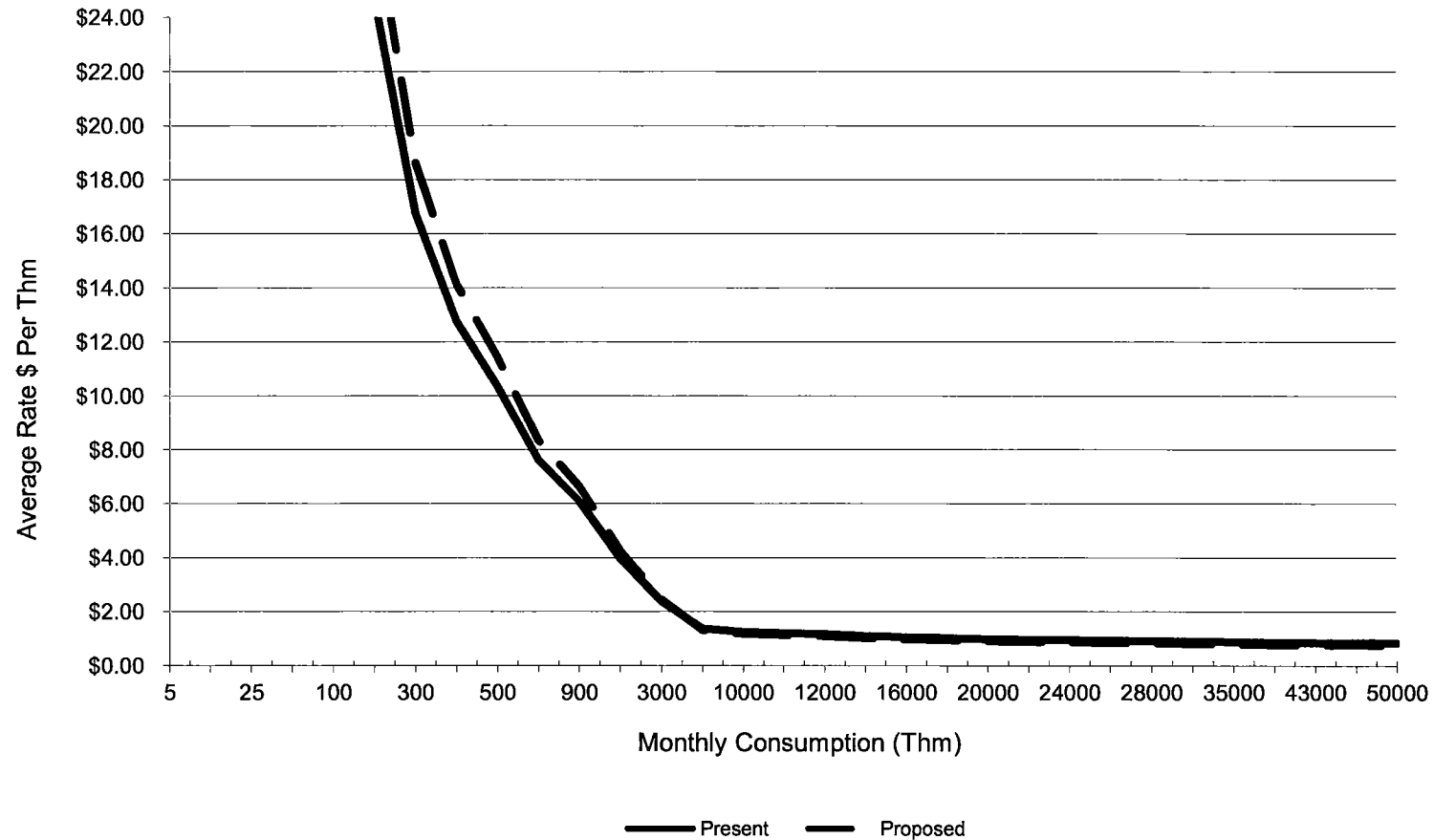
COLUMBIA GAS OF PENNSYLVANIA, INC  
PRESENT AND PROPOSED RATES  
Large General Sales Service (>540,000 and ≤1,074,000 Thms Annually)



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

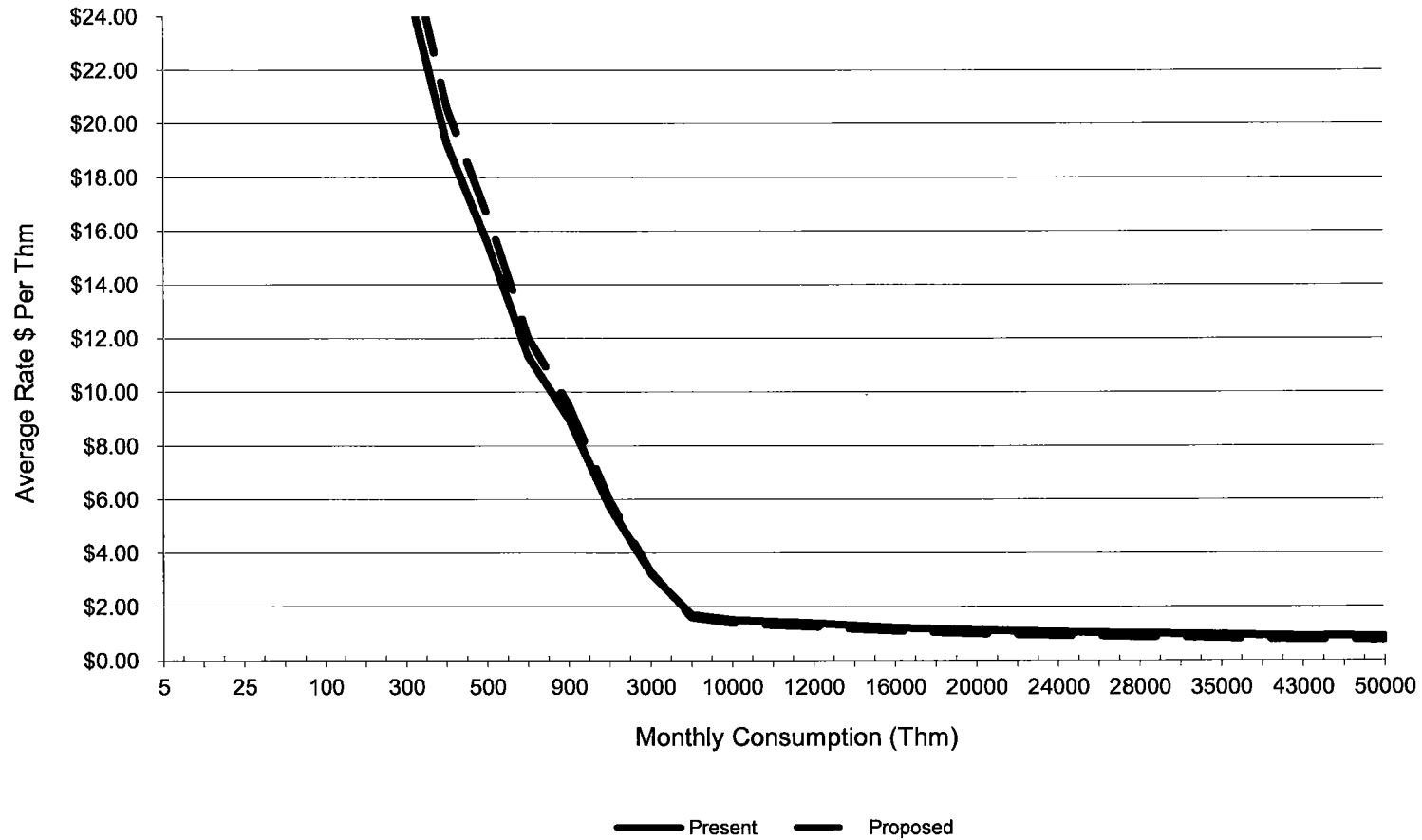


COLUMBIA GAS OF PENNSYLVANIA, INC  
PRESENT AND PROPOSED RATES  
Large General Sales Service (>3,400,000 and ≤7,500,000 Thms Annually)





