PUBLIC SERVICE COMPANY OF COLORADO
Gas Book Depreciation Accrual Rate Study
At June 30, 2019

PUBLIC SERVICE OF COLORADO
GAS BOOK DEPRECIATION RATE STUDY
EXECUTIVE SUMMARY

Public Service of Colorado ("PSCo" or "Company") engaged Alliance Consulting Group to conduct a depreciation study of the Company's Gas utility plant depreciable assets as of June 30, 2019. Since Intangible and General Plant accounts were adjudicated in Docket 17AL-0363G, Intangible and General Plant assets were not analyzed in the course of this study. This analysis recommends a number of changes in the lives of various types of assets, by account number under the FERC Uniform System of Accounts. The changes in lives discussed in this Executive Summary are discussed in more detail in the study.

For Gas Plant depreciable accounts (excluding the Intangible and General functions), the lives of many accounts changed. There are 44 accounts: 17 accounts that have increasing lives, 12 accounts that have decreasing lives, and 15 accounts that were unchanged. The accounts with the greatest increase in life are Account 351 Underground Storage Structures and Improvements and Account 365.2 Transmission Land Rights, which both moved 15 years longer in life. The account with the greatest decrease in life is Account 356 Underground Purification Equipment, which moved 17 years shorter in life.

There are also changes in net salvage, with 14 accounts increasing their negative net salvage (i.e., more negative), 4 accounts decreasing their negative net salvage (i.e., less negative), and the remaining 26 accounts remaining unchanged. The account with the greatest increase in negative net salvage is Account 376.1 Distribution Steel Mains where the net salvage moved from negative 50 percent to a negative 85 percent, which is a change of 35 percent. The account with the great decrease in negative net salvage is Account 351 Underground Storage Structures and Improvements where the net salvage moved from negative 10 percent to a negative 3 percent, which is a change of 7 percent. For Intangible and General Depreciated and Amortized Plant, all depreciation rates, depreciable lives, amortization periods, and net

salvage percentages remain the same.

All annual accrual rates were determined using the straight line, broad group, remaining life depreciation system. Under the remaining life approach, depreciation and amortization rates reflect any imbalance between actual and theoretical reserves. Use of the remaining life depreciation system includes a self-correcting mechanism, which accounts for any differences between theoretical and book depreciation reserve over the remaining life of each depreciable group.

Given the number of changes in life and net salvage proposed, this study recommends a reallocation of book reserve by plant account within each function, with the exception of Intangible and General Plant. This reallocation does not change the total reserve within each function. Rather, reallocating the reserve within a function realigns the depreciation reserve balances within each function using the proposed life and net salvage parameters. The only exception to the reallocation was Account 381 AMR equipment. Given the age of the assets, short remaining life, and the small net book value of that account, book reserves were used for that account in the Distribution function. All other accounts were reallocated using the theoretical reserve model.

This study recommends an overall increase of approximately $8.4 million in annual depreciation expense for Gas Plant, based on plant balances as of June 30, 2019. The Gas Plant functional categories showing the largest increases are Distribution, with an increase of $4.4 million in annual depreciation expense, and Transmission, with an increase of $3.8 million in annual depreciation expense, as compared to the depreciation rates currently in effect as approved in Dockets 12-AL1268G and 17AL-0363G. Appendix B demonstrates the change in depreciation expense for the various Gas Plant accounts. The overall increase in depreciation expense is driven by changes in life and net salvage as well as treatment of any book and theoretical reserve imbalance.

PUBLIC SERVICE COMPANY OF COLORADO
DEPRECIATION RATE STUDY
AT JUNE 30, 2019

Table of Contents

PURPOSE

The purpose of this study is to develop depreciation rates for gas depreciable property (excluding Intangible and General plant) as recorded on the books of Public Service Company of Colorado ("PSCo" or "Company") as of June 30, 2019.

The depreciation rates in this study were designed to recover the total remaining undepreciated investment, adjusted for net salvage, over the remaining life of PSCo's property on a straight-line basis. PSCo is a regulated electric, gas, and steam utility principally engaged in providing production and delivery services to customers in Colorado. PSCo provides the essential service of producing and delivering electricity, gas, and steam safely, reliably, and economically to end-use consumers through its production, transmission, and distribution systems.

STUDY RESULTS

Recommended depreciation rates for PSCo Gas depreciable property, including the computations of annual depreciation accrual rates, are shown in Appendix A. These rates translate into an annual depreciation accrual of approximately $113.4 million (excluding Intangible and General Plant) based on PSCo's depreciable gas plant investment at June 30, 2019. Appendix B includes a comparison between depreciation rates and annual accruals at current levels versus the proposed rates and resulting annual accruals. As this Appendix shows, the annual depreciation expense calculated by the same method using the existing approved depreciation rates is approximately $105 million (excluding Intangible and General Plant). Appendix C contains the proposed lives and net salvage parameters on which these calculations are based, as well as a comparison of current and recommended depreciation parameters for PSCo Gas property. Appendix D contains a comparison between the book and reallocated depreciation reserve for each account for PSCo Gas. Appendix E addresses the development of net salvage parameters for the plant accounts for PSCo Gas.

GENERAL DISCUSSION

Definition

The term "depreciation" as used in this study is considered in the accounting sense; that is, a system of accounting that distributes the cost of assets, less net salvage (if any), over the estimated useful life of the assets in a systematic and rational manner. It is a process of allocation, not valuation. This expense is systematically allocated to accounting periods over the life of the properties. The amount allocated to any one accounting period does not necessarily represent the loss or decrease in value that will occur during that particular period. The Company accrues depreciation on the basis of the original cost of all depreciable property included in each functional property group. At retirement, the full cost of depreciable property, less the net salvage value, is charged to the depreciation reserve.

Basis of Depreciation Estimates

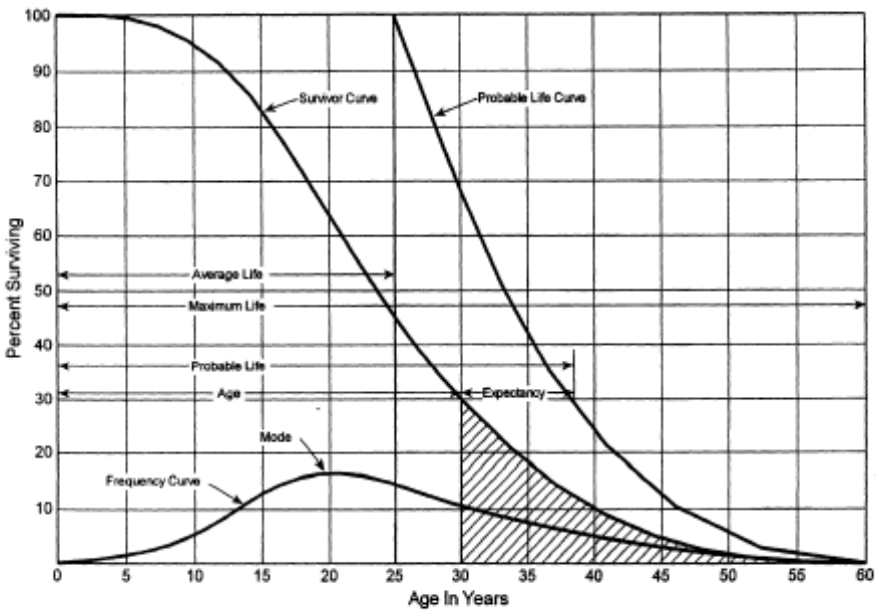
Annual and accrued depreciation were calculated in this study by the straight-line, vintage group, remaining-life depreciation system. In this system, the annual depreciation expense for each vintage is computed by dividing the original cost of the asset vintage (less allocated depreciation reserve less estimated net salvage) by its respective average remaining life. The resulting annual accrual amounts were divided by the original cost of the depreciable property in each account to determine the depreciation rate. The calculated remaining lives and annual depreciation accrual rates were based on attained ages of plant in service and the estimated service life and salvage characteristics of each depreciable group and were computed in a direct weighting by multiplying each vintage or account balance times its remaining life and dividing by the plant investment in service at June 30, 2019. The computations of the annual depreciation rates are shown in Appendix A and the weighted remaining life calculations are shown in the study’s workpapers

An actuarial analysis approach was incorporated into the analyses of PSCo data. This method was approved by the Colorado Public Utilities Commission in the Company’s most recent case and is generally used to determine depreciation rates for

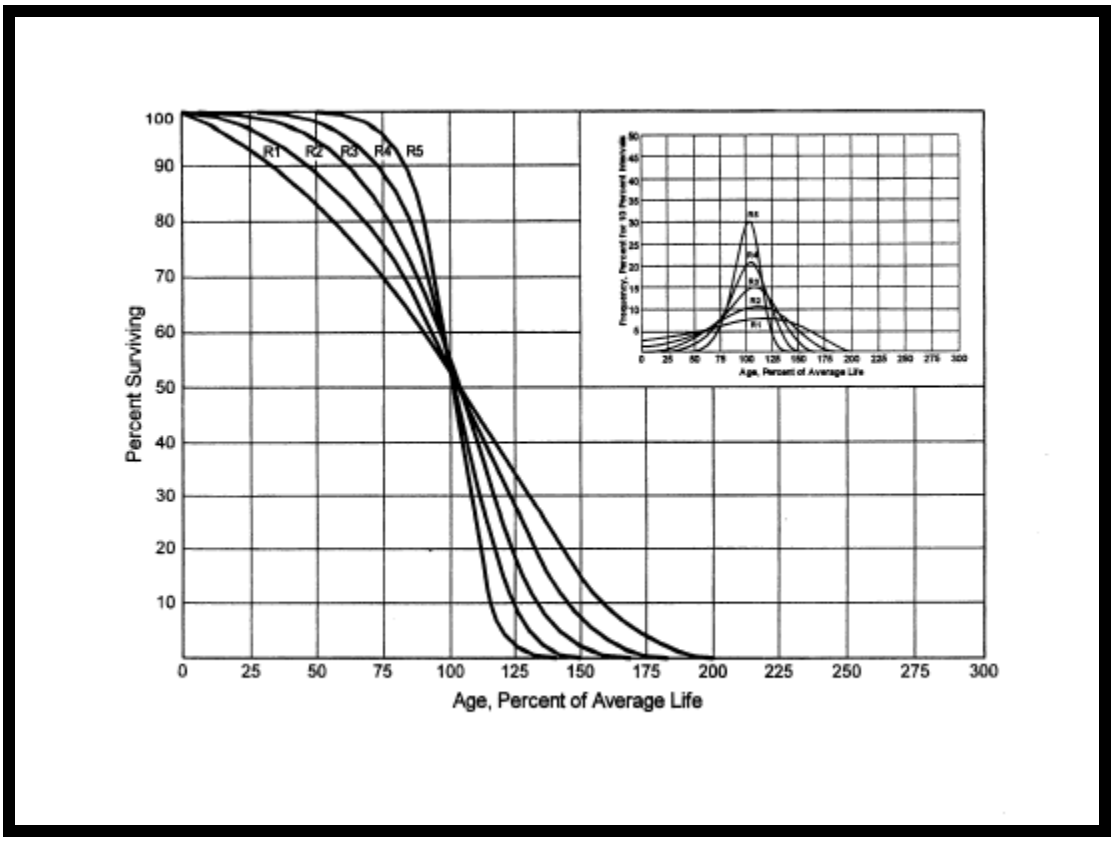
gas utility property. The rates for gas property in accounts 325.4-366.3, 368-375, 377-379, and 381- 387 were based on a 2012 year-end study which was adjudicated in Docket 12-AL-1268G. The rates for gas property in accounts 303, 376, 380, and 389.2-398 were based on a 2016 year-end study which was adjudicated in Docket 17-AL-0363G. Vintaged information was assembled in this study to allow actuarial analysis to be performed. Judgment was used to a greater or lesser degree on each distribution account. This approach is more fully described in a later section.

Survivor Curves

To fully understand depreciation projections in a regulated utility setting, there must be a basic understanding of Survivor Curves. Individual assets within a group do not normally have identical lives or investment amounts. The average life of a group can be determined by comparing actual experience against various Survivor Curves. A Survivor Curve represents the percentage of property remaining in service at various age intervals. The most widely used set of representative Survivor Curves are the Iowa Survivor Curves ("Iowa Curves"). The Iowa Curves are the result of an extensive investigation of life characteristics of physical property made at the Iowa State College Engineering Experiment Station in the first half of the twentieth century. Through common usage, revalidation, and regulatory acceptance, these curves have become a descriptive standard for the life characteristics of industrial property. An example of an Iowa Curve is shown below.



There are four families in the Iowa Curves which are distinguished by the relation of the age at the retirement mode (largest annual retirement frequency) and the average life. The four families are designated as “R”— Right, “S” — Symmetric, “L” — Left, and “O” — Origin Modal. First, for distributions with the mode age greater than the average life, an "R" designation (i.e., Right modal) is used. The family of “R” moded curves is shown below.