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



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

|                               | PRESENT<br>RATES | PROPOSED<br>RATES |
|-------------------------------|------------------|-------------------|
| CUSTOMER CHARGE               | \$ 16.75         | \$ 20.60          |
| COMMODITY CHARGE              | \$ 0.42138       | \$ 0.47354        |
| RIDER USP                     | \$ 0.08800       | \$ 0.09826        |
| RIDER PGCC                    | \$ 0.44009       | \$ 0.44009        |
| RIDER PGDC                    | \$ 0.10203       | \$ 0.10203        |
| MERCHANT FUNCTION CHARGE      | \$ 0.00676       | \$ 0.00676        |
| GAS PROCUREMENT CHG (NON-CAP) | \$ 0.00695       | \$ 0.00166        |
| RIDER CC                      | \$ 0.00009       | \$ 0.00010        |
| COMMODITY E-FACTOR            | \$ (0.00321)     | \$ (0.00321)      |
| 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     | 16.75         | 20.60          |                   |                    | 3.85         | 22.99%       |
| 1     | 17.81         | 21.72          | 17.81             | 21.72              | 3.91         | 21.95%       |
| 2     | 18.88         | 22.83          | 9.44              | 11.42              | 3.95         | 20.92%       |
| 3     | 19.94         | 23.96          | 6.65              | 7.99               | 4.02         | 20.16%       |
| 5     | 22.06         | 26.20          | 4.41              | 5.24               | 4.14         | 18.77%       |
| 8     | 25.25         | 29.55          | 3.16              | 3.69               | 4.30         | 17.03%       |
| 10    | 27.37         | 31.79          | 2.74              | 3.18               | 4.42         | 16.15%       |
| 15    | 32.68         | 37.39          | 2.18              | 2.49               | 4.71         | 14.41%       |
| 20    | 37.99         | 42.99          | 1.90              | 2.15               | 5.00         | 13.16%       |
| 25    | 43.30         | 48.59          | 1.73              | 1.94               | 5.29         | 12.22%       |
| 30    | 48.61         | 54.17          | 1.62              | 1.81               | 5.56         | 11.44%       |
| 35    | 53.92         | 59.77          | 1.54              | 1.71               | 5.85         | 10.85%       |
| 40    | 59.24         | 65.37          | 1.48              | 1.63               | 6.13         | 10.35%       |
| 45    | 64.54         | 70.96          | 1.43              | 1.58               | 6.42         | 9.95%        |
| 50    | 69.86         | 76.56          | 1.40              | 1.53               | 6.70         | 9.59%        |
| 60    | 80.47         | 87.76          | 1.34              | 1.46               | 7.29         | 9.06%        |
| 70    | 91.10         | 98.95          | 1.30              | 1.41               | 7.85         | 8.62%        |
| 80    | 101.72        | 110.13         | 1.27              | 1.38               | 8.41         | 8.27%        |
| 90    | 112.33        | 121.33         | 1.25              | 1.35               | 9.00         | 8.01%        |
| 100   | 122.96        | 132.52         | 1.23              | 1.33               | 9.56         | 7.77%        |
| 150   | 176.07        | 188.48         | 1.17              | 1.26               | 12.41        | 7.05%        |
| 200   | 229.17        | 244.45         | 1.15              | 1.22               | 15.28        | 6.67%        |
| 250   | 282.28        | 300.41         | 1.13              | 1.20               | 18.13        | 6.42%        |
| 300   | 335.37        | 356.37         | 1.12              | 1.19               | 21.00        | 6.26%        |
| 350   | 388.48        | 412.33         | 1.11              | 1.18               | 23.85        | 6.14%        |
| 400   | 441.58        | 468.29         | 1.10              | 1.17               | 26.71        | 6.05%        |
| 450   | 494.69        | 524.25         | 1.10              | 1.17               | 29.56        | 5.98%        |
| 500   | 547.80        | 580.22         | 1.10              | 1.16               | 32.42        | 5.92%        |
| 600   | 654.01        | 692.14         | 1.09              | 1.15               | 38.13        | 5.83%        |
| 700   | 760.22        | 804.06         | 1.09              | 1.15               | 43.84        | 5.77%        |
| 800   | 866.42        | 915.98         | 1.08              | 1.14               | 49.56        | 5.72%        |
| 900   | 972.63        | 1,027.91       | 1.08              | 1.14               | 55.28        | 5.68%        |
| 1000  | 1,078.84      | 1,139.83       | 1.08              | 1.14               | 60.99        | 5.65%        |
| 1500  | 1,609.89      | 1,699.45       | 1.07              | 1.13               | 89.56        | 5.56%        |
| 2000  | 2,140.93      | 2,259.06       | 1.07              | 1.13               | 118.13       | 5.52%        |
| 5000  | 5,327.20      | 5,616.75       | 1.07              | 1.12               | 289.55       | 5.44%        |

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         | \$ 27.75          |
| ALL GAS CONSUMED         | \$ 0.31385       | \$ 0.35027        |
| RIDER PGCC               | \$ 0.44009       | \$ 0.44009        |
| RIDER PGDC               | \$ 0.10203       | \$ 0.10203        |
| MERCHANT FUNCTION CHARGE | \$ 0.00196       | \$ 0.00196        |
| GAS PROCUREMENT CHARGE   | \$ 0.00695       | \$ 0.00166        |
| RIDER CC                 | \$ 0.00009       | \$ 0.00010        |
| COMMODITY E-FACTOR       | \$ (0.00321)     | \$ (0.00321)      |
| 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         | 27.75          |                   |                    | 6.50         | 30.59%       |
| 1     | 22.11         | 28.64          | 22.11             | 28.64              | 6.53         | 29.53%       |
| 2     | 22.97         | 29.53          | 11.49             | 14.77              | 6.56         | 28.56%       |
| 3     | 23.83         | 30.42          | 7.94              | 10.14              | 6.59         | 27.65%       |
| 5     | 25.56         | 32.21          | 5.11              | 6.44               | 6.65         | 26.02%       |
| 7     | 27.29         | 34.00          | 3.90              | 4.86               | 6.71         | 24.59%       |
| 10    | 29.87         | 36.68          | 2.99              | 3.67               | 6.81         | 22.80%       |
| 15    | 34.18         | 41.14          | 2.28              | 2.74               | 6.96         | 20.36%       |
| 20    | 38.49         | 45.60          | 1.92              | 2.28               | 7.11         | 18.47%       |
| 25    | 42.80         | 50.06          | 1.71              | 2.00               | 7.26         | 16.96%       |
| 30    | 47.11         | 54.52          | 1.57              | 1.82               | 7.41         | 15.73%       |
| 35    | 51.42         | 58.98          | 1.47              | 1.69               | 7.56         | 14.70%       |
| 40    | 55.73         | 63.44          | 1.39              | 1.59               | 7.71         | 13.83%       |
| 45    | 60.04         | 67.90          | 1.33              | 1.51               | 7.86         | 13.09%       |
| 50    | 64.35         | 72.36          | 1.29              | 1.45               | 8.01         | 12.45%       |
| 60    | 72.97         | 81.29          | 1.22              | 1.35               | 8.32         | 11.40%       |
| 70    | 81.59         | 90.22          | 1.17              | 1.29               | 8.63         | 10.58%       |
| 80    | 90.21         | 99.15          | 1.13              | 1.24               | 8.94         | 9.91%        |
| 90    | 98.83         | 108.08         | 1.10              | 1.20               | 9.25         | 9.36%        |
| 100   | 107.45        | 117.01         | 1.07              | 1.17               | 9.56         | 8.90%        |
| 150   | 150.54        | 161.65         | 1.00              | 1.08               | 11.11        | 7.38%        |
| 200   | 193.63        | 206.29         | 0.97              | 1.03               | 12.66        | 6.54%        |
| 250   | 236.72        | 250.93         | 0.95              | 1.00               | 14.21        | 6.00%        |
| 300   | 279.81        | 295.57         | 0.93              | 0.99               | 15.76        | 5.63%        |
| 350   | 322.90        | 340.21         | 0.92              | 0.97               | 17.31        | 5.36%        |
| 400   | 365.99        | 384.85         | 0.91              | 0.96               | 18.86        | 5.15%        |
| 450   | 409.08        | 429.49         | 0.91              | 0.95               | 20.41        | 4.99%        |
| 500   | 452.17        | 474.13         | 0.90              | 0.95               | 21.96        | 4.86%        |
| 600   | 538.35        | 563.42         | 0.90              | 0.94               | 25.07        | 4.66%        |
| 700   | 624.53        | 652.71         | 0.89              | 0.93               | 28.18        | 4.51%        |
| 800   | 710.71        | 742.00         | 0.89              | 0.93               | 31.29        | 4.40%        |
| 900   | 796.89        | 831.29         | 0.89              | 0.92               | 34.40        | 4.32%        |
| 1000  | 883.07        | 920.58         | 0.88              | 0.92               | 37.51        | 4.25%        |
| 1500  | 1,313.96      | 1,367.04       | 0.88              | 0.91               | 53.08        | 4.04%        |
| 2000  | 1,744.85      | 1,813.50       | 0.87              | 0.91               | 68.65        | 3.93%        |
| 5000  | 4,330.13      | 4,492.20       | 0.87              | 0.90               | 162.07       | 3.74%        |

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         | \$ 55.50          |
| ALL GAS CONSUMED         | \$ 0.31385       | \$ 0.31427        |
| RIDER PGCC               | \$ 0.44009       | \$ 0.44009        |
| RIDER PGDC               | \$ 0.10203       | \$ 0.10203        |
| MERCHANT FUNCTION CHARGE | \$ 0.00196       | \$ 0.00196        |
| GAS PROCUREMENT CHARGE   | \$ 0.00695       | \$ 0.00166        |
| RIDER CC                 | \$ 0.00009       | \$ 0.00010        |
| COMMODITY E-FACTOR       | \$ (0.00321)     | \$ (0.00321)      |
| 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         | 55.50          |                   |                    | 7.50         | 15.63%       |
| 1     | 48.86         | 56.35          | 48.86             | 56.35              | 7.49         | 15.33%       |
| 2     | 49.72         | 57.20          | 24.86             | 28.60              | 7.48         | 15.04%       |
| 3     | 50.58         | 58.05          | 16.86             | 19.35              | 7.47         | 14.77%       |
| 5     | 52.31         | 59.77          | 10.46             | 11.95              | 7.46         | 14.26%       |
| 7     | 54.04         | 61.49          | 7.72              | 8.78               | 7.45         | 13.79%       |
| 10    | 56.62         | 64.06          | 5.66              | 6.41               | 7.44         | 13.14%       |
| 15    | 60.93         | 68.34          | 4.06              | 4.56               | 7.41         | 12.16%       |
| 20    | 65.24         | 72.62          | 3.26              | 3.63               | 7.38         | 11.31%       |
| 25    | 69.55         | 76.90          | 2.78              | 3.08               | 7.35         | 10.57%       |
| 30    | 73.86         | 81.18          | 2.46              | 2.71               | 7.32         | 9.91%        |
| 35    | 78.17         | 85.46          | 2.23              | 2.44               | 7.29         | 9.33%        |
| 40    | 82.48         | 89.74          | 2.06              | 2.24               | 7.26         | 8.80%        |
| 45    | 86.79         | 94.02          | 1.93              | 2.09               | 7.23         | 8.33%        |
| 50    | 91.10         | 98.30          | 1.82              | 1.97               | 7.20         | 7.90%        |
| 60    | 99.72         | 106.87         | 1.66              | 1.78               | 7.15         | 7.17%        |
| 70    | 108.34        | 115.44         | 1.55              | 1.65               | 7.10         | 6.55%        |
| 80    | 116.96        | 124.01         | 1.46              | 1.55               | 7.05         | 6.03%        |
| 90    | 125.58        | 132.58         | 1.40              | 1.47               | 7.00         | 5.57%        |
| 100   | 134.20        | 141.15         | 1.34              | 1.41               | 6.95         | 5.18%        |
| 150   | 177.29        | 183.99         | 1.18              | 1.23               | 6.70         | 3.78%        |
| 200   | 220.38        | 226.83         | 1.10              | 1.13               | 6.45         | 2.93%        |
| 250   | 263.47        | 269.67         | 1.05              | 1.08               | 6.20         | 2.35%        |
| 300   | 306.56        | 312.51         | 1.02              | 1.04               | 5.95         | 1.94%        |
| 350   | 349.65        | 355.35         | 1.00              | 1.02               | 5.70         | 1.63%        |
| 400   | 392.74        | 398.19         | 0.98              | 1.00               | 5.45         | 1.39%        |
| 450   | 435.83        | 441.03         | 0.97              | 0.98               | 5.20         | 1.19%        |
| 500   | 478.92        | 483.87         | 0.96              | 0.97               | 4.95         | 1.03%        |
| 600   | 565.10        | 569.56         | 0.94              | 0.95               | 4.46         | 0.79%        |
| 700   | 651.28        | 655.25         | 0.93              | 0.94               | 3.97         | 0.61%        |
| 800   | 737.46        | 740.94         | 0.92              | 0.93               | 3.48         | 0.47%        |
| 900   | 823.64        | 826.63         | 0.92              | 0.92               | 2.99         | 0.36%        |
| 1000  | 909.82        | 912.32         | 0.91              | 0.91               | 2.50         | 0.27%        |
| 1500  | 1,340.71      | 1,340.78       | 0.89              | 0.89               | 0.07         | 0.01%        |
| 2000  | 1,771.60      | 1,769.24       | 0.89              | 0.88               | (2.36)       | -0.13%       |
| 5000  | 4,356.88      | 4,339.94       | 0.87              | 0.87               | (16.94)      | -0.39%       |

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            | \$ 170.00        | \$ 215.00         |
| First 11,000 Thm per month | \$ 0.22209       | \$ 0.20523        |
| Next 43,000 Thm per month  | \$ 0.18672       | \$ 0.20523        |
| Next 54,000 Thm per month  | \$ 0.16663       | \$ 0.20523        |
| Over 108,000 Thm per month | \$ 0.11416       | \$ 0.20523        |
| RIDER PGCC                 | \$ 0.44009       | \$ 0.44009        |
| RIDER PGDC                 | \$ 0.10203       | \$ 0.10203        |
| GAS PROCUREMENT CHARGE     | \$ 0.00695       | \$ 0.00166        |
| COMMODITY E-FACTOR         | \$ (0.00321)     | \$ (0.00321)      |
| 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      | 170.00        | 215.00         |                   |                    | 45.00        | 26.47%       |
| 5      | 173.84        | 218.73         | 34.77             | 43.75              | 44.89        | 25.82%       |
| 10     | 177.68        | 222.46         | 17.77             | 22.25              | 44.78        | 25.20%       |
| 25     | 189.20        | 233.64         | 7.57              | 9.35               | 44.44        | 23.49%       |
| 50     | 208.39        | 252.30         | 4.17              | 5.05               | 43.91        | 21.07%       |
| 100    | 246.80        | 289.58         | 2.47              | 2.90               | 42.78        | 17.33%       |
| 200    | 323.60        | 364.16         | 1.62              | 1.82               | 40.56        | 12.53%       |
| 300    | 400.38        | 438.75         | 1.33              | 1.46               | 38.37        | 9.58%        |
| 400    | 477.19        | 513.32         | 1.19              | 1.28               | 36.13        | 7.57%        |
| 500    | 553.97        | 587.90         | 1.11              | 1.18               | 33.93        | 6.12%        |
| 700    | 707.56        | 737.06         | 1.01              | 1.05               | 29.50        | 4.17%        |
| 900    | 861.15        | 886.22         | 0.96              | 0.98               | 25.07        | 2.91%        |
| 1500   | 1,321.92      | 1,333.70       | 0.88              | 0.89               | 11.78        | 0.89%        |
| 3000   | 2,473.85      | 2,452.41       | 0.82              | 0.82               | (21.44)      | -0.87%       |
| 8000   | 6,313.60      | 6,181.41       | 0.79              | 0.77               | (132.19)     | -2.09%       |
| 10000  | 7,849.50      | 7,673.01       | 0.78              | 0.77               | (176.49)     | -2.25%       |
| 11000  | 8,617.45      | 8,418.81       | 0.78              | 0.77               | (198.64)     | -2.31%       |
| 12000  | 9,350.03      | 9,164.60       | 0.78              | 0.76               | (185.43)     | -1.98%       |
| 14000  | 10,815.19     | 10,656.20      | 0.77              | 0.76               | (158.99)     | -1.47%       |
| 16000  | 12,280.35     | 12,147.80      | 0.77              | 0.76               | (132.55)     | -1.08%       |
| 18000  | 13,745.51     | 13,639.40      | 0.76              | 0.76               | (106.11)     | -0.77%       |
| 20000  | 15,210.67     | 15,131.00      | 0.76              | 0.76               | (79.67)      | -0.52%       |
| 22000  | 16,675.83     | 16,622.60      | 0.76              | 0.76               | (53.23)      | -0.32%       |
| 24000  | 18,140.99     | 18,114.20      | 0.76              | 0.75               | (26.79)      | -0.15%       |
| 26000  | 19,606.15     | 19,605.80      | 0.75              | 0.75               | (0.35)       | 0.00%        |
| 28000  | 21,071.31     | 21,097.40      | 0.75              | 0.75               | 26.09        | 0.12%        |
| 30000  | 22,536.47     | 22,589.00      | 0.75              | 0.75               | 52.53        | 0.23%        |
| 35000  | 26,199.37     | 26,318.00      | 0.75              | 0.75               | 118.63       | 0.45%        |
| 40000  | 29,862.27     | 30,047.00      | 0.75              | 0.75               | 184.73       | 0.62%        |
| 43000  | 32,060.01     | 32,284.40      | 0.75              | 0.75               | 224.39       | 0.70%        |
| 45000  | 33,525.17     | 33,776.00      | 0.75              | 0.75               | 250.83       | 0.75%        |
| 50000  | 37,188.07     | 37,505.00      | 0.74              | 0.75               | 316.93       | 0.85%        |
| 54000  | 40,118.39     | 40,488.20      | 0.74              | 0.75               | 369.81       | 0.92%        |
| 60000  | 44,393.33     | 44,963.00      | 0.74              | 0.75               | 569.67       | 1.28%        |
| 70000  | 51,518.23     | 52,421.00      | 0.74              | 0.75               | 902.77       | 1.75%        |
| 80000  | 58,643.13     | 59,879.00      | 0.73              | 0.75               | 1,235.87     | 2.11%        |
| 90000  | 65,768.03     | 67,337.00      | 0.73              | 0.75               | 1,568.97     | 2.39%        |
| 95000  | 69,330.48     | 71,066.00      | 0.73              | 0.75               | 1,735.52     | 2.50%        |
| 100000 | 72,892.93     | 74,795.00      | 0.73              | 0.75               | 1,902.07     | 2.61%        |
| 108000 | 78,592.85     | 80,761.40      | 0.73              | 0.75               | 2,168.55     | 2.76%        |
| 110000 | 79,912.89     | 82,253.00      | 0.73              | 0.75               | 2,340.11     | 2.93%        |