Second, an "S" designation (i.e., Symmetric modal) is used for the family whose mode age is symmetric about the average life. Third, an "L" designation (i.e., Left modal) is used for the family whose mode age is less than the average life. Fourth, a special case of left modal dispersion is the "O" or origin modal curve family. Within each curve family, numerical designations are used to describe the relative magnitude of the retirement frequencies at the mode. A "6" indicates that the retirements are not greatly dispersed from the mode (i.e., high mode frequency) while a "1" indicates a large dispersion about the mode (i.e., low mode frequency). For example, a curve with an average life of 30 years and an "L3" dispersion is a moderately dispersed, left modal curve that can be designated as a 30 L3 Curve. An SQ, or square, Survivor Curve occurs where no dispersion is present (i.e., units of common age retire simultaneously).

For all depreciable accounts, a Survivor Curve pattern was selected based on analyses of historical data, as well as other factors, such as general changes relevant to the Company's operations. The blending of professional judgment concerning current conditions and future trends, along with the matching of historical data permits the depreciation analyst to make an informed selection of an account's average life and retirement dispersion pattern. Iowa Curves were used to depict the estimated Survivor Curves for each account.

Actuarial Analysis

Actuarial analysis (retirement rate method) was used in evaluating historical asset retirement experience where vintage data were available and sufficient retirement activity was present. In an actuarial analysis, interval exposures (total property subject to retirement at the beginning of the age interval, regardless of vintage) and age interval retirements are calculated. The complement of the ratio of interval retirements to interval exposures establishes a survivor ratio. The survivor ratio is the fraction of property surviving to the end of the selected age interval, given that it has survived to the beginning of that age interval. Survivor ratios for all of the available age intervals were chained by successive multiplications to establish a series of survivor factors, collectively known as an observed life table. The observed life table shows the experienced mortality characteristic of the account and may be compared to standard mortality curves such as the Iowa Curves. Many accounts were analyzed using this method. Placement bands were used to illustrate the composite history over a specific era, and experience bands were used to focus on retirement history for all vintages during a set period. Matching data in observed life tables for each experience and placement band to an Iowa Curve requires visual examination. As stated in widely-cited text, Depreciation Systems by Wolf and Fitch, “the analyst must decide which points or sections of the curve should be given the most weight. Points at the end of the curve are often based on fewer exposures and may be given less weight than those points based on larger samples” (page 46). Some analysts chose to use mathematical fitting as a tool to narrow the population of

curves using a least squares technique. Use of the least squares approach does not imply a statistical validity; however, because the underlying data does not meet the criteria for independence between vintages and the same average price for property units through time. Thus, Depreciation Systems cautions, "… the results of mathematical fitting should be checked visually and the final determination of best fit made by the analyst" (page 48). This study uses the visual matching approach to match Iowa Curves, since mathematical fitting produces theoretically possible curve matches. Visual examination and experienced judgment allow the depreciation professional to make the final determination as to the best curve type. Detailed information for each account is shown later in this study and in workpapers.

Judgment

Any depreciation study requires informed judgment by the analyst conducting the study. A knowledge of the property being studied, company policies and procedures, general trends in technology and industry practice, and a sound basis of understanding depreciation theory are needed to apply this informed judgment. In this depreciation study, judgment was used in areas such as Survivor Curve modeling and selection, depreciation method selection, simulated plant record method analysis, and actuarial analysis.

Where there are multiple factors, activities, actions, property characteristics, statistical inconsistencies, property mix in accounts or a multitude of other considerations that affect the analysis (potentially in various directions), judgment is used to take into account all of these considerations and synthesize them into a general direction or understanding of the characteristics of the property. Individually, no one consideration in these cases may have a substantial impact on the analysis, but overall, the collective effect of these considerations may shed light on the use and characteristics of assets. Judgment may also be defined as deduction, inference, wisdom, common sense, or the ability to make sensible decisions. There is no single correct result from statistical analysis; hence, there is no answer absent the application of informed professional judgment and experience.

DETAILED DISCUSSION

Depreciation Study Process

This depreciation study encompassed four distinct phases. The first phase involved data collection and field interviews. The second phase was where the initial data analysis occurred. The third phase was where the information and analysis was evaluated. After the first three stages were complete, the fourth phase began. This phase involved the calculation of deprecation rates and documenting the corresponding recommendations.

During the Phase I data collection process, historical data was compiled from continuing property records and general ledger systems. Data was validated for accuracy by extracting and comparing to multiple financial system sources: Projects System (construction ledger), Fixed Asset System (continuing property ledger), General Ledger, and interfaces from other operating systems. Audit of this data was validated against historical data from prior periods, historical general ledger sources, and field personnel discussions. This data was reviewed extensively so that it could be put in the proper format for a depreciation study. Further discussion on data review and adjustment is found in the Salvage Consideration section of this study. Also, as part of the Phase I data collection process, numerous discussions were conducted with engineers and field operations personnel to obtain information that would be helpful in formulating life and salvage recommendations in this study. One of the most important elements in performing a proper depreciation study is to understand how the Company utilizes assets and the environment of those assets. Understanding industry and geographical norms for mortality characteristics are important factors in selecting life and salvage recommendations; however, care must be used not to apply them rigorously to any particular company since no two companies would have the same exact forces of retirement acting upon their assets. Interviews with engineering and operations personnel are important ways to allow the analyst to obtain information that is helpful when evaluating the output from the life and net salvage programs in relation to the Company's actual asset utilization and environment. Information that was gleaned in these discussions is found both in the

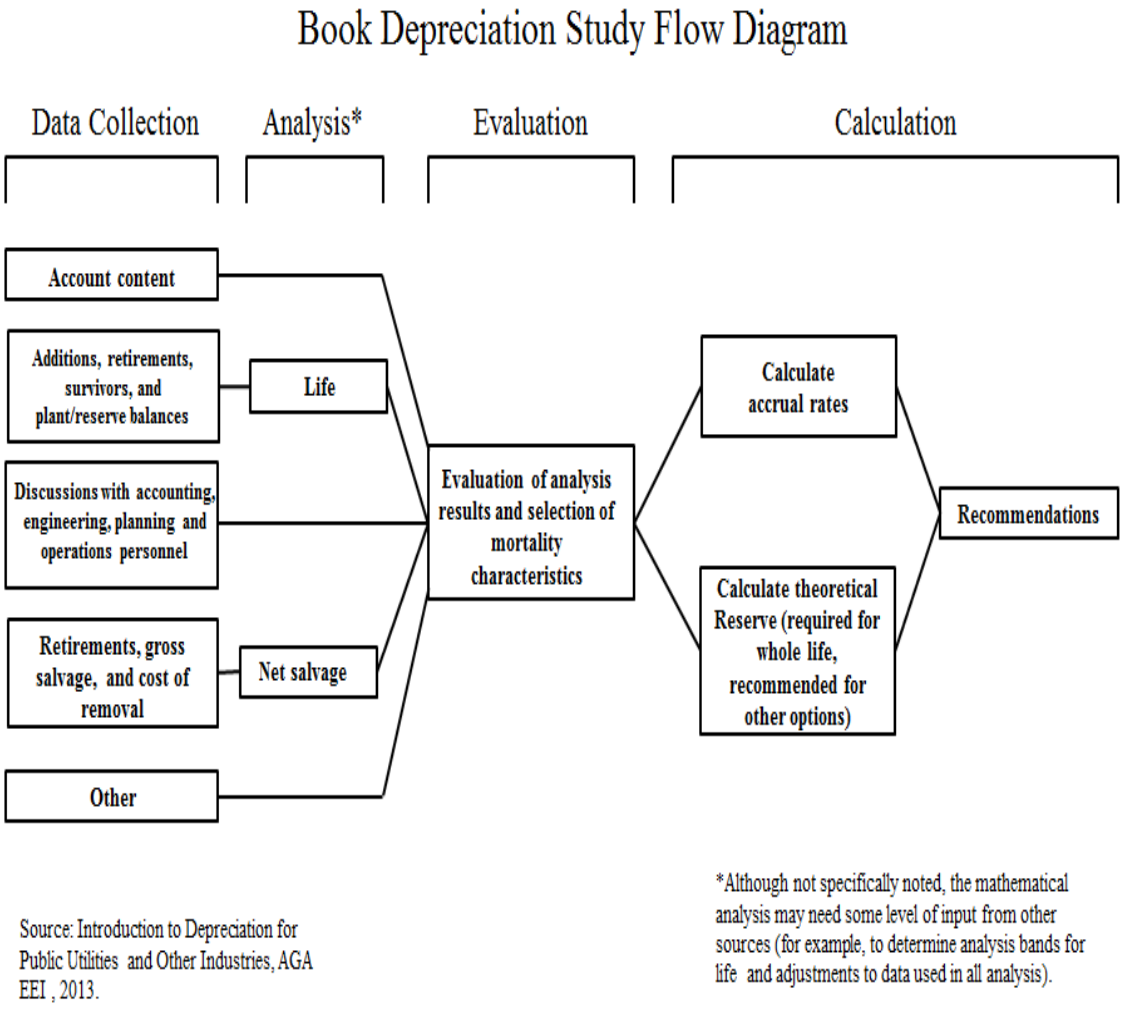
Detailed Discussion portions of the Life Analysis and Salvage Analysis sections and also in workpapers. In addition, Alliance personnel possess a significant understanding of the property and its forces of retirement due to years of day-to-day exposure to property and the operations of gas utility property.

Phase 2 is where the actuarial analysis was performed. Phase 2 and Phase 3 overlap to a significant degree. The detailed property records information was used in Phase 2 to develop observed life tables, graphs and statistics for analysis. Net salvage analysis consists of compiling historical salvage and removal data by account to determine values and trends in gross salvage and removal cost. This information was then carried forward into Phase 3 for the evaluation process.

Phase 3 is the evaluation process, which synthesized analysis, interviews, and operational characteristics into a final selection of asset lives and net salvage parameters. The historical analysis from Phase 2 was further enhanced by the incorporation of recent or future changes in the characteristics or operations of assets that were revealed in Phase 1. The preliminary results were then reviewed and discussed with Company accounting and operations personnel. Phases 2 and 3 validated the asset characteristics as seen in the accounting transactions with actual Company operational experience.

Finally, Phase 4 involves the calculation of accrual rates, making recommendations and documenting the conclusions in a final report. The calculation of accrual rates for this study is found in Appendix A. Recommendations for the various accounts are contained within the Detailed Discussion of this report. The depreciation study flow diagram shown as Figure 1[1] documents the steps used in conducting this study. Depreciation Systems on page 289 documents the same basic processes in performing a depreciation study.

[1] Introduction to Depreciation for Public Utilities and Other Industries, AGA EEI, 2013.



PSCo Gas Depreciation Process

Figure 1

Depreciation Calculation Process

Annual depreciation expense amounts for depreciable accounts were calculated by the vintage group, straight line, remaining life procedure.

In a whole life representation, the annual accrual rate is computed by the following equation,

$$AnnualAccrualRate = \frac{(100\% - NetSalvagePercent)}{AverageServiceLife}$$

The vintage group procedure considers each year of plant placement as a separate group, unlike the broad group model which combines all placement years into one group. The vintage group model uses a unique Survivor Curve for each vintage to combine observed and forecast survivor ratios rather than a single curve for each vintage as the broad group model does.

Use of the remaining life depreciation system adds a self-correcting mechanism, which accounts for any differences between theoretical and book depreciation reserve over the remaining life of the group. With the straight line, remaining life, average life group system using Iowa Curves, composite remaining lives were calculated according to standard broad group expectancy techniques, noted in the formula below:

$$Composite\ \mathrm{Re}\ mainingLife = \frac{\sum V\ \mathrm{int}\ ageOriginalCost * \mathrm{Re}\ mainingLife}{\sum TotalOriginalCost}$$

For each plant account, the difference between the surviving investment, adjusted for estimated net salvage, and the allocated book depreciation reserve, was divided by the composite remaining life to yield the annual depreciation expense as noted in this equation:

$$AnnualDepreciationExpense = \frac{OriginalCost - Book\ \mathrm{Re}\ serve - (OriginalCost) * (1 - NetSalvage\ \%)}{Composite\ \mathrm{Re}\ mainingLife}$$

where the net salvage percent represents future net salvage.