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            | \$ 640.00        | \$ 685.00         |
| First 11,000 Thm per month | \$ 0.22209       | \$ 0.19186        |
| Next 43,000 Thm per month  | \$ 0.18672       | \$ 0.19186        |
| Next 54,000 Thm per month  | \$ 0.16663       | \$ 0.19186        |
| Over 108,000 Thm per month | \$ 0.11416       | \$ 0.19186        |
| RIDER PGCC                 | \$ 0.44009       | \$ 0.44009        |
| RIDER PGDC                 | \$ 0.10203       | \$ 0.10203        |
| GAS PROCUREMENT CHARGE     | \$ 0.00695       | \$ 0.00166        |
| COMMODITY E-FACTOR         | \$ (0.00321)     | \$ (0.00321)      |
| 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      | 640.00        | 685.00         |                   |                    | 45.00        | 7.03%        |
| 5      | 643.84        | 688.66         | 128.77            | 137.73             | 44.82        | 6.96%        |
| 10     | 647.68        | 692.32         | 64.77             | 69.23              | 44.64        | 6.89%        |
| 25     | 659.20        | 703.31         | 26.37             | 28.13              | 44.11        | 6.69%        |
| 50     | 678.40        | 721.62         | 13.57             | 14.43              | 43.22        | 6.37%        |
| 100    | 716.79        | 758.24         | 7.17              | 7.58               | 41.45        | 5.78%        |
| 200    | 793.59        | 831.49         | 3.97              | 4.16               | 37.90        | 4.78%        |
| 300    | 870.39        | 904.74         | 2.90              | 3.02               | 34.35        | 3.95%        |
| 400    | 947.19        | 977.99         | 2.37              | 2.44               | 30.80        | 3.25%        |
| 500    | 1,023.97      | 1,051.21       | 2.05              | 2.10               | 27.24        | 2.66%        |
| 700    | 1,177.56      | 1,197.69       | 1.68              | 1.71               | 20.13        | 1.71%        |
| 900    | 1,331.15      | 1,344.17       | 1.48              | 1.49               | 13.02        | 0.98%        |
| 1500   | 1,791.92      | 1,783.63       | 1.19              | 1.19               | (8.29)       | -0.46%       |
| 3000   | 2,943.85      | 2,882.28       | 0.98              | 0.96               | (61.57)      | -2.09%       |
| 8000   | 6,783.60      | 6,544.43       | 0.85              | 0.82               | (239.17)     | -3.53%       |
| 10000  | 8,319.50      | 8,009.29       | 0.83              | 0.80               | (310.21)     | -3.73%       |
| 11000  | 9,087.45      | 8,741.72       | 0.83              | 0.79               | (345.73)     | -3.80%       |
| 12000  | 9,820.03      | 9,474.16       | 0.82              | 0.79               | (345.87)     | -3.52%       |
| 14000  | 11,285.19     | 10,939.02      | 0.81              | 0.78               | (346.17)     | -3.07%       |
| 16000  | 12,750.35     | 12,403.88      | 0.80              | 0.78               | (346.47)     | -2.72%       |
| 18000  | 14,215.51     | 13,868.74      | 0.79              | 0.77               | (346.77)     | -2.44%       |
| 20000  | 15,680.67     | 15,333.60      | 0.78              | 0.77               | (347.07)     | -2.21%       |
| 22000  | 17,145.83     | 16,798.46      | 0.78              | 0.76               | (347.37)     | -2.03%       |
| 24000  | 18,610.99     | 18,263.32      | 0.78              | 0.76               | (347.67)     | -1.87%       |
| 26000  | 20,076.15     | 19,728.18      | 0.77              | 0.76               | (347.97)     | -1.73%       |
| 28000  | 21,541.31     | 21,193.04      | 0.77              | 0.76               | (348.27)     | -1.62%       |
| 30000  | 23,006.47     | 22,657.90      | 0.77              | 0.76               | (348.57)     | -1.52%       |
| 35000  | 26,669.37     | 26,320.05      | 0.76              | 0.75               | (349.32)     | -1.31%       |
| 40000  | 30,332.27     | 29,982.20      | 0.76              | 0.75               | (350.07)     | -1.15%       |
| 43000  | 32,530.01     | 32,179.49      | 0.76              | 0.75               | (350.52)     | -1.08%       |
| 45000  | 33,995.17     | 33,644.35      | 0.76              | 0.75               | (350.82)     | -1.03%       |
| 50000  | 37,658.07     | 37,306.50      | 0.75              | 0.75               | (351.57)     | -0.93%       |
| 54000  | 40,588.39     | 40,236.22      | 0.75              | 0.75               | (352.17)     | -0.87%       |
| 60000  | 44,863.33     | 44,630.80      | 0.75              | 0.74               | (232.53)     | -0.52%       |
| 70000  | 51,988.23     | 51,955.10      | 0.74              | 0.74               | (33.13)      | -0.06%       |
| 80000  | 59,113.13     | 59,279.40      | 0.74              | 0.74               | 166.27       | 0.28%        |
| 90000  | 66,238.03     | 66,603.70      | 0.74              | 0.74               | 365.67       | 0.55%        |
| 95000  | 69,800.48     | 70,265.85      | 0.73              | 0.74               | 465.37       | 0.67%        |
| 100000 | 73,362.93     | 73,928.00      | 0.73              | 0.74               | 565.07       | 0.77%        |
| 108000 | 79,062.85     | 79,787.44      | 0.73              | 0.74               | 724.59       | 0.92%        |
| 150000 | 106,783.69    | 110,549.50     | 0.71              | 0.74               | 3,765.81     | 3.53%        |
| 200000 | 139,784.69    | 147,171.00     | 0.70              | 0.74               | 7,386.31     | 5.28%        |
| 250000 | 172,785.69    | 183,792.50     | 0.69              | 0.74               | 11,006.81    | 6.37%        |
| 300000 | 205,786.69    | 220,414.00     | 0.69              | 0.73               | 14,627.31    | 7.11%        |
| 350000 | 238,787.69    | 257,035.50     | 0.68              | 0.73               | 18,247.81    | 7.64%        |
| 400000 | 271,788.69    | 293,657.00     | 0.68              | 0.73               | 21,868.31    | 8.05%        |
| 450000 | 304,789.69    | 330,278.50     | 0.68              | 0.73               | 25,488.81    | 8.36%        |
| 500000 | 337,790.69    | 366,900.00     | 0.68              | 0.73               | 29,109.31    | 8.62%        |