Within a group, the sum of the group annual depreciation expense amounts, as a percentage of the depreciable original cost investment summed, gives the annual depreciation rate as shown below:

$$AnnualDepreciationRate = \frac{\sum AnnualDepreciationExpense}{\sum OriginalCost}$$

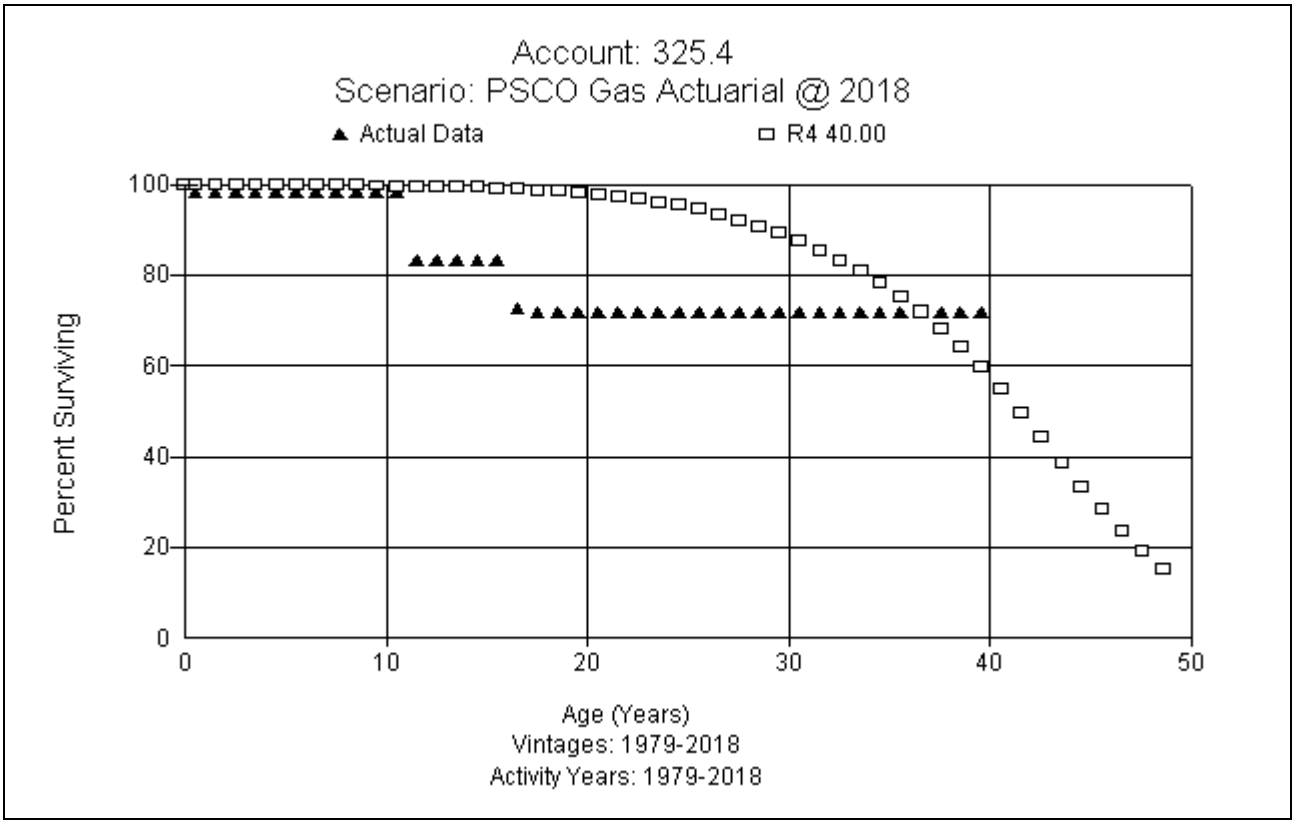
Average salvage was assumed equal to future net salvage when computing reserve ratios. These calculations are shown in the study's workpapers. The calculations of the theoretical depreciation reserve values and the corresponding remaining life calculations are shown in workpapers. Book depreciation reserves are maintained on an account level and were used to compute depreciation rates for each account.

LIFE ANALYSIS

Production & Gathering Accounts, FERC Accts 325.4, 327-329, 332-334, & 337

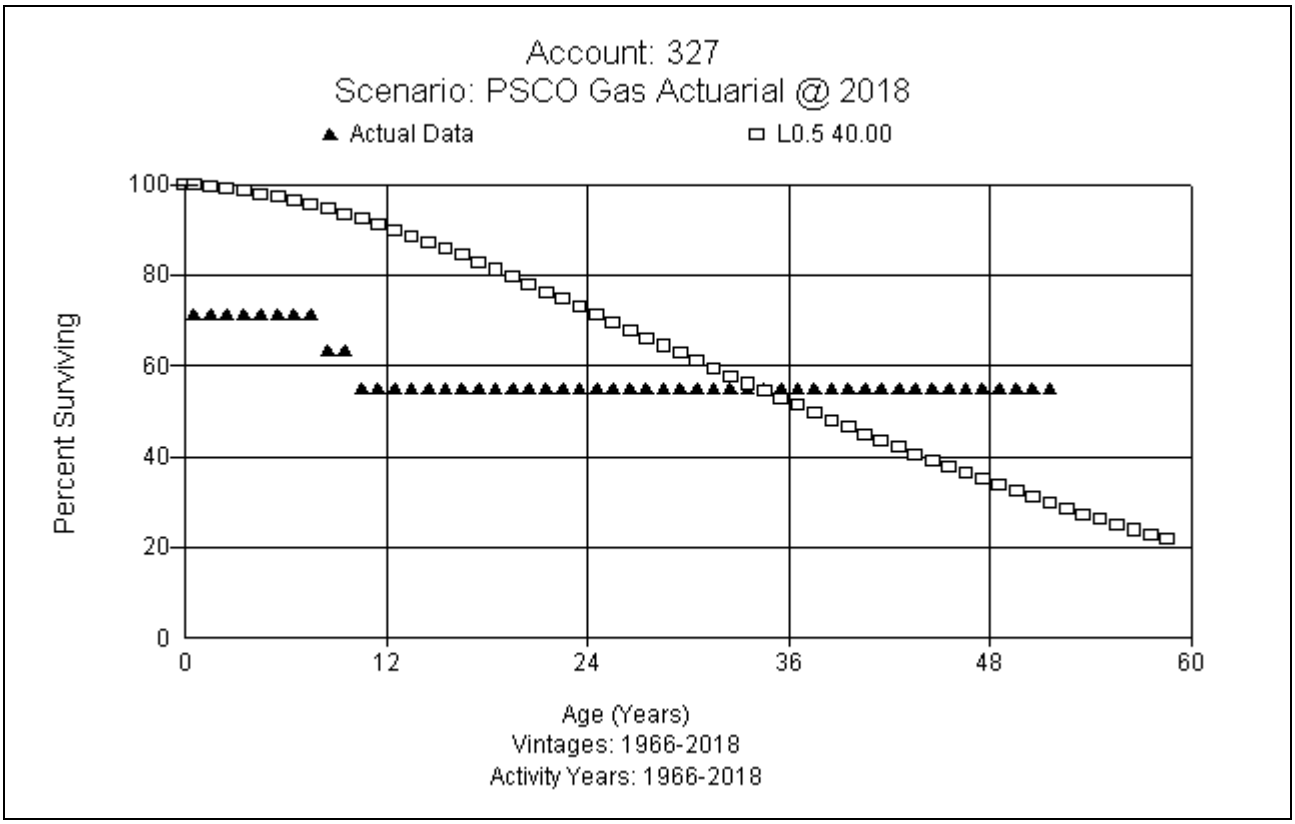
FERC Account 325.4 Land Rights (40 R4)

This account consists of land rights related to production activity. The balance in this account is $99 thousand. The approved life for this account is 33 years with an R4 dispersion. Actuarial analysis was used to determine life characteristics for this account. The longest band has a stub curve that reaches approximately 58 percent surviving. Company subject matter experts state that the operational lives of these land rights are tied to the field lines and facilities on which they are sitting. A 40 year life for production land rights is consistent with the analysis and the usage of the underlying assets. While life analysis might indicate a shorter life, the average age of the investment in this account is 27.3 years. This study recommends extending the life of this account to 40 years with an R4 dispersion. A graph of the actual experience and the selected Iowa Curve is shown below.



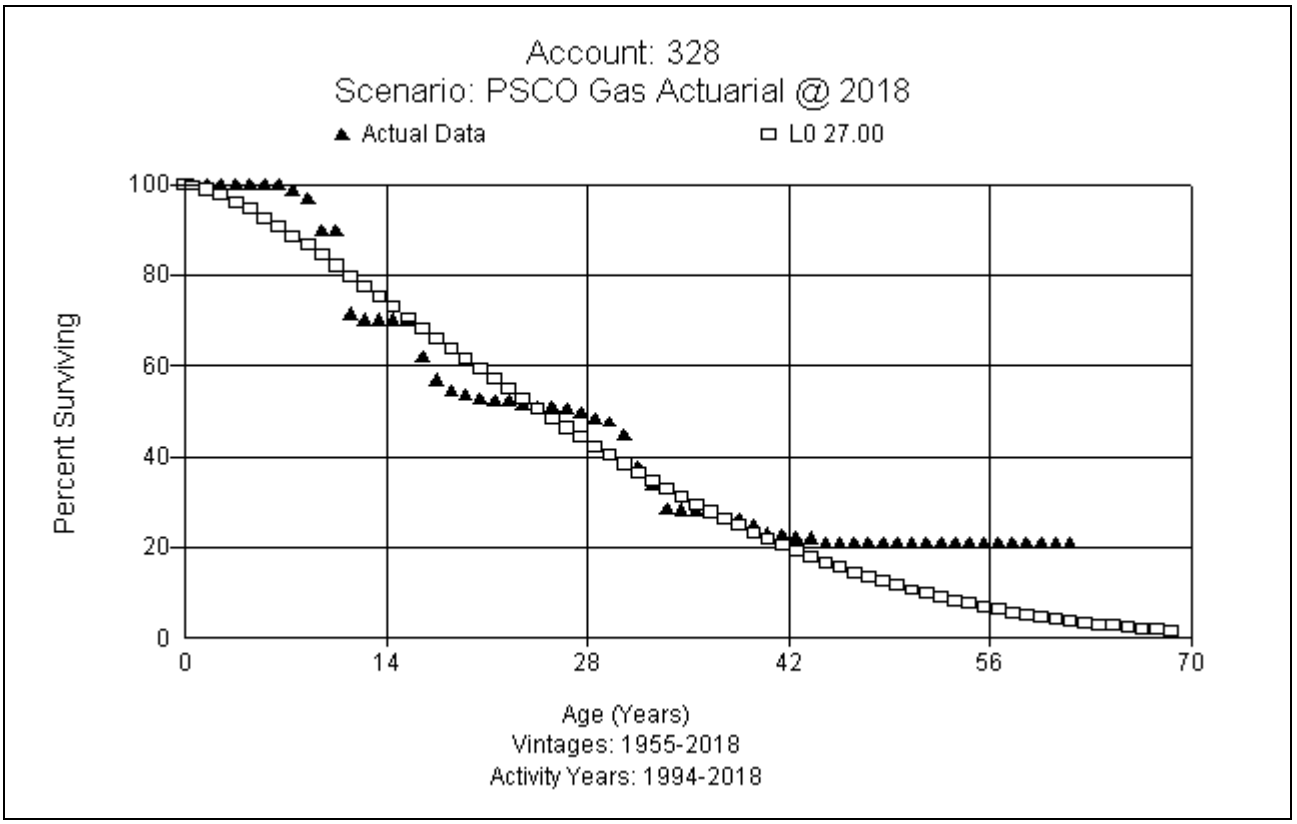
FERC Account 327 Field Compressor Station Structures (40 L0.5)

This account consists of building and yard improvements related to production field compressor station activities. The balance in this account is $16.8 thousand. The balance did not change since the last study. The approved life for this account is 40 years with an L0.5 dispersion. This study recommends retaining the 40 year life and the L0.5 dispersion. A graph of the actual experience and the selected Iowa Curve is shown below.



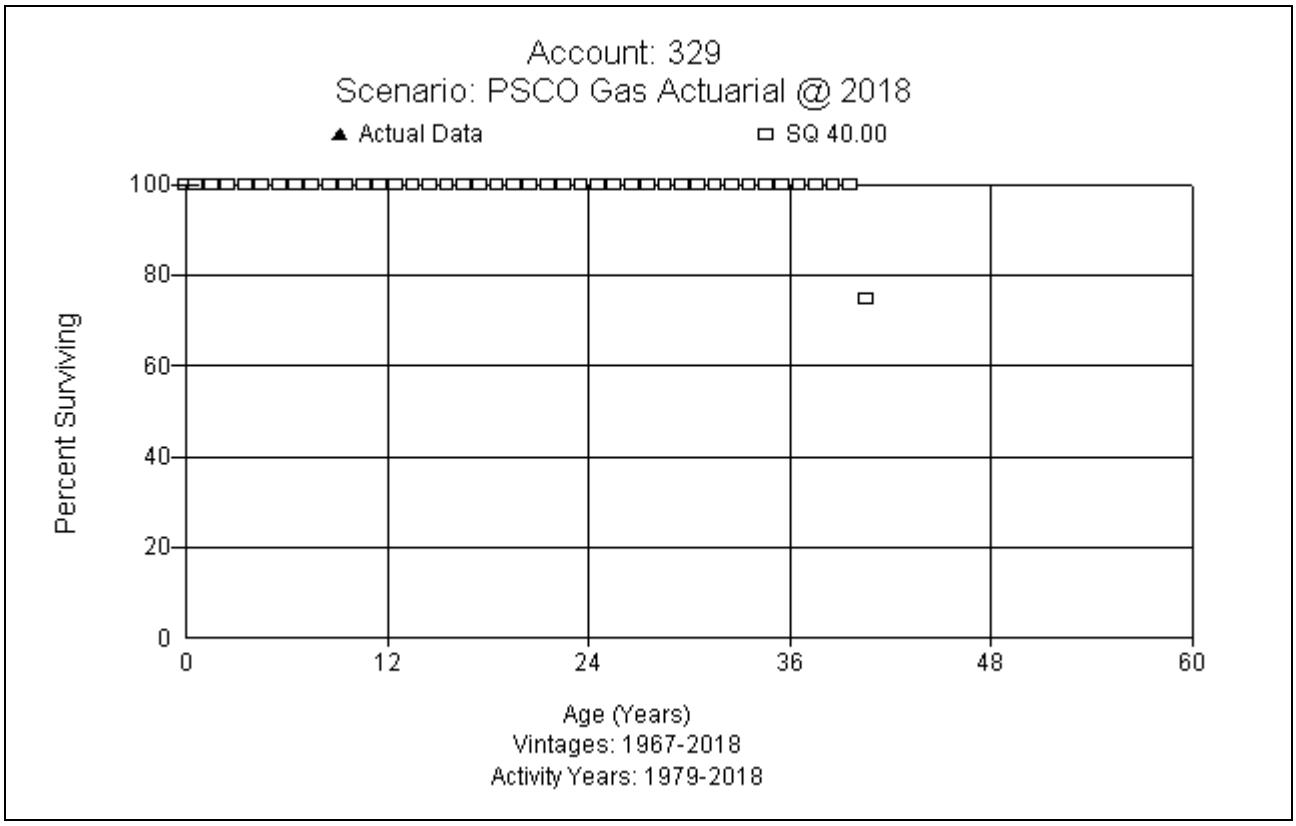
FERC Account 328 Field Measuring & Regulating Station Structures (27 L0)

This account consists of building and yard improvements related to production measuring and regulating station activities. The balance in this account is $102.5 thousand. The approved life for this account is 27 years with an L0 dispersion. This study recommends retaining the existing 27 year life and retaining the L0 dispersion for this account. A graph of the actual experience and the selected Iowa Curve is shown below.



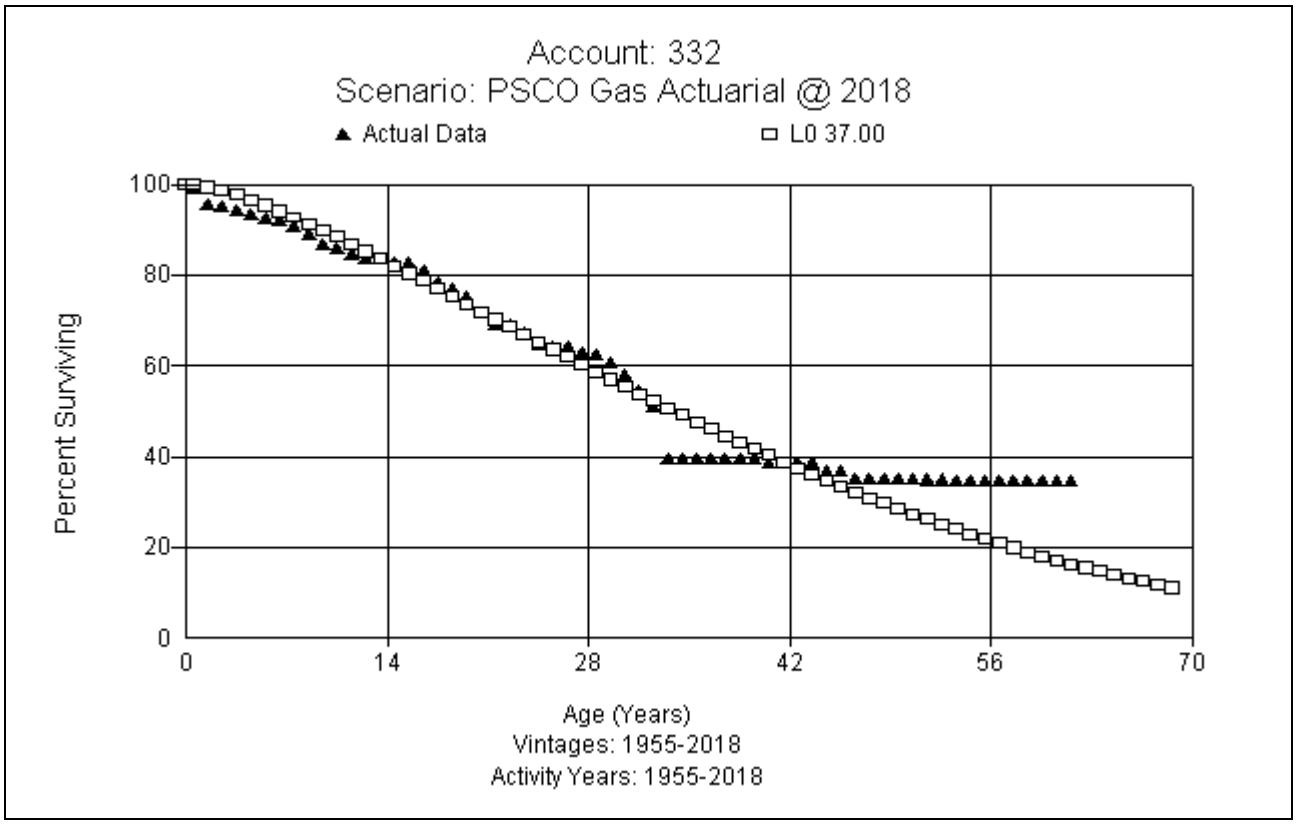
FERC Account 329 Other Structures (40 SQ)

This account consists of roadway related to production activities. The balance in this account is $8.8 thousand. The approved life for this account is 40 years with an SQ dispersion. This study recommends retaining the 40 SQ dispersion. A graph of the actual experience and the selected Iowa Curve is shown below.



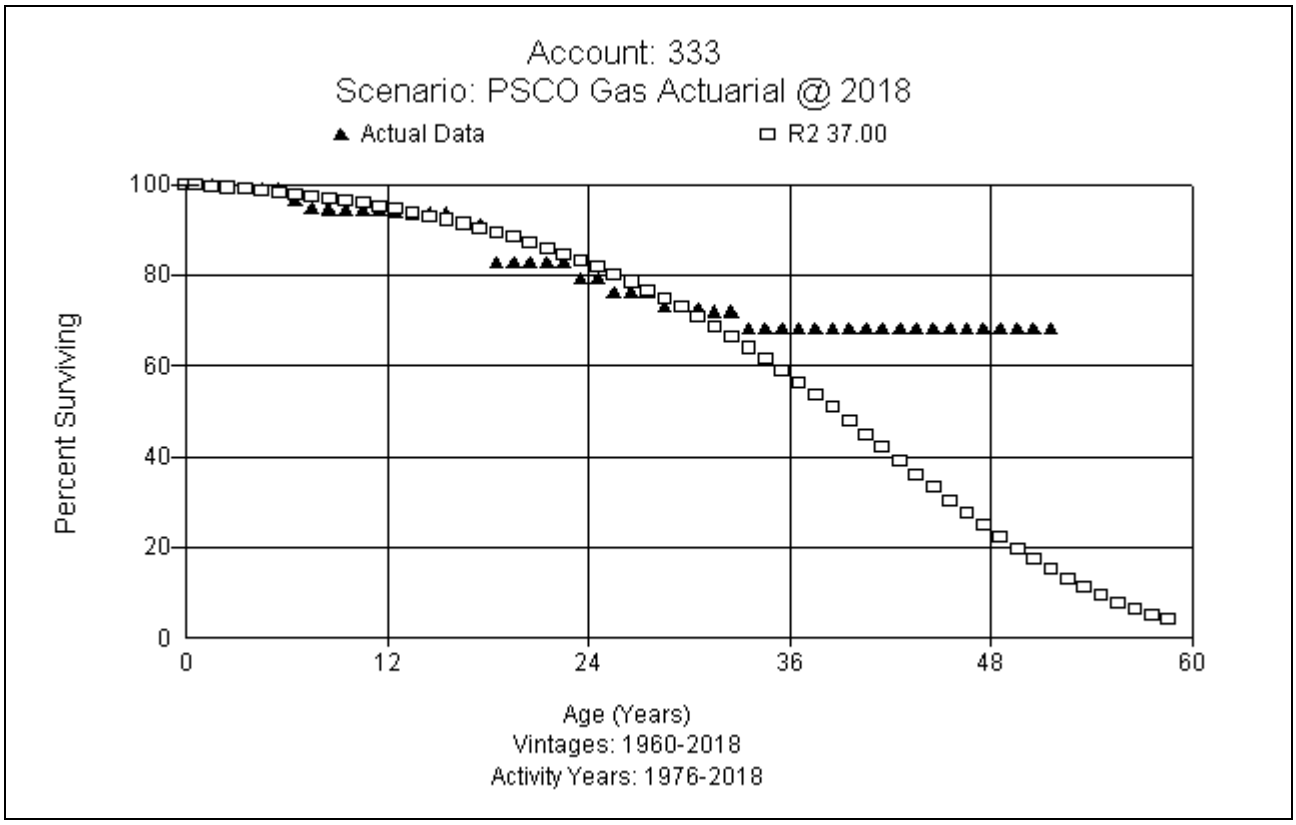
FERC Account 332 Field Lines (37 L0)

This account consists of production field lines and associated equipment. The balance in this account is $3.6 million. The approved life for this account is 37 years with an L0 dispersion. Actuarial analysis was used to determine life characteristics for this account. Company subject matter experts anticipate that the operational life of this account would be approximately half that of steel transmission lines, which currently has a life of 72 years. The Company has retired some fields (and associated lines) due to depletion of field. Now the Company serves to a central distribution point ("CDP") instead of building the field lines all the way to the wells. Currently the Company is seeing a much smaller portion of total supply than in the past. Baxter gathering field is expected to continue for a long period, whereas other areas have more problems, including wetter gas than other lines in some areas and dying wells in other areas (which may last 30 to 40 years). Company experts see no operational reason that the life would vary from the approved life of 37 year life for this account, and this study recommends the retention of the 37 year life and L0 dispersion. A graph of the actual experience and the selected Iowa Curve is shown below.


Account: 332
Scenario: PSCO Gas Actuarial @ 2018
Actual Data
L0 37.00
Percent Surviving
100
80
60
40
20
0
0
14
28
42
56
70
Age (Years)
Vintages: 1955-2018
Activity Years: 1955-2018

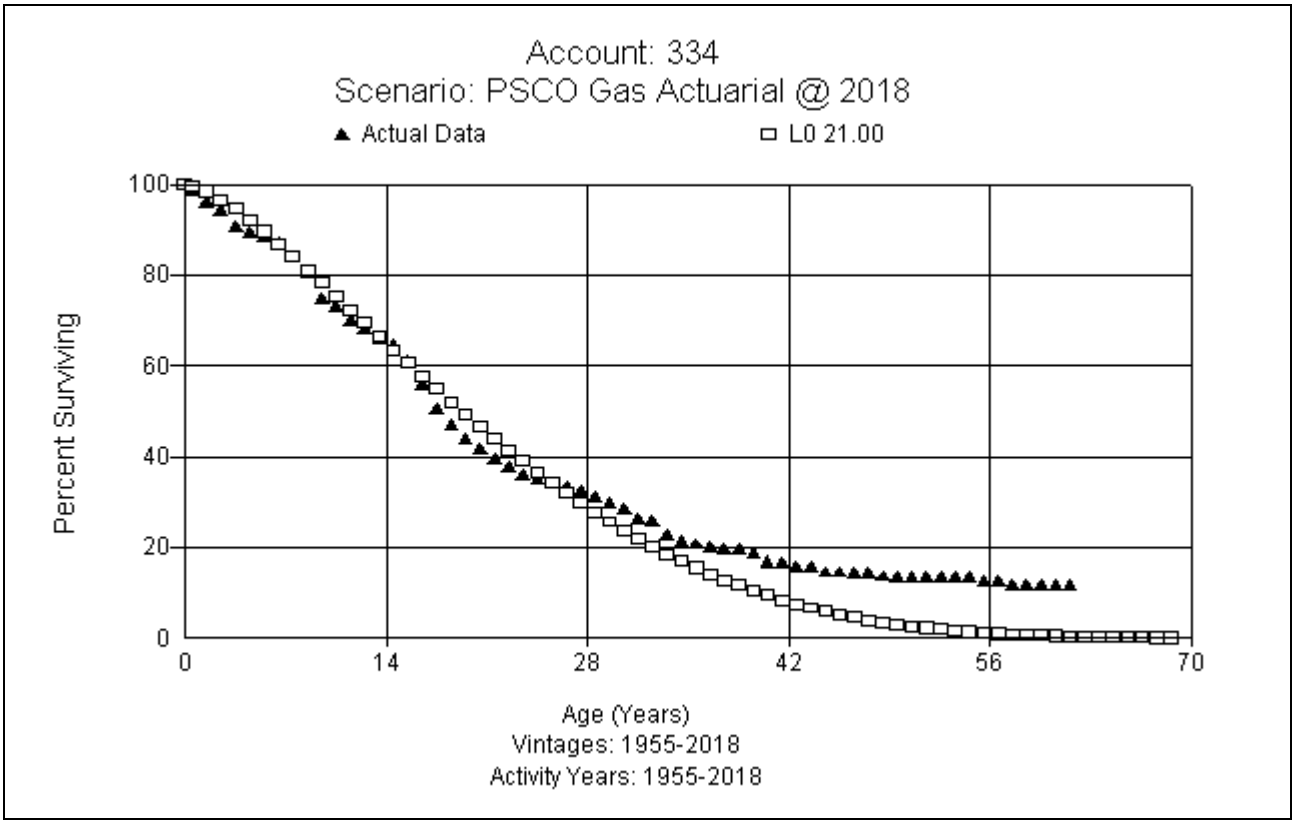
FERC Account 333 Field Compressor Station Equipment (37 R2)