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            | \$ 1,300.00      | \$ 1,800.00       |
| First 11,000 Thm per month | \$ 0.22209       | \$ 0.13812        |
| Next 43,000 Thm per month  | \$ 0.18672       | \$ 0.13812        |
| Next 54,000 Thm per month  | \$ 0.16663       | \$ 0.13812        |
| Over 108,000 Thm per month | \$ 0.11416       | \$ 0.13812        |
| RIDER PGCC                 | \$ 0.44009       | \$ 0.44009        |
| RIDER PGDC                 | \$ 0.10203       | \$ 0.10203        |
| GAS PROCUREMENT CHARGE     | \$ 0.00695       | \$ 0.00166        |
| COMMODITY E-FACTOR         | \$ (0.00321)     | \$ (0.00321)      |
| 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      | 1,300.00      | 1,800.00       |                   |                    | 500.00       | 38.46%       |
| 5      | 1,303.84      | 1,803.39       | 260.77            | 360.68             | 499.55       | 38.31%       |
| 10     | 1,307.68      | 1,806.78       | 130.77            | 180.68             | 499.10       | 38.17%       |
| 25     | 1,319.20      | 1,816.96       | 52.77             | 72.68              | 497.76       | 37.73%       |
| 50     | 1,338.40      | 1,833.92       | 26.77             | 36.68              | 495.52       | 37.02%       |
| 100    | 1,376.79      | 1,867.86       | 13.77             | 18.68              | 491.07       | 35.67%       |
| 200    | 1,453.59      | 1,935.73       | 7.27              | 9.68               | 482.14       | 33.17%       |
| 300    | 1,530.39      | 2,003.60       | 5.10              | 6.68               | 473.21       | 30.92%       |
| 400    | 1,607.19      | 2,071.47       | 4.02              | 5.18               | 464.28       | 28.89%       |
| 500    | 1,683.98      | 2,139.33       | 3.37              | 4.28               | 455.35       | 27.04%       |
| 700    | 1,837.57      | 2,275.06       | 2.63              | 3.25               | 437.49       | 23.81%       |
| 900    | 1,991.16      | 2,410.79       | 2.21              | 2.68               | 419.63       | 21.07%       |
| 1500   | 2,451.93      | 2,818.00       | 1.63              | 1.88               | 366.07       | 14.93%       |
| 3000   | 3,603.86      | 3,836.04       | 1.20              | 1.28               | 232.18       | 6.44%        |
| 8000   | 7,443.61      | 7,229.49       | 0.93              | 0.90               | (214.12)     | -2.88%       |
| 10000  | 8,979.51      | 8,586.87       | 0.90              | 0.86               | (392.64)     | -4.37%       |
| 11000  | 9,747.46      | 9,265.56       | 0.89              | 0.84               | (481.90)     | -4.94%       |
| 12000  | 10,480.03     | 9,944.28       | 0.87              | 0.83               | (535.75)     | -5.11%       |
| 14000  | 11,945.19     | 11,301.66      | 0.85              | 0.81               | (643.53)     | -5.39%       |
| 16000  | 13,410.35     | 12,659.04      | 0.84              | 0.79               | (751.31)     | -5.60%       |
| 18000  | 14,875.51     | 14,016.42      | 0.83              | 0.78               | (859.09)     | -5.78%       |
| 20000  | 16,340.67     | 15,373.80      | 0.82              | 0.77               | (966.87)     | -5.92%       |
| 22000  | 17,805.83     | 16,731.18      | 0.81              | 0.76               | (1,074.65)   | -6.04%       |
| 24000  | 19,270.99     | 18,088.56      | 0.80              | 0.75               | (1,182.43)   | -6.14%       |
| 26000  | 20,736.15     | 19,445.94      | 0.80              | 0.75               | (1,290.21)   | -6.22%       |
| 28000  | 22,201.31     | 20,803.32      | 0.79              | 0.74               | (1,397.99)   | -6.30%       |
| 30000  | 23,666.47     | 22,160.70      | 0.79              | 0.74               | (1,505.77)   | -6.36%       |
| 35000  | 27,329.37     | 25,554.15      | 0.78              | 0.73               | (1,775.22)   | -6.50%       |
| 40000  | 30,992.27     | 28,947.60      | 0.77              | 0.72               | (2,044.67)   | -6.60%       |
| 43000  | 33,190.01     | 30,983.67      | 0.77              | 0.72               | (2,206.34)   | -6.65%       |
| 45000  | 34,655.17     | 32,341.05      | 0.77              | 0.72               | (2,314.12)   | -6.68%       |
| 50000  | 38,318.07     | 35,734.50      | 0.77              | 0.71               | (2,583.57)   | -6.74%       |
| 54000  | 41,248.39     | 38,449.26      | 0.76              | 0.71               | (2,799.13)   | -6.79%       |
| 60000  | 45,523.33     | 42,521.40      | 0.76              | 0.71               | (3,001.93)   | -6.59%       |
| 70000  | 52,648.23     | 49,308.30      | 0.75              | 0.70               | (3,339.93)   | -6.34%       |
| 80000  | 59,773.13     | 56,095.20      | 0.75              | 0.70               | (3,677.93)   | -6.15%       |
| 90000  | 66,898.03     | 62,882.10      | 0.74              | 0.70               | (4,015.93)   | -6.00%       |
| 95000  | 70,460.48     | 66,275.55      | 0.74              | 0.70               | (4,184.93)   | -5.94%       |
| 100000 | 74,022.93     | 69,669.00      | 0.74              | 0.70               | (4,353.93)   | -5.88%       |
| 108000 | 79,722.85     | 75,098.52      | 0.74              | 0.70               | (4,624.33)   | -5.80%       |
| 150000 | 107,443.69    | 103,603.50     | 0.72              | 0.69               | (3,840.19)   | -3.57%       |
| 200000 | 140,444.69    | 137,538.00     | 0.70              | 0.69               | (2,906.69)   | -2.07%       |
| 250000 | 173,445.69    | 171,472.50     | 0.69              | 0.69               | (1,973.19)   | -1.14%       |
| 300000 | 206,446.69    | 205,407.00     | 0.69              | 0.68               | (1,039.69)   | -0.50%       |
| 350000 | 239,447.69    | 239,341.50     | 0.68              | 0.68               | (106.19)     | -0.04%       |
| 400000 | 272,448.69    | 273,276.00     | 0.68              | 0.68               | 827.31       | 0.30%        |
| 450000 | 305,449.69    | 307,210.50     | 0.68              | 0.68               | 1,760.81     | 0.58%        |
| 500000 | 338,450.69    | 341,145.00     | 0.68              | 0.68               | 2,694.31     | 0.80%        |

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            | \$ 2,300.00      | \$ 2,800.00       |
| First 11,000 Thm per month | \$ 0.22209       | \$ 0.11820        |
| Next 43,000 Thm per month  | \$ 0.18672       | \$ 0.11820        |
| Next 54,000 Thm per month  | \$ 0.16663       | \$ 0.11820        |
| Over 108,000 Thm per month | \$ 0.11416       | \$ 0.11820        |
| RIDER PGCC                 | \$ 0.44009       | \$ 0.44009        |
| RIDER PGDC                 | \$ 0.10203       | \$ 0.10203        |
| GAS PROCUREMENT CHARGE     | \$ 0.00695       | \$ 0.00166        |
| COMMODITY E-FACTOR         | \$ (0.00321)     | \$ (0.00321)      |

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      | 2,300.00      | 2,800.00       |                   |                    | 500.00       | 21.74%       |
| 5      | 2,303.84      | 2,803.29       | 460.77            | 560.66             | 499.45       | 21.68%       |
| 10     | 2,307.68      | 2,806.58       | 230.77            | 280.66             | 498.90       | 21.62%       |
| 25     | 2,319.20      | 2,816.47       | 92.77             | 112.66             | 497.27       | 21.44%       |
| 50     | 2,338.40      | 2,832.94       | 46.77             | 56.66              | 494.54       | 21.15%       |
| 100    | 2,376.79      | 2,865.88       | 23.77             | 28.66              | 489.09       | 20.58%       |
| 200    | 2,453.59      | 2,931.76       | 12.27             | 14.66              | 478.17       | 19.49%       |
| 300    | 2,530.39      | 2,997.64       | 8.43              | 9.99               | 467.25       | 18.47%       |
| 400    | 2,607.19      | 3,063.52       | 6.52              | 7.66               | 456.33       | 17.50%       |
| 500    | 2,683.97      | 3,129.39       | 5.37              | 6.26               | 445.42       | 16.60%       |
| 700    | 2,837.56      | 3,261.14       | 4.05              | 4.66               | 423.58       | 14.93%       |
| 900    | 2,991.15      | 3,392.89       | 3.32              | 3.77               | 401.74       | 13.43%       |
| 1500   | 3,451.92      | 3,788.15       | 2.30              | 2.53               | 336.23       | 9.74%        |
| 3000   | 4,603.85      | 4,776.31       | 1.53              | 1.59               | 172.46       | 3.75%        |
| 8000   | 8,443.60      | 8,070.16       | 1.06              | 1.01               | (373.44)     | -4.42%       |
| 10000  | 9,979.50      | 9,387.70       | 1.00              | 0.94               | (591.80)     | -5.93%       |
| 11000  | 10,747.45     | 10,046.47      | 0.98              | 0.91               | (700.98)     | -6.52%       |
| 12000  | 11,480.03     | 10,705.24      | 0.96              | 0.89               | (774.79)     | -6.75%       |
| 14000  | 12,945.19     | 12,022.78      | 0.92              | 0.86               | (922.41)     | -7.13%       |
| 16000  | 14,410.35     | 13,340.32      | 0.90              | 0.83               | (1,070.03)   | -7.43%       |
| 18000  | 15,875.51     | 14,657.86      | 0.88              | 0.81               | (1,217.65)   | -7.67%       |
| 20000  | 17,340.67     | 15,975.40      | 0.87              | 0.80               | (1,365.27)   | -7.87%       |
| 22000  | 18,805.83     | 17,292.94      | 0.85              | 0.79               | (1,512.89)   | -8.04%       |
| 24000  | 20,270.99     | 18,610.48      | 0.84              | 0.78               | (1,660.51)   | -8.19%       |
| 26000  | 21,736.15     | 19,928.02      | 0.84              | 0.77               | (1,808.13)   | -8.32%       |
| 28000  | 23,201.31     | 21,245.56      | 0.83              | 0.76               | (1,955.75)   | -8.43%       |
| 30000  | 24,666.47     | 22,563.10      | 0.82              | 0.75               | (2,103.37)   | -8.53%       |
| 35000  | 28,329.37     | 25,856.95      | 0.81              | 0.74               | (2,472.42)   | -8.73%       |
| 40000  | 31,992.27     | 29,150.80      | 0.80              | 0.73               | (2,841.47)   | -8.88%       |
| 43000  | 34,190.01     | 31,127.11      | 0.80              | 0.72               | (3,062.90)   | -8.96%       |
| 45000  | 35,655.17     | 32,444.65      | 0.79              | 0.72               | (3,210.52)   | -9.00%       |
| 50000  | 39,318.07     | 35,738.50      | 0.79              | 0.71               | (3,579.57)   | -9.10%       |
| 54000  | 42,248.39     | 38,373.58      | 0.78              | 0.71               | (3,874.81)   | -9.17%       |
| 60000  | 46,523.33     | 42,326.20      | 0.78              | 0.71               | (4,197.13)   | -9.02%       |
| 70000  | 53,648.23     | 48,913.90      | 0.77              | 0.70               | (4,734.33)   | -8.82%       |
| 80000  | 60,773.13     | 55,501.60      | 0.76              | 0.69               | (5,271.53)   | -8.67%       |
| 90000  | 67,898.03     | 62,089.30      | 0.75              | 0.69               | (5,808.73)   | -8.56%       |
| 95000  | 71,460.48     | 65,383.15      | 0.75              | 0.69               | (6,077.33)   | -8.50%       |
| 100000 | 75,022.93     | 68,677.00      | 0.75              | 0.69               | (6,345.93)   | -8.46%       |
| 108000 | 80,722.85     | 73,947.16      | 0.75              | 0.68               | (6,775.69)   | -8.39%       |
| 150000 | 108,443.69    | 101,615.50     | 0.72              | 0.68               | (6,828.19)   | -6.30%       |
| 200000 | 141,444.69    | 134,554.00     | 0.71              | 0.67               | (6,890.69)   | -4.87%       |
| 250000 | 174,445.69    | 167,492.50     | 0.70              | 0.67               | (6,953.19)   | -3.99%       |
| 300000 | 207,446.69    | 200,431.00     | 0.69              | 0.67               | (7,015.69)   | -3.38%       |
| 350000 | 240,447.69    | 233,369.50     | 0.69              | 0.67               | (7,078.19)   | -2.94%       |
| 400000 | 273,448.69    | 266,308.00     | 0.68              | 0.67               | (7,140.69)   | -2.61%       |
| 450000 | 306,449.69    | 299,246.50     | 0.68              | 0.66               | (7,203.19)   | -2.35%       |
| 500000 | 339,450.69    | 332,185.00     | 0.68              | 0.66               | (7,265.69)   | -2.14%       |