This account consists of production compressors, piping, and associated equipment. The balance in this account is $378.3 thousand. The approved life for this account is 30 years with an R2.5 dispersion. Company experts report that every five to seven years the Company will overhaul the compressors, which produces capital expenditures but no retirement. Company personnel estimate that the age of assets in this account fall into approximately three categories: one third with ages of up to 50 years, one third with ages of 30-40 years, and one third with ages newer than the first two categories. Company personnel expect to see a longer life for underground compressor equipment in Account 354, since assets in the underground storage function use cleaner gas than the production/extraction gas in the gathering function. Company experts anticipate that the operational life for these assets will be longer than the currently approved 30 years life. Based on the analysis and company input, this study recommends moving to a 37 year life and an R2 dispersion for this account. A graph of the actual experience and the selected Iowa Curve is shown below.


Account: 333
Scenario: PSCO Gas Actuarial @ 2018
Actual Data
R2 37.00
Percent Surviving
100
80
60
40
20
0
0
12
24
36
48
60
Age (Years)
Vintages: 1960-2018
Activity Years: 1976-2018

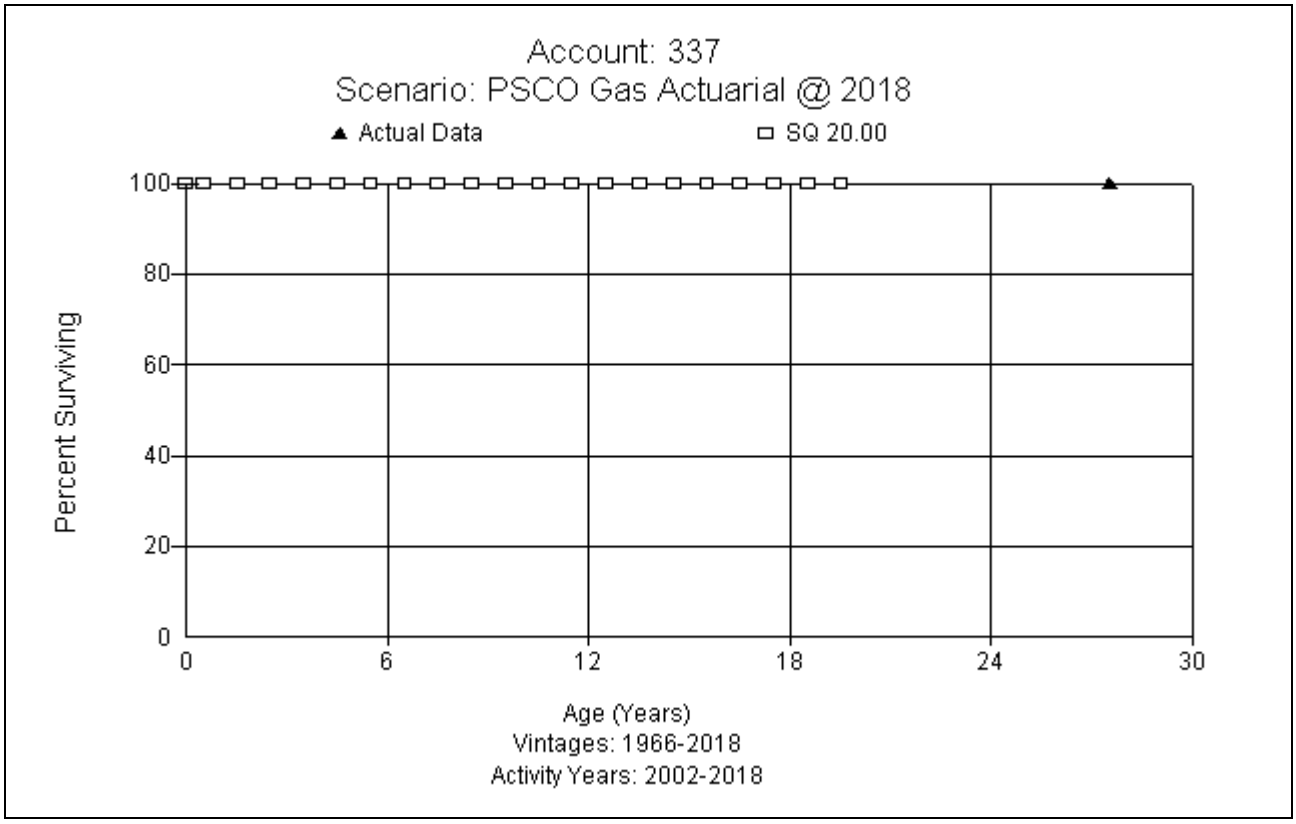
FERC Account 334 Field Measuring & Regulating Station Equipment (21 L0)

This account consists of station piping, dehydrator, meters, regulators, and associated measuring and regulating equipment. The balance in this account is $938 thousand. The approved life for this account is 21 years with an L0 dispersion. Company personnel report that the Company is moving to using more electronic measurement devices in this account. Company experts expect that newer electronic measuring equipment will have a 15 to 20 year life. Overall, Company personnel believe that operationally, a life of around 20 years for the account is reasonable. Actuarial analysis was used to determine life characteristics for this account. This study recommends retaining the existing 21 year life with an L0 dispersion for this account. A graph of the actual experience and the selected Iowa Curve is shown below.



FERC Account 337 Other Equipment (20 SQ)

The balance in this account is $0. This account has an approved life and curve of 20 years with an SQ dispersion. In the event of future additions to this account, this study recommends retaining the 20 year life and SQ dispersion. A graph of the actual experience and the selected Iowa Curve is shown below.

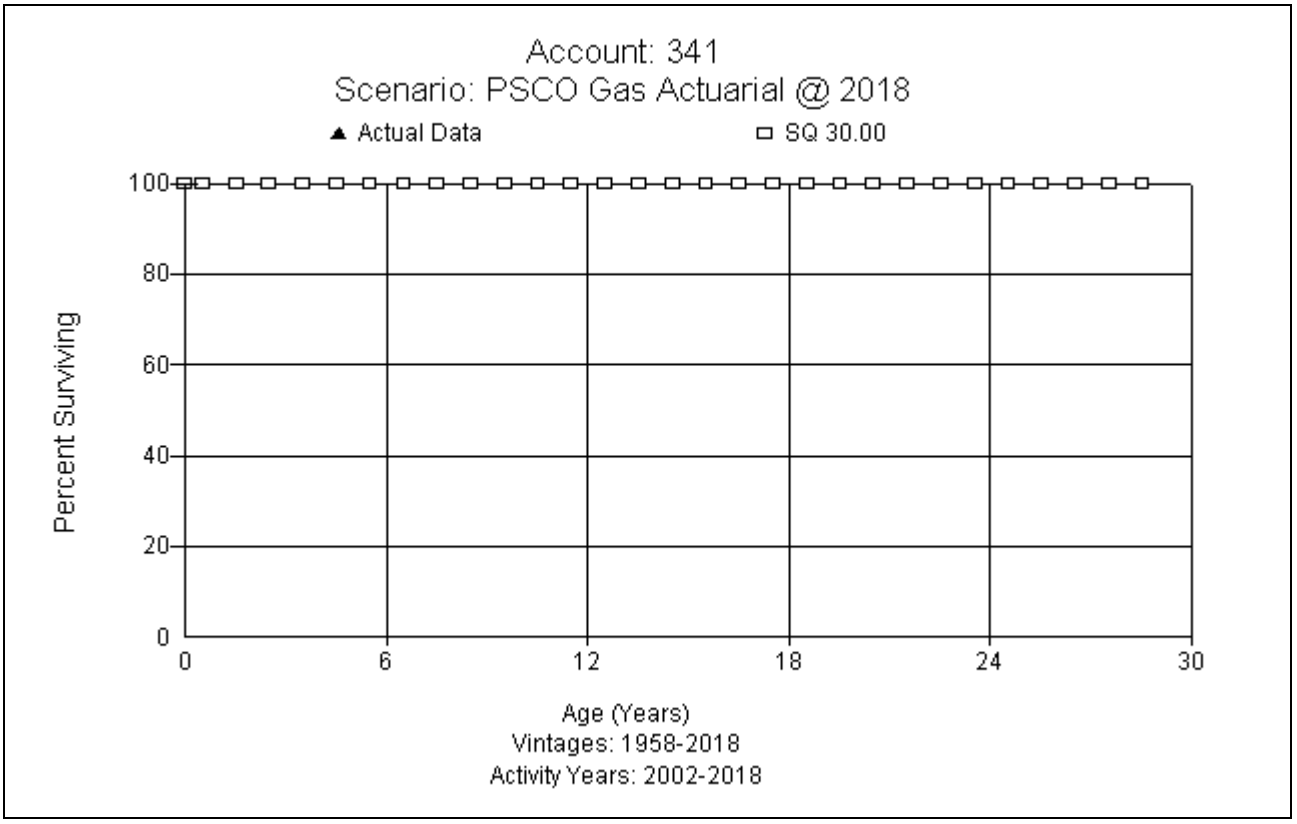


Gas Products Extraction Accounts, FERC Accounts 341-346

Company personnel report that there are three extraction facilities: Baxter (older and uses a simple process), Rifle (installed at West Douglas in 1981 and was moved to Rifle in 1995 and used more than its design rating) and Roundup (which dries gas out of storage field and was installed in the mid-1990s).

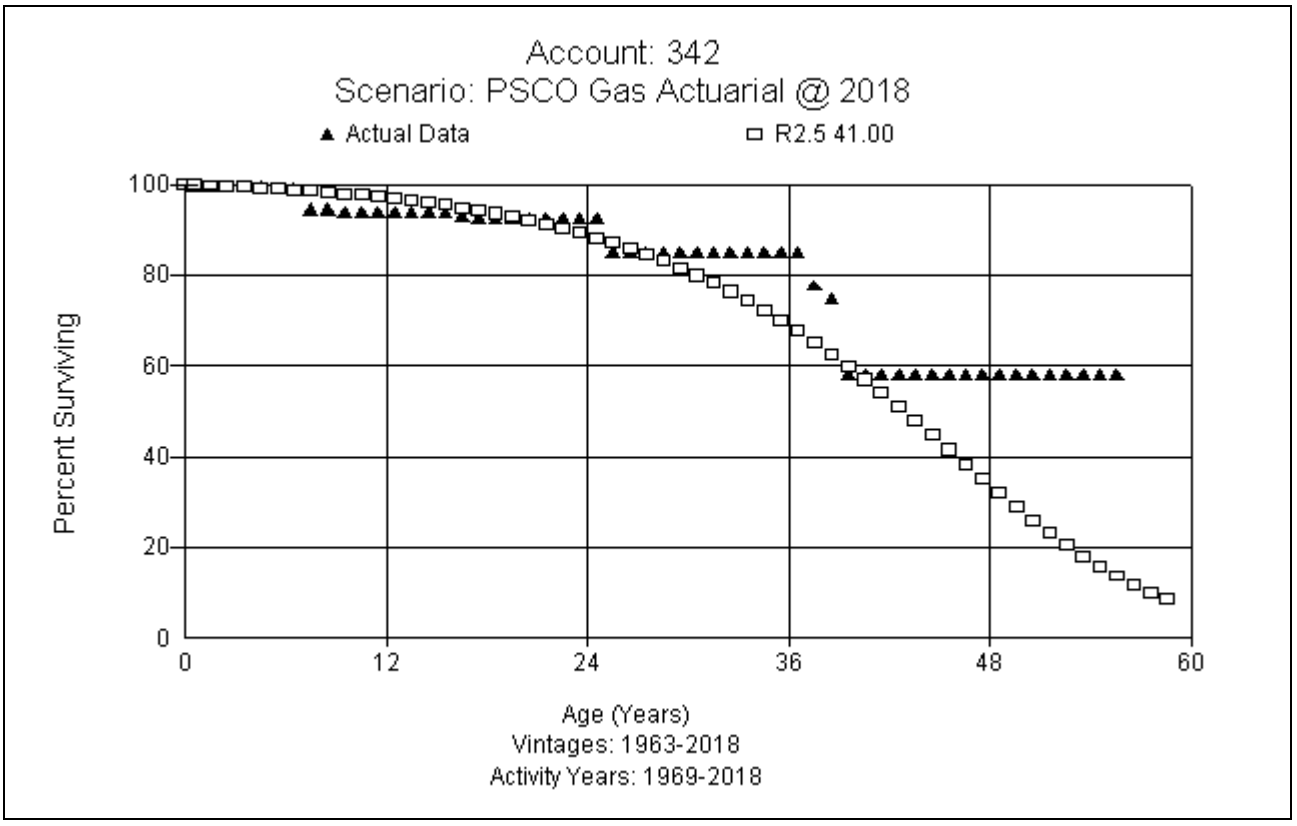
FERC Account 341 Structures and Improvements (30 SQ)

This account consists of production extraction station controls, yard improvements, and associated equipment and structures. The balance in this account is $450.2 thousand. This account has an approved life and curve of 30 years with an SQ dispersion. Due to the lack of retirement experience, actuarial analysis was not used to determine life characteristics for this account. This study recommends retaining the 30 year life and SQ dispersion. A graph of the actual experience and the selected Iowa Curve is shown below.



FERC Account 342 Extraction and Refining Equipment (41 R2.5)

This account consists of production extraction equipment, piping, and associated equipment. The balance in this account is $8.5 million. This account has an approved life and curve of 35 years with an R1.5 dispersion. There are more retirements in this account than in the 2012 depreciation study. Actuarial analysis shows a longer life with a slightly different dispersion curve. This study recommends moving to a 41 year life and an R2.5 dispersion. A graph of the actual experience and the selected Iowa Curve is shown below.

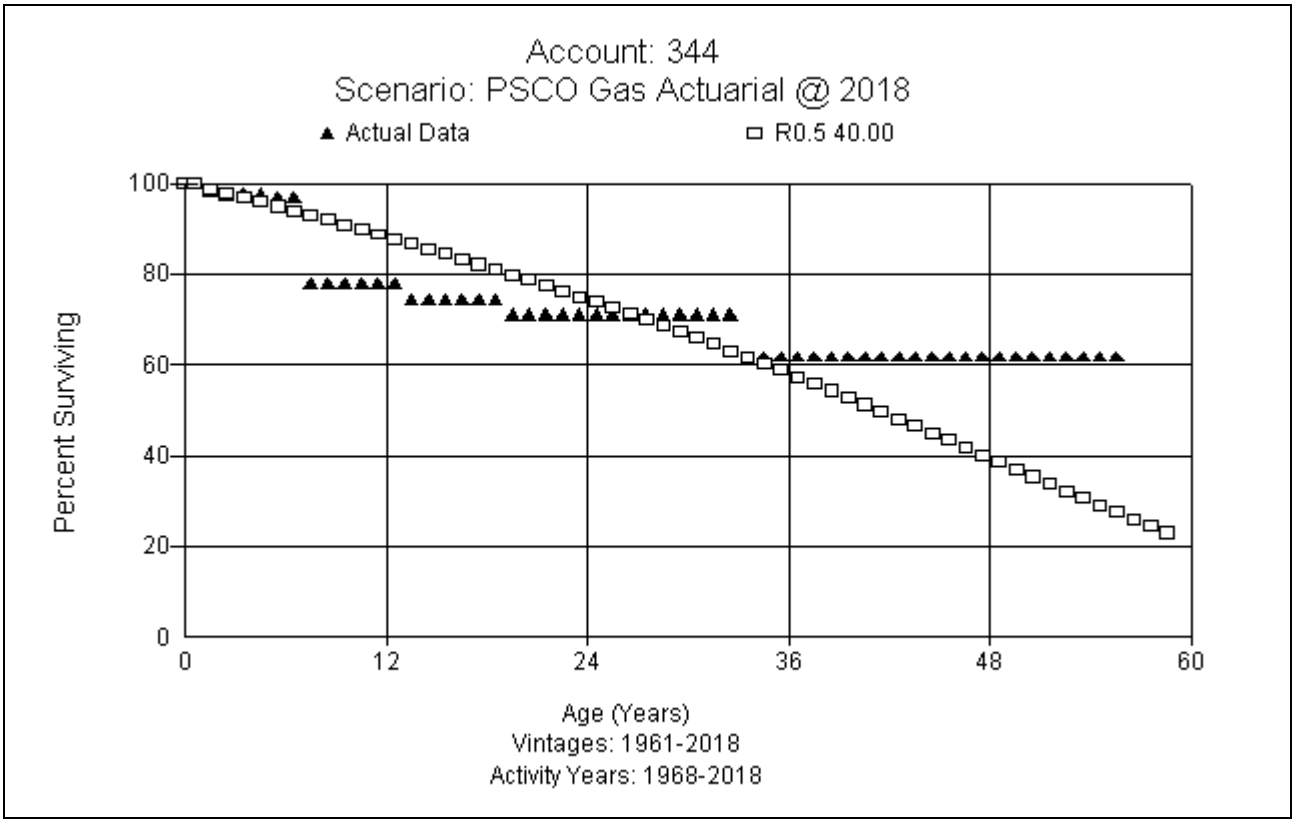


FERC Account 343 Pipe Lines (40 R0.5)

This account consists of the costs associated with gas and liquid pipelines used in connection with the processing of natural gas. The balance in this account is $0. This account has no approved life and curve and life. Thus there is no historic data where actuarial analysis could be used to determine life characteristics for this account. Based on judgment, this study recommends a 40 year life and R0.5 dispersion, which is the current proposal for Account 344, Extracted Products Storage Equipment.

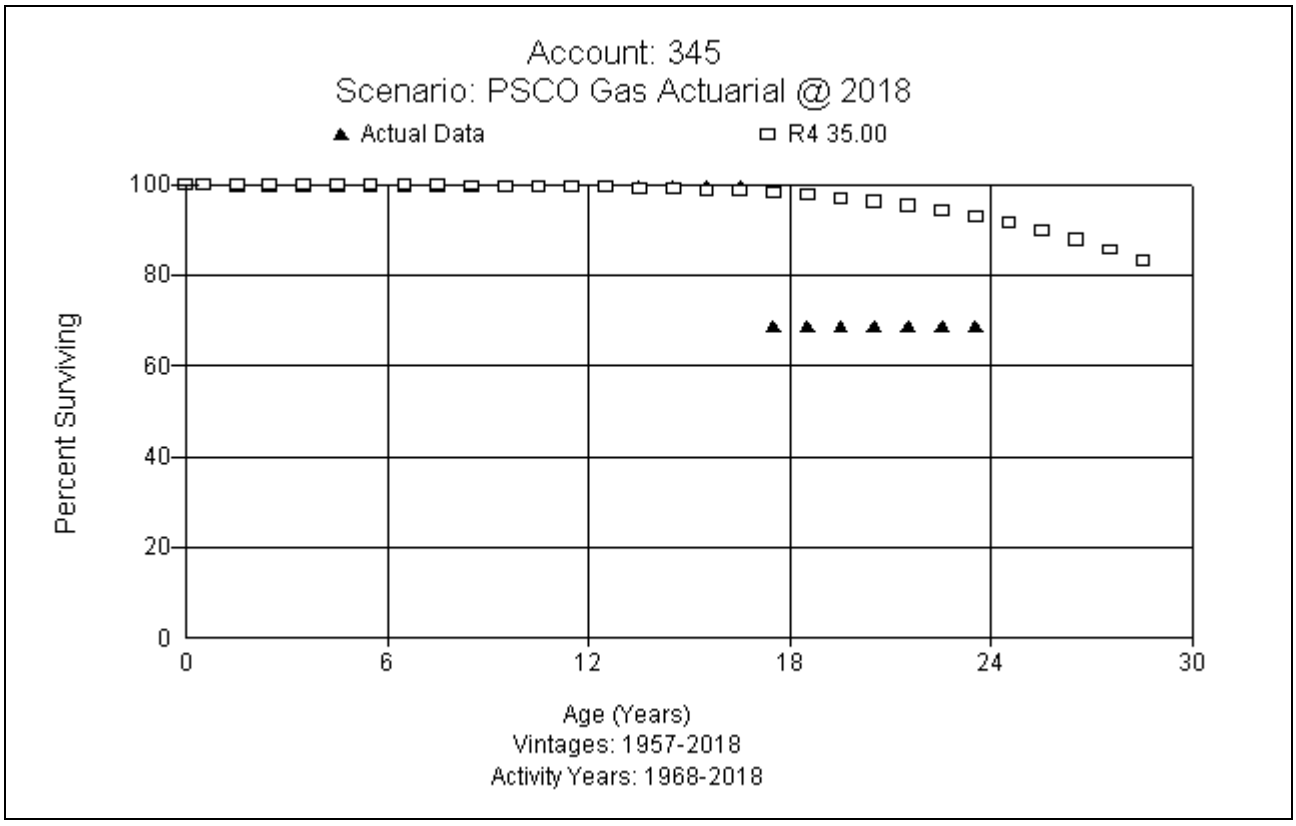
FERC Account 344 Extracted Product Storage Equipment (40 R0.5)

This account consists of production extraction storage tanks and associated equipment. The balance in this account is $206.3 thousand. The approved life for this account is 31 years with an R0.5 dispersion. This analysis shows a longer life than is currently approved. This study recommends moving to a 40 year life while retaining an R0.5 dispersion. A graph of the actual experience and the selected Iowa Curve is shown below.



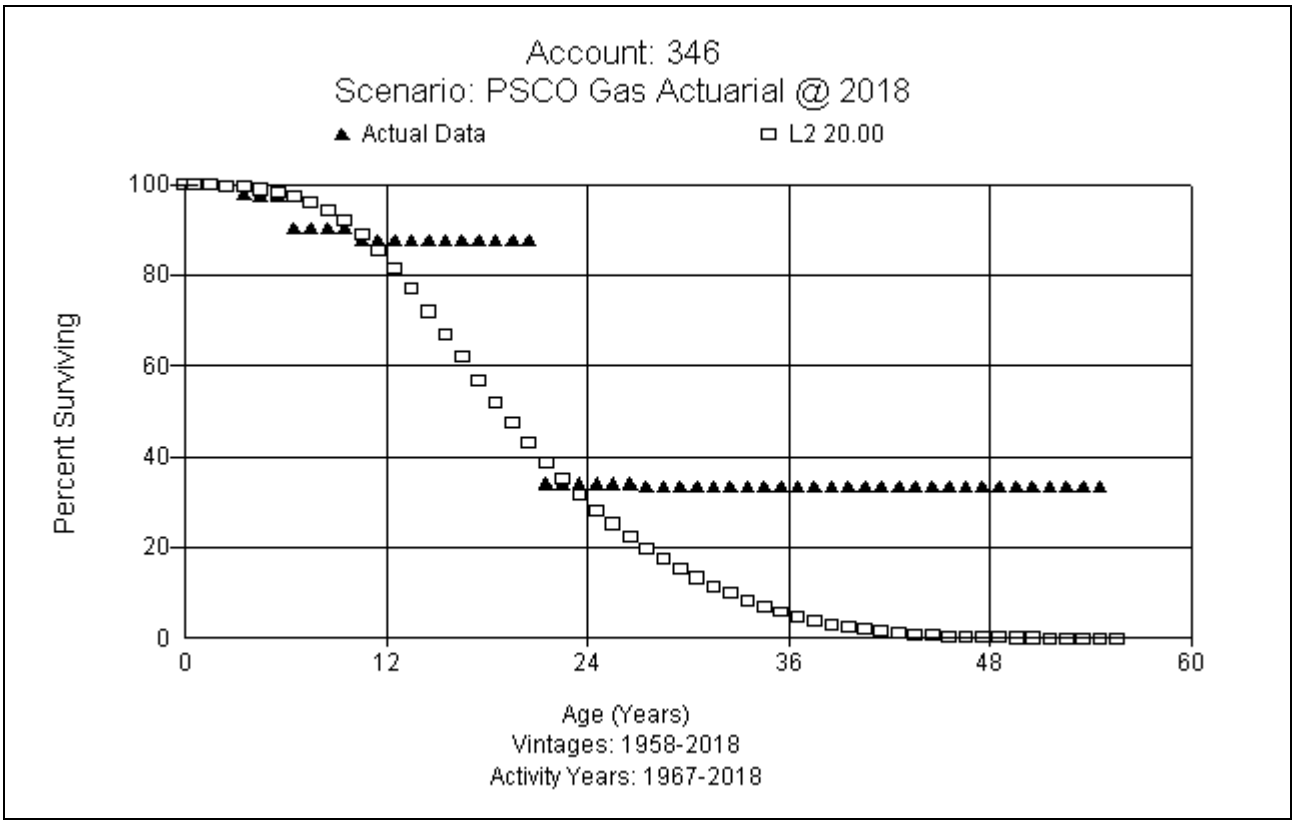
FERC Account 345 Compressor Equipment (35 R4)

This account consists of production extraction compressor and controls. The balance in this account is $452.9 thousand. This account has an approved life and curve of 35 years with an R3 dispersion. This study recommends retaining the 35 year life and moving to an R4 dispersion. A graph of the actual experience and the selected Iowa Curve is shown below.