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            | \$ 4,800.00      | \$ 5,400.00       |
| First 11,000 Thm per month | \$ 0.22209       | \$ 0.09784        |
| Next 43,000 Thm per month  | \$ 0.18672       | \$ 0.09784        |
| Next 54,000 Thm per month  | \$ 0.16663       | \$ 0.09784        |
| Over 108,000 Thm per month | \$ 0.11416       | \$ 0.09784        |
| RIDER PGCC                 | \$ 0.44009       | \$ 0.44009        |
| RIDER PGDC                 | \$ 0.10203       | \$ 0.10203        |
| GAS PROCUREMENT CHARGE     | \$ 0.00695       | \$ 0.00166        |
| COMMODITY E-FACTOR         | \$ (0.00321)     | \$ (0.00321)      |
| 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      | 4,800.00      | 5,400.00       |                   |                    | 600.00       | 12.50%       |
| 5      | 4,803.84      | 5,403.19       | 960.77            | 1,080.64           | 599.35       | 12.48%       |
| 10     | 4,807.68      | 5,406.38       | 480.77            | 540.64             | 598.70       | 12.45%       |
| 25     | 4,819.20      | 5,415.96       | 192.77            | 216.64             | 596.76       | 12.38%       |
| 50     | 4,838.40      | 5,431.92       | 96.77             | 108.64             | 593.52       | 12.27%       |
| 100    | 4,876.79      | 5,463.84       | 48.77             | 54.64              | 587.05       | 12.04%       |
| 200    | 4,953.59      | 5,527.68       | 24.77             | 27.64              | 574.09       | 11.59%       |
| 300    | 5,030.39      | 5,591.52       | 16.77             | 18.64              | 561.13       | 11.15%       |
| 400    | 5,107.19      | 5,655.36       | 12.77             | 14.14              | 548.17       | 10.73%       |
| 500    | 5,183.97      | 5,719.20       | 10.37             | 11.44              | 535.23       | 10.32%       |
| 700    | 5,337.56      | 5,846.88       | 7.63              | 8.35               | 509.32       | 9.54%        |
| 900    | 5,491.15      | 5,974.56       | 6.10              | 6.64               | 483.41       | 8.80%        |
| 1500   | 5,951.92      | 6,357.60       | 3.97              | 4.24               | 405.68       | 6.82%        |
| 3000   | 7,103.85      | 7,315.22       | 2.37              | 2.44               | 211.37       | 2.98%        |
| 8000   | 10,943.60     | 10,507.27      | 1.37              | 1.31               | (436.33)     | -3.99%       |
| 10000  | 12,479.50     | 11,784.09      | 1.25              | 1.18               | (695.41)     | -5.57%       |
| 11000  | 13,247.45     | 12,422.50      | 1.20              | 1.13               | (824.95)     | -6.23%       |
| 12000  | 13,980.03     | 13,060.92      | 1.17              | 1.09               | (919.11)     | -6.57%       |
| 14000  | 15,445.19     | 14,337.74      | 1.10              | 1.02               | (1,107.45)   | -7.17%       |
| 16000  | 16,910.35     | 15,614.56      | 1.06              | 0.98               | (1,295.79)   | -7.66%       |
| 18000  | 18,375.51     | 16,891.38      | 1.02              | 0.94               | (1,484.13)   | -8.08%       |
| 20000  | 19,840.67     | 18,168.20      | 0.99              | 0.91               | (1,672.47)   | -8.43%       |
| 22000  | 21,305.83     | 19,445.02      | 0.97              | 0.88               | (1,860.81)   | -8.73%       |
| 24000  | 22,770.99     | 20,721.84      | 0.95              | 0.86               | (2,049.15)   | -9.00%       |
| 26000  | 24,236.15     | 21,998.66      | 0.93              | 0.85               | (2,237.49)   | -9.23%       |
| 28000  | 25,701.31     | 23,275.48      | 0.92              | 0.83               | (2,425.83)   | -9.44%       |
| 30000  | 27,166.47     | 24,552.30      | 0.91              | 0.82               | (2,614.17)   | -9.62%       |
| 35000  | 30,829.37     | 27,744.35      | 0.88              | 0.79               | (3,085.02)   | -10.01%      |
| 40000  | 34,492.27     | 30,936.40      | 0.86              | 0.77               | (3,555.87)   | -10.31%      |
| 43000  | 36,690.01     | 32,851.63      | 0.85              | 0.76               | (3,838.38)   | -10.46%      |
| 45000  | 38,155.17     | 34,128.45      | 0.85              | 0.76               | (4,026.72)   | -10.55%      |
| 50000  | 41,818.07     | 37,320.50      | 0.84              | 0.75               | (4,497.57)   | -10.76%      |
| 54000  | 44,748.39     | 39,874.14      | 0.83              | 0.74               | (4,874.25)   | -10.89%      |
| 60000  | 49,023.33     | 43,704.60      | 0.82              | 0.73               | (5,318.73)   | -10.85%      |
| 70000  | 56,148.23     | 50,088.70      | 0.80              | 0.72               | (6,059.53)   | -10.79%      |
| 80000  | 63,273.13     | 56,472.80      | 0.79              | 0.71               | (6,800.33)   | -10.75%      |
| 90000  | 70,398.03     | 62,856.90      | 0.78              | 0.70               | (7,541.13)   | -10.71%      |
| 95000  | 73,960.48     | 66,048.95      | 0.78              | 0.70               | (7,911.53)   | -10.70%      |
| 100000 | 77,522.93     | 69,241.00      | 0.78              | 0.69               | (8,281.93)   | -10.68%      |
| 108000 | 83,222.85     | 74,348.28      | 0.77              | 0.69               | (8,874.57)   | -10.66%      |
| 150000 | 110,943.69    | 101,161.50     | 0.74              | 0.67               | (9,782.19)   | -8.82%       |
| 200000 | 143,944.69    | 133,082.00     | 0.72              | 0.67               | (10,862.69)  | -7.55%       |
| 250000 | 176,945.69    | 165,002.50     | 0.71              | 0.66               | (11,943.19)  | -6.75%       |
| 300000 | 209,946.69    | 196,923.00     | 0.70              | 0.66               | (13,023.69)  | -6.20%       |
| 350000 | 242,947.69    | 228,843.50     | 0.69              | 0.65               | (14,104.19)  | -5.81%       |
| 400000 | 275,948.69    | 260,764.00     | 0.69              | 0.65               | (15,184.69)  | -5.50%       |
| 450000 | 308,949.69    | 292,684.50     | 0.69              | 0.65               | (16,265.19)  | -5.26%       |
| 500000 | 341,950.69    | 324,605.00     | 0.68              | 0.65               | (17,345.69)  | -5.07%       |

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            | \$ 7,400.00      | \$ 8,000.00       |
| First 11,000 Thm per month | \$ 0.22209       | \$ 0.05684        |
| Next 43,000 Thm per month  | \$ 0.18672       | \$ 0.05684        |
| Next 54,000 Thm per month  | \$ 0.16663       | \$ 0.05684        |
| Over 108,000 Thm per month | \$ 0.11416       | \$ 0.05684        |
| RIDER PGCC                 | \$ 0.44009       | \$ 0.44009        |
| RIDER PGDC                 | \$ 0.10203       | \$ 0.10203        |
| GAS PROCUREMENT CHARGE     | \$ 0.00695       | \$ 0.00166        |
| COMMODITY E-FACTOR         | \$ (0.00321)     | \$ (0.00321)      |
| 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      | 7,400.00      | 8,000.00       |                   |                    | 600.00       | 8.11%        |
| 5      | 7,403.84      | 8,002.98       | 1,480.77          | 1,600.60           | 599.14       | 8.09%        |
| 10     | 7,407.68      | 8,005.96       | 740.77            | 800.60             | 598.28       | 8.08%        |
| 25     | 7,419.20      | 8,014.93       | 296.77            | 320.60             | 595.73       | 8.03%        |
| 50     | 7,438.40      | 8,029.86       | 148.77            | 160.60             | 591.46       | 7.95%        |
| 100    | 7,476.79      | 8,059.73       | 74.77             | 80.60              | 582.94       | 7.80%        |
| 200    | 7,553.59      | 8,119.47       | 37.77             | 40.60              | 565.88       | 7.49%        |
| 300    | 7,630.39      | 8,179.21       | 25.43             | 27.26              | 548.82       | 7.19%        |
| 400    | 7,707.19      | 8,238.95       | 19.27             | 20.60              | 531.76       | 6.90%        |
| 500    | 7,783.97      | 8,298.70       | 15.57             | 16.60              | 514.73       | 6.61%        |
| 700    | 7,937.56      | 8,418.18       | 11.34             | 12.03              | 480.62       | 6.06%        |
| 900    | 8,091.15      | 8,537.66       | 8.99              | 9.49               | 446.51       | 5.52%        |
| 1500   | 8,551.92      | 8,896.10       | 5.70              | 5.93               | 344.18       | 4.02%        |
| 3000   | 9,703.85      | 9,792.22       | 3.23              | 3.26               | 88.37        | 0.91%        |
| 8000   | 13,543.60     | 12,779.27      | 1.69              | 1.60               | (764.33)     | -5.64%       |
| 10000  | 15,079.50     | 13,974.09      | 1.51              | 1.40               | (1,105.41)   | -7.33%       |
| 11000  | 15,847.45     | 14,571.50      | 1.44              | 1.32               | (1,275.95)   | -8.05%       |
| 12000  | 16,580.03     | 15,168.92      | 1.38              | 1.26               | (1,411.11)   | -8.51%       |
| 14000  | 18,045.19     | 16,363.74      | 1.29              | 1.17               | (1,681.45)   | -9.32%       |
| 16000  | 19,510.35     | 17,558.56      | 1.22              | 1.10               | (1,951.79)   | -10.00%      |
| 18000  | 20,975.51     | 18,753.38      | 1.17              | 1.04               | (2,222.13)   | -10.59%      |
| 20000  | 22,440.67     | 19,948.20      | 1.12              | 1.00               | (2,492.47)   | -11.11%      |
| 22000  | 23,905.83     | 21,143.02      | 1.09              | 0.96               | (2,762.81)   | -11.56%      |
| 24000  | 25,370.99     | 22,337.84      | 1.06              | 0.93               | (3,033.15)   | -11.96%      |
| 26000  | 26,836.15     | 23,532.66      | 1.03              | 0.91               | (3,303.49)   | -12.31%      |
| 28000  | 28,301.31     | 24,727.48      | 1.01              | 0.88               | (3,573.83)   | -12.63%      |
| 30000  | 29,766.47     | 25,922.30      | 0.99              | 0.86               | (3,844.17)   | -12.91%      |
| 35000  | 33,429.37     | 28,909.35      | 0.96              | 0.83               | (4,520.02)   | -13.52%      |
| 40000  | 37,092.27     | 31,896.40      | 0.93              | 0.80               | (5,195.87)   | -14.01%      |
| 43000  | 39,290.01     | 33,688.63      | 0.91              | 0.78               | (5,601.38)   | -14.26%      |
| 45000  | 40,755.17     | 34,883.45      | 0.91              | 0.78               | (5,871.72)   | -14.41%      |
| 50000  | 44,418.07     | 37,870.50      | 0.89              | 0.76               | (6,547.57)   | -14.74%      |
| 54000  | 47,348.39     | 40,260.14      | 0.88              | 0.75               | (7,088.25)   | -14.97%      |
| 60000  | 51,623.33     | 43,844.60      | 0.86              | 0.73               | (7,778.73)   | -15.07%      |
| 70000  | 58,748.23     | 49,818.70      | 0.84              | 0.71               | (8,929.53)   | -15.20%      |
| 80000  | 65,873.13     | 55,792.80      | 0.82              | 0.70               | (10,080.33)  | -15.30%      |
| 90000  | 72,998.03     | 61,766.90      | 0.81              | 0.69               | (11,231.13)  | -15.39%      |
| 95000  | 76,560.48     | 64,753.95      | 0.81              | 0.68               | (11,806.53)  | -15.42%      |
| 100000 | 80,122.93     | 67,741.00      | 0.80              | 0.68               | (12,381.93)  | -15.45%      |
| 108000 | 85,822.85     | 72,520.28      | 0.79              | 0.67               | (13,302.57)  | -15.50%      |
| 150000 | 113,543.69    | 97,611.50      | 0.76              | 0.65               | (15,932.19)  | -14.03%      |
| 200000 | 146,544.69    | 127,482.00     | 0.73              | 0.64               | (19,062.69)  | -13.01%      |
| 250000 | 179,545.69    | 157,352.50     | 0.72              | 0.63               | (22,193.19)  | -12.36%      |
| 300000 | 212,546.69    | 187,223.00     | 0.71              | 0.62               | (25,323.69)  | -11.91%      |
| 350000 | 245,547.69    | 217,093.50     | 0.70              | 0.62               | (28,454.19)  | -11.59%      |
| 400000 | 278,548.69    | 246,964.00     | 0.70              | 0.62               | (31,584.69)  | -11.34%      |
| 450000 | 311,549.69    | 276,834.50     | 0.69              | 0.62               | (34,715.19)  | -11.14%      |
| 500000 | 344,550.69    | 306,705.00     | 0.69              | 0.61               | (37,845.69)  | -10.98%      |

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, 2015. Schedule 2 is for the Fully Forecasted Rate Year which is for the twelve-month period ending December 31, 2016. 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, 2015

|                                    | <u>(MDth)</u> |
|------------------------------------|---------------|
| Annualized Sales (Exhibit No. 103) | 33,597        |
| <u>Sources of Gas</u>              |               |
| Interstate Pipeline Purchases      | 33,597        |
| City Gate Purchases                | 0             |
| Local Production                   | 255           |
| Storage                            | (255)         |
| Total                              | 33,597        |

Schedule 2: Twelve Month Ending December 31, 2016

|                                    | <u>(MDth)</u> |
|------------------------------------|---------------|
| Annualized Sales (Exhibit No. 103) | 33,585        |
| <u>Sources of Gas</u>              |               |
| Interstate Pipeline Purchases      | 34,079        |
| City Gate Purchases                | 0             |
| Local Production                   | 256           |
| Storage                            | (750)         |
| Total                              | 33,585        |

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 3, for details of Purchased Gas for the twelve months ended November 2013 and November 2014.

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 2013 and November 2014.

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 2013 and November 2014.

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

11. Supply the net Fuel Clause Adjustment by month for the test year.

Response: Refer to Exhibit No. 12, Schedule No.6.

COLUMBIA GAS OF PENNSYLVANIA, INC.  
OPERATIONS AND MAINTENANCE EXPENSE ADJUSTMENTS  
TO THE TWELVE MONTHS ENDED DECEMBER 31, 2015  
ADJUSTMENTS TO PURCHASED GAS EXPENSE  
53.62

To adjust the Cost of Purchased Gas Expense to the level being recovered through base tariff rates.

Response: The adjustment to the Cost of Purchased Gas Expense for the twelve months ending November 30, 2015 is \$5,384,061 and for twelve months ending December 31, 2016 is \$299,766. 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, 2015  
Adjustments to Purchased Gas Expense  
53.62

|     |                                                                                   |                   |
|-----|-----------------------------------------------------------------------------------|-------------------|
| (1) | Purchased Gas Costs<br>Per Books for the Twelve Months Ended<br>November 30, 2015 | \$<br>196,163,585 |
|-----|-----------------------------------------------------------------------------------|-------------------|

(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>            |                       |                             |                     |
| Residential Sales Service - RSS             | 5.3891                | 23,369,159                  | 125,938,733         |
| Small General Sales Service - SGSS          | 5.3891                | 9,101,664                   | 49,049,775          |
| Negotiated Sales Service - NSS              | Varies                | 65,300                      | 273,369             |
| Large General Sales Service - LGSS          | 5.3891                | 1,015,414                   | 5,472,169           |
| Residential Distribution Service - RDS      | 0.7266                | 8,153,964                   | 5,924,670           |
| Residential Distribution Service (CAP)- RCC | 0.7266                | 2,519,036                   | 1,830,332           |
| Small Commercial Distribution - SCD         | 0.7266                | 2,094,820                   | 1,522,096           |
| Small General Distribution Service - SGDS   | 1.0203                | 753,093                     | 768,381             |
| Total Gas Supply Expense                    |                       |                             | 190,779,524         |
| Gas Supply Expense Adjustment               |                       |                             | 5,384,061           |

Columbia Gas of Pennsylvania, Inc.  
Operations and Maintenance Expense Adjustments  
To the Twelve Months Ended December 31, 2016  
Adjustments to Purchased Gas Expense  
53.62

(1) Purchased Gas Costs \$  
Per Books for the Twelve Months Ended 190,779,525  
December 31, 2016

(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>             |                       |                             |                     |
| Residential Sales Service - RSS              | 5.3891                | 23,280,676                  | 125,461,892         |
| Small General Sales Service - SGSS           | 5.3891                | 9,128,568                   | 49,194,765          |
| Negotiated Sales Service- NSS                | Varies                | 65,000                      | 272,136             |
| Large General Sales Service - LGSS           | 5.3891                | 1,014,741                   | 5,468,538           |
| Residential Distribution Service - RDS       | 0.7266                | 8,134,026                   | 5,910,184           |
| Residential Distribution Service (CAP) - RCC | 0.7266                | 2,512,974                   | 1,825,927           |
| Small Commercial Distribution - SCD          | 0.7266                | 2,149,044                   | 1,561,496           |
| Small General Distribution Service - SGDS    | 1.0203                | 769,208                     | <u>784,822</u>      |
| Total Gas Supply Expense                     |                       |                             | 190,479,759         |
| Gas Supply Expense Adjustment                |                       |                             | 299,766             |

COLUMBIA GAS OF PENNSYLVANIA, INC  
SECTION 53.62 RECOVERIES OF FUEL COSTS BY GAS UTILITIES

In addition to information otherwise required to be filed by a jurisdictional natural gas distributor with gross intrastate annual operating revenues in excess of \$40 million seeking a change in its base rates, each gas utility must also file updates to the information required by § 53.64(c) (relating to filing requirements for natural gas distributors with gross intrastate annual operating revenues in excess of \$40 million). In the case of a gas utility purchasing gas as defined at § 53.61 (a) (relating to purpose) from an affiliated interest, it shall also file updates to the information required at § 53.65 (relating to special provisions relating to natural gas distributors with gross intrastate annual operating revenues in excess of \$40 million with affiliated interests). These updates shall to be made at the time the base rate case under 66 Pa. C.S. § 1308 (relating to voluntary changes in rates) is originally filed. Deficiencies in filing will be treated as set forth at § 53.51(c) (relating to general).