FERC Account 346 Gas Measuring & Regulating Equipment (20 L2)

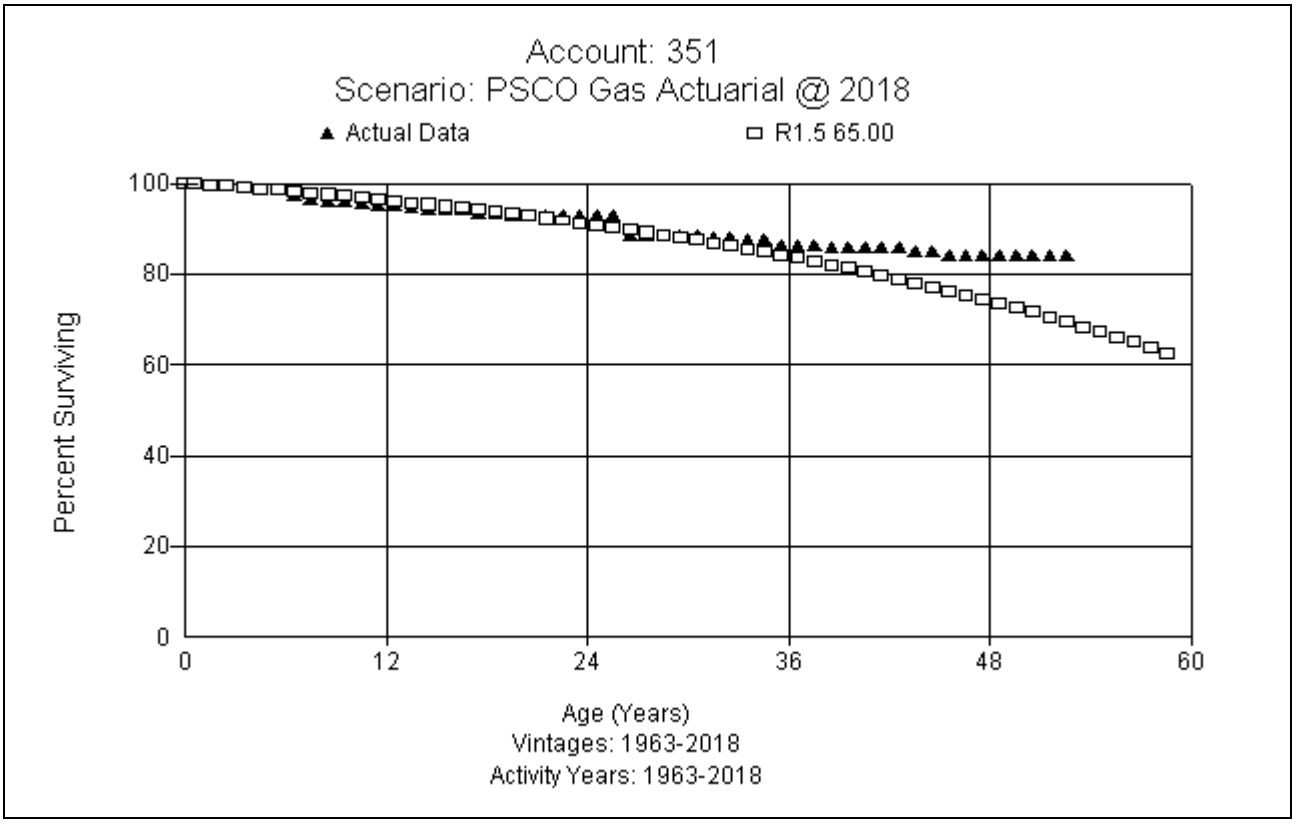
This account consists of metering and regulating station controls, meters, and associated equipment. The balance in this account is $84.3 thousand. The approved life for this account is 23 years with an L1.5 dispersion. Actuarial analysis shows a slightly shorter life with steeper retirement dispersion. This study recommends moving to a 20 year life and an L2 dispersion. A graph of the actual experience and the selected Iowa Curve is shown below.



Underground Storage Accounts, FERC Accounts 351 – 357

FERC Account 351 Structures and Improvements (65 R1.5)

This account consists of underground storage station controls and other associated equipment. The balance in this account is $1.5 million. The approved life for this account is 50 years with an R1 dispersion. Company personnel report that the structures in this account are all in good condition. Given that the average age of survivors in this account is 35 years, Company experts would anticipate a longer operational life for assets in this account than the approved 50 years. Actuarial analysis (although somewhat limited) reflects a longer life for this account with a slightly different dispersion. This study recommends moving to a 65 year life and R1.5 dispersion based on recommendations for other accounts in this function. A graph of the actual experience and the selected Iowa Curve is shown below.

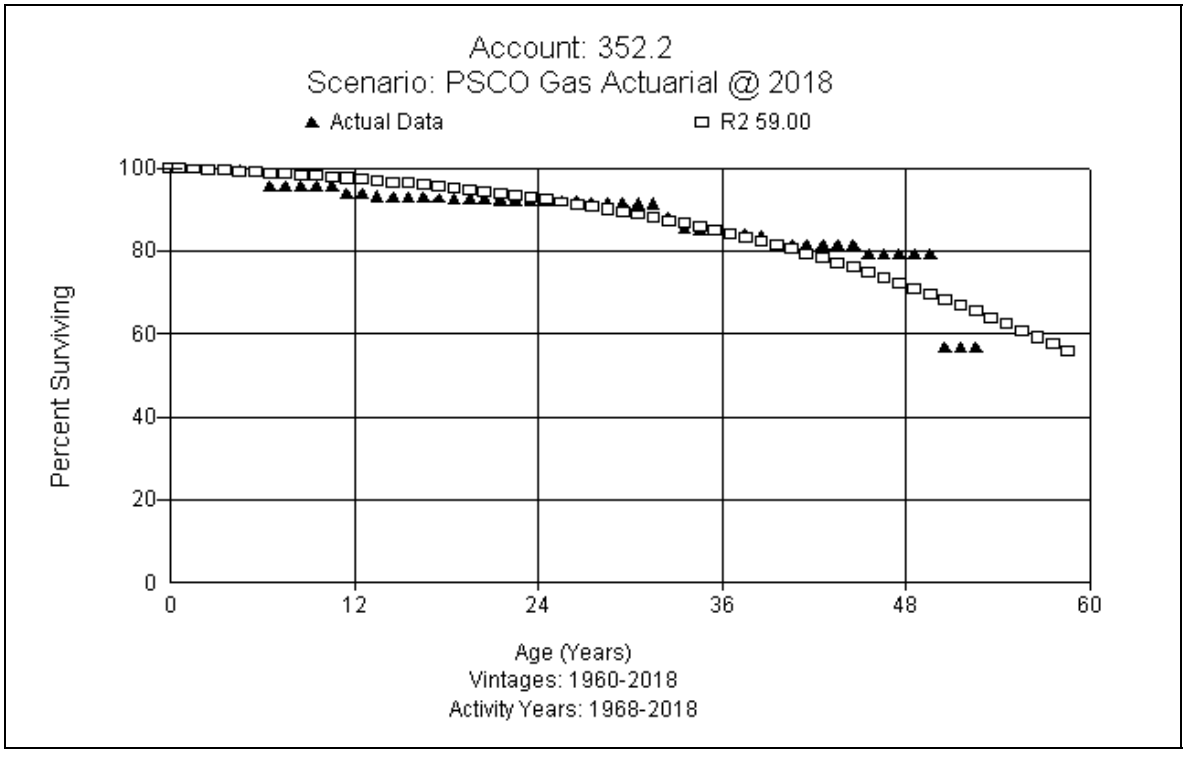


FERC Account 352.1 Storage Leaseholds and Rights (59 R2)

This account consists primarily of storage leaseholds and rights. The balance in this account is $688 thousand. The approved life for this account is 50 years with an R1 dispersion. The prior depreciation study used the same recommendation for Accounts 352.1, 352.2, and 352.3. This study proposes the same combination. Accounts 352.1 and 352.3 have limited or no retirement history, so the actuarial experience from Account 352.2 Reservoirs is used to determine the life for this account. This study recommends moving to a 59 year life and an R2 dispersion based on the recommendation for Account 352.2. See Account 352.2 for a graph of the actual experience and the selected Iowa Curve.

FERC Account 352.2 Reservoirs (59 R2)

This account consists primarily of gas wells used as storage reservoirs. The balance in this account is $11.6 million. The approved life for this account is 50 years with an R1 dispersion. The prior depreciation study used the same recommendation for Accounts 352.1, 352.2, and 352.3. This study proposes the same combination. Company personnel report that the wells in this account are mostly 1970s vintage. The Company does casing inspections every 3 years. When casings begin to go bad, that indicates that the well will have to be abandoned. Currently, there are no problems with casings showing any change in life. Based on current circumstances, Company personnel anticipate a longer operational life for this account. Based on recent experience, input from Company personnel, and the recommendations for Accounts 352.1, 352.2, and 352.3, this study recommends moving to a 59 year life and an R2 dispersion. A graph of the actual experience and the selected Iowa Curve is shown below.

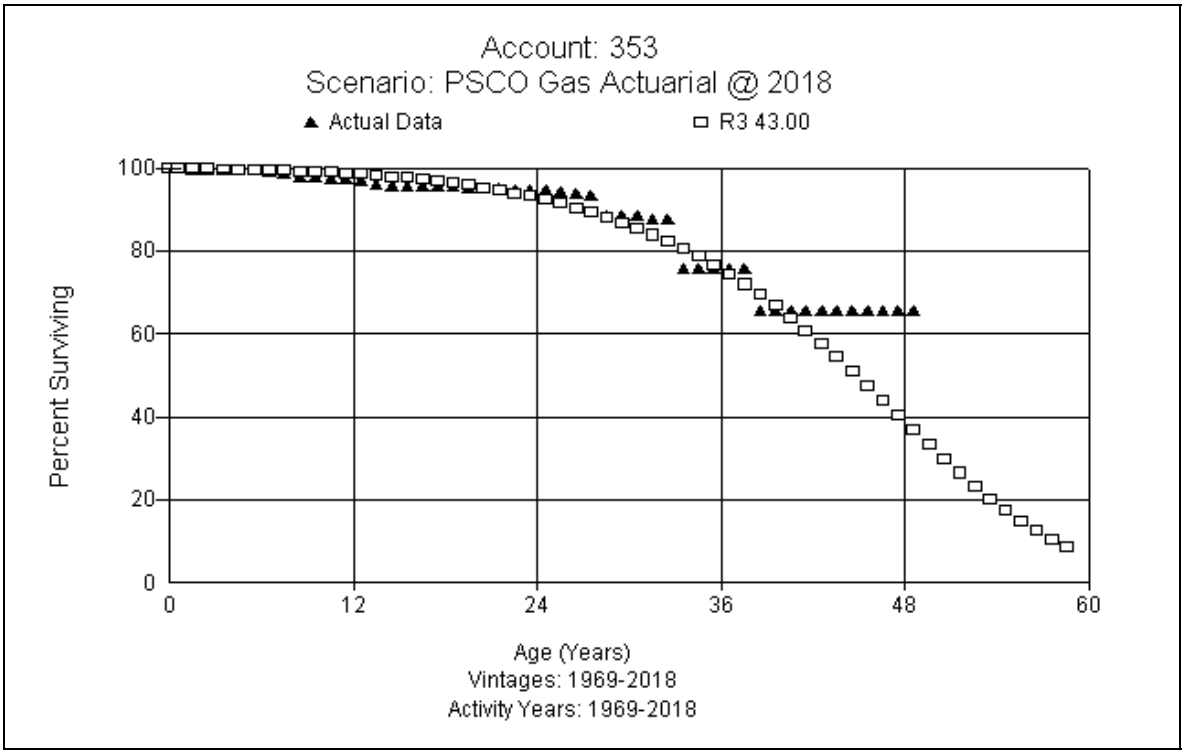


FERC Account 352.3 Non-recoverable Natural Gas (59 R2)

This account consists primarily of non-recoverable gas in storage reservoirs. The balance in this account is $133.4 thousand. The approved life for this account is 50 years with an R1 dispersion. The prior depreciation study used the same recommendation for Accounts 352.1, 352.2, and 352.3. This study proposes the same combination. Accounts 352.1 and 352.3 have limited or no retirement history, so the actuarial experience from Account 352.2 Reservoirs is used to determine the life for this account. This study recommends moving to a 59 year life and an R2 dispersion based on the recommendation for Account 352.2. See Account 352.2 for a graph of the actual experience and the selected Iowa Curve.