Response: Please see Exhibit No. 12, Schedule No. 8.

COLUMBIA GAS OF PENNSYLVANIA, INC.

53.52

Applicability; public utilities other than canal, turnpike, tunnel bridge and wharf companies.

- (a) Whenever a public utility, other than a canal, turnpike, tunnel, bridge or wharf company files a tariff, revision or supplement effecting changes in the terms and conditions of service rendered or to be rendered, it shall submit to the Commission, with the tariff, revision or supplement, statements showing all of the following:
- (1) The specific reasons for each change.
  - (2) The total number of customers served by the utility.
  - (3) A calculation of the number of customers, by tariff subdivisions, whose bills will be affected by the change.
  - (4) The effect of the change on the utility's customers.
  - (5) The direct or indirect effect of the proposed change on the utility's revenues and expenses.
  - (6) The effect of the change on the service rendered by the utility.
  - (7) A list of factors considered by the utility in its determination to make the change. The list shall include a comprehensive statement about these factors were chosen and the relative importance of each. This subsection does not apply to a portion of a tariff change seeking a general rate increase as defined in 66 Pa. C.S. §1308 (relating to voluntary changes in rates).
  - (8) Studies undertaken by the utility in order to draft its proposed change. This paragraph does not apply to a portion of a tariff change seeking a general rate increase as defined in 66 Pa. C.S. §1 308.
  - (9) Customer polls taken and other documents which indicate customer acceptance and desire for the proposed change. If the poll or other documents reveal discernible public opposition, an explanation of why the change is in the public interest shall be provided
  - (10) Plans the utility has for introducing or implementing the changes with respect to its ratepayers.
  - (11) F.C.C., F.E.R.C. or Commission orders or rulings applicable to the filing.

COLUMBIA GAS OF PENNSYLVANIA, INC.  
53.52

- (b) Whenever a public utility, other than a canal, turnpike, tunnel, bridge or wharf company files a tariff, revision, or supplement which will increase or decrease the bills to its customers, it shall submit in addition to the requirements of subsection (a), to the Commission, with the tariff, revision or supplement, statements showing all of the following:
- (1) The specific reason for each increase or decrease.
  - (2) The operating income statement of the utility for a 12-month period, the end of which may not be more than 120 days prior to the filing.
  - (3) A calculation of the number of customers, by tariff subdivision, whose bills will be increased.
  - (4) A calculation of the total increase, in dollars, by tariff subdivision, projected to an annual basis.
  - (5) A calculation of the number of customers, by tariff subdivision, whose bills will be decreased.
  - (6) A calculation of the total decreases, in dollars, by tariff subdivision, projected to an annual basis.

Response: Refer to Exhibit No. 13, Schedule No. 1.

COLUMBIA GAS OF PENNSYLVANIA, INC  
53.53 II. RATE OF RETURN  
A. ALL UTILITIES

13. Attach copies of the summaries of the projected two years' Company's budgets (revenues, expense, and capital).

Response:

Please see Exhibit GAS-ROR-13 for projected revenues and expenses.

Please see Exhibit GAS-ROR-14 for the projected construction budget.

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

19. List extraordinary property losses as a separate item, not included in operating expenses or depreciation and amortization. Sufficient supporting data must be provided.

Response: See Exhibit No. 13 Schedule No. 5

39. Identify the specific witness for all statements and schedules of revenues, expenses, taxes, property, valuation, etc.

Response: Refer to Exhibit No. 13 Schedule No. 3.

40. Adjustments which are estimated shall be fully supported by basic information reasonably necessary.

Response: Refer to Exhibit No. 13 Schedule No. 4.

41. Submit a statement explaining the derivation of the amounts used for projecting future test year level of operations and submit appropriate schedules supporting the projected test year level of operation.

Response: Refer to Exhibit 13 No. Schedule No. 4.

44. Ratios, percentages, allocations and averages used in adjustments must be fully supported and identified as to source.

Response: Refer to Exhibit 13 No. Schedule No. 4.

45. Provide an explanation of any differences between the basis or procedure used in allocations of revenues, expenses, depreciation and taxes in the current rate case and that used in the prior rate case.

Response: Refer to Exhibit 13 No. Schedule No. 4.

46. Supply a copy of internal and independent audit reports of the test year and prior calendar year, noting any exceptions and recommendations and disposition thereof.

Response: Refer to Exhibit No. 13 Schedule No. 4.



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

27. Submit a schedule for gas producing units retired or scheduled for retirements subsequent to the test year showing station, units, Mcf capacity, hours of operation during test year, net output produced and cents/Mcf of maintenance and fuel expenses.

Response:

See Exhibit No. 13, Schedule No. 6.

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

26. Provide a list of reports, data, or statements requested by and submitted to the Commission during and subsequent to the test year.

Response: Refer to Exhibit No. 14, Schedule No. 1

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

6. Supply copies of all present and proposed Gas Tariffs.

Response: Refer to Exhibit No. 14, Schedule No 2.

COLUMBIA GAS OF PENNSYLVANIA, INC.

53.53 I. VALUATION

A. ALL UTILITIES

1. Provide a corporate history (include the dates of original incorporation, subsequent mergers and/or acquisitions). Indicate all counties and cities and other governmental subdivisions to which service is provided (including service areas outside the state), and the total population in the area served.

Response: See Exhibit No. 15 Schedule No. 1.

COLUMBIA GAS OF PENNSYLVANIA, INC.

53.53 I. VALUATION

C. GAS UTILITIES

2. Provide an overall system map, including and labeling all measuring and regulating stations, storage facilities, production facilities, transmission and distribution mains, by size, and all interconnections with other utilities and pipelines.

Response: See Exhibit No. 15 Schedule No. 2.

COLUMBIA GAS OF PENNSYLVANIA, INC.

53.53 II. RATE OF RETURN

A. ALL UTILITIES

24. Attach chart explaining Company's relationship to its affiliates (System Structure).

Response: See Exhibit No.15 Schedule No. 3.

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

7. Provide details of respondent's attempts to recover uncollectible and delinquent accounts.

Response: Refer to Exhibit No. 16.

COLUMBIA GAS OF PENNSYLVANIA, INC.

53.53 I. VALUATION  
C. GAS UTILITIES

1. Provide, with respect to the scope of operations of the utility, a description of all property, including an explanation of the system's operation, and all plans for any significant future expansion, modification or other alteration of facilities.

This description should include, but not be limited to the following:

- a. If respondent has various gas services areas, indicate if they are integrated, such that the gas supply is available to all customers.
- b. Provide all pertinent data regarding company policy related to the addition of new consumers in the company's service area.
- c. Explain how respondent obtains its gas supply, as follows:
  - (i) Explain how respondent stores or manufactures gas; if applicable.
  - (ii) State whether the company has peak shaving facilities.
  - (iii) Provide details of coal-gasification programs, if any.
  - (iv) Describe the potential for emergency purchases of gas.
  - (iv) Provide the amount of gas in MCF supplied by various suppliers in the test year (include a copy of all contracts).
  - (vi) Provide the amount of gas in MCF supplied from company-owned wells during the test year.
- d. Provide plans for future supply, as follows:
  - (i) Supply details of anticipated gas supply from respondent's near-term development of gas wells, if any.
  - (ii) Provide gas supply agreements and well development ventures and identify the parties thereto.

COLUMBIA GAS OF PENNSYLVANIA, INC.

53.53 I. VALUATION

C. GAS UTILITIES

- e. Indicate any anticipated curtailments and explain the reasons for the curtailments.
- f. Provide current data on any Federal Power Commission action or programs that may affect, or tend to affect, the natural gas supply to the gas utility.

Response: See Exhibit No. 17.

COLUMBIA GAS OF PENNSYLVANIA, INC.

53.53 III BALANCE SHEET AND OPERATING STATEMENT

E. GAS UTILITIES

- 28. Provide a statement explaining the details of firm gas purchase (long-term) contracts with affiliated and non-affiliated utilities, including determination of costs terms of contract, and other pertinent information.

Response: See Exhibit No. 17.