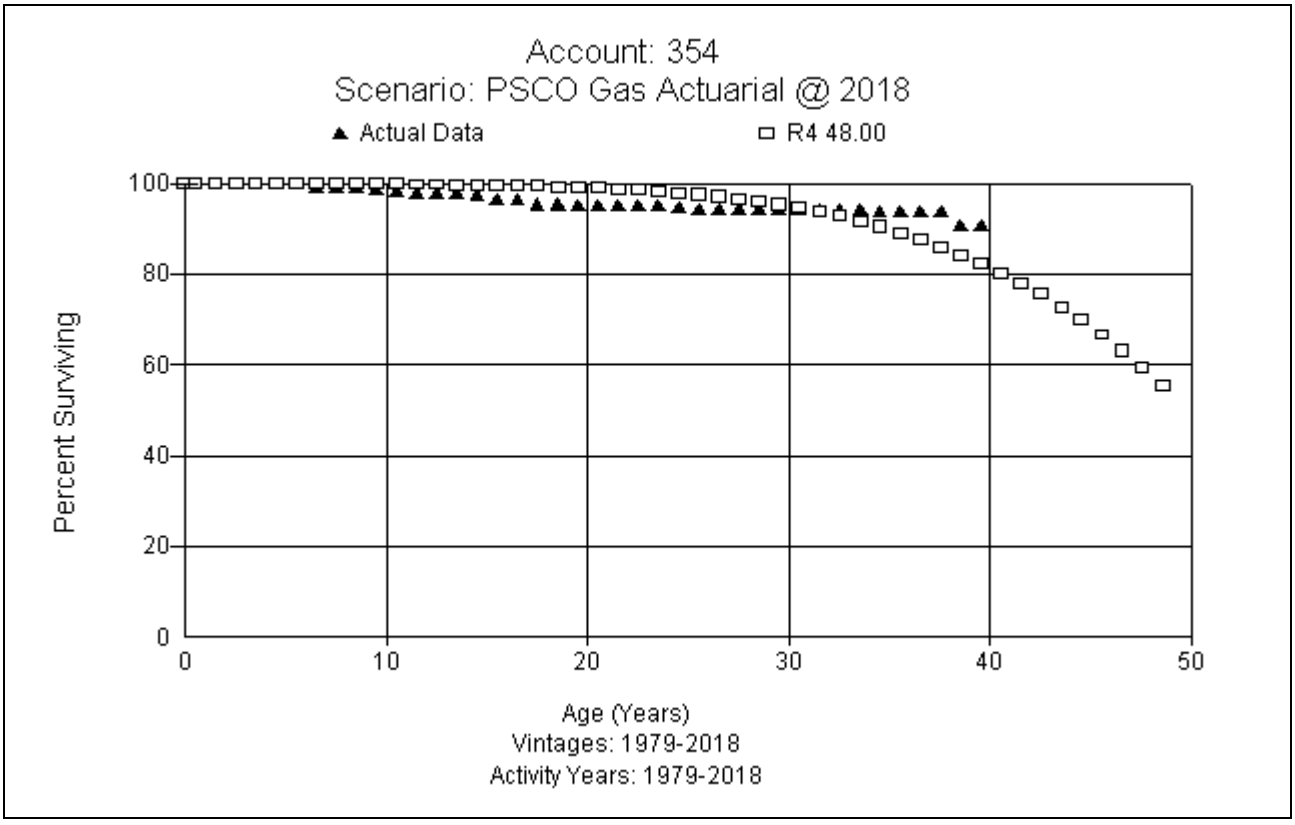
FERC Account 353 Lines (43 R3)

This account consists of underground storage lines and associated equipment. The balance in this account is $3.9 million. The approved life for this account is 55 years with an R3 dispersion. Company personnel report that this account contains both gas lines and water lines. The water system deteriorated to the point of having to be totally replaced in 2011, well before 55 years. The Company is also seeing deterioration in the gas lines. Before the 2011 replacement of water lines, the Company had an issue of microbial bacterial internal corrosion in the water lines. Company experts believe that the new material for the water lines may help to resolve that issue. The existing application of steel for water lines lasted less than 35 years. Based on recent activity and judgment, this study recommends moving to a 43 year life with an R3 dispersion. A graph of the actual experience and the selected Iowa Curve is shown below.



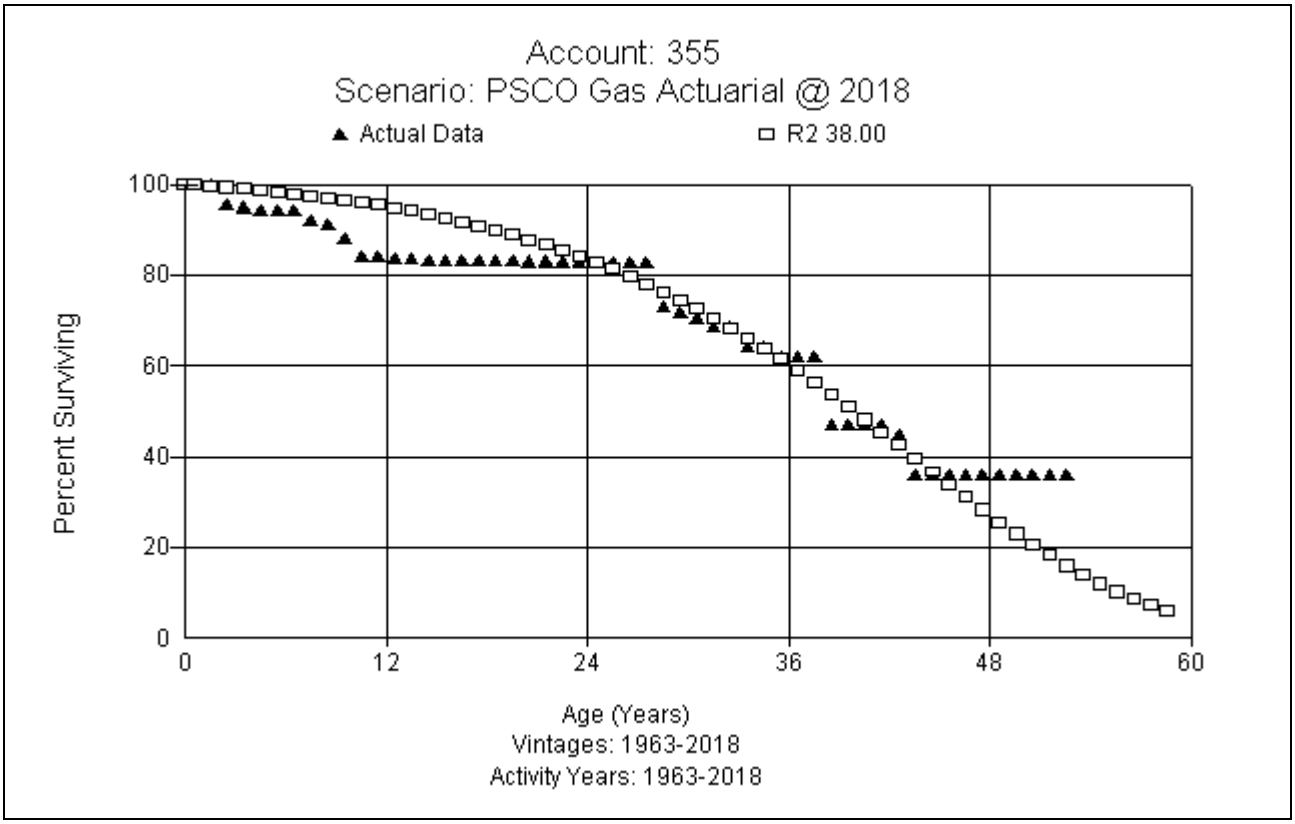
FERC Account 354 Compressor Station Equipment (48 R4)

This account consists of compressor station equipment and piping for underground storage operations and associated equipment. The balance in this account is $10.8 million. The approved life for this account is 55 years with an R4 dispersion. The life of compressors in storage is affected by the amount of run time and how clean the gas is. Actuarial analysis shows a shorter life for this account. Based on Company experience, this study recommends moving to a 48 year life with an R4 dispersion. A graph of the actual experience and the selected Iowa Curve is shown below.



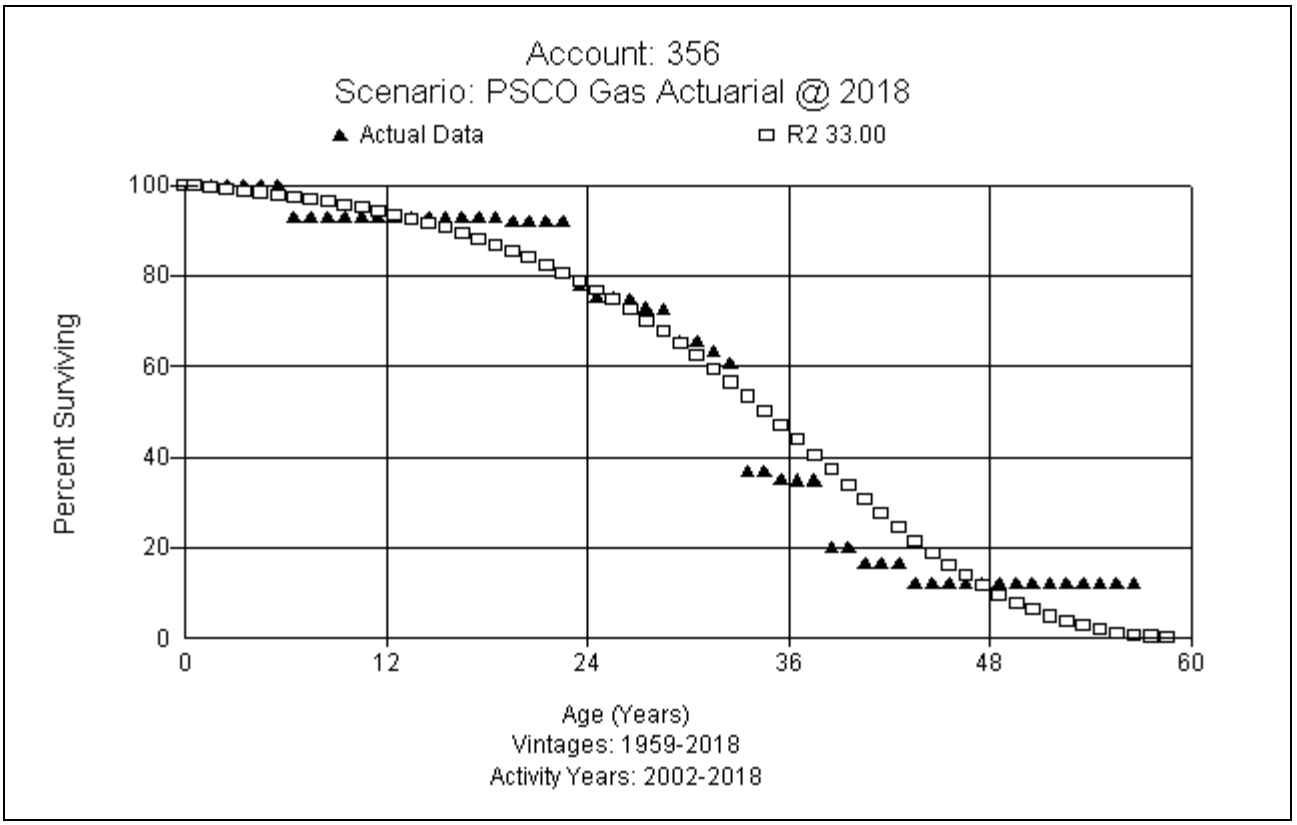
FERC Account 355 Measuring & Regulating Equipment (38 R2)

This account consists of underground storage metering, regulating piping, and related equipment. The balance in this account is $532 thousand. The approved life for this account is 28 years with an R1 dispersion. Company personnel report that Remote Terminal units ("RTU") will only last approximately 20 years, whereas some of the other assets will last longer. At Roundup underground storage, the Company replaced the orifice meters with electronics. Company personnel state that a life of less than 30 years would be expected for the meter and RTU components, however, a significant investment in this account is in piping. Based on the actuarial analysis and mix of assets in the account, this study recommends moving to a 38 year life and an R2 dispersion. A graph of the actual experience and the selected Iowa Curve is shown below.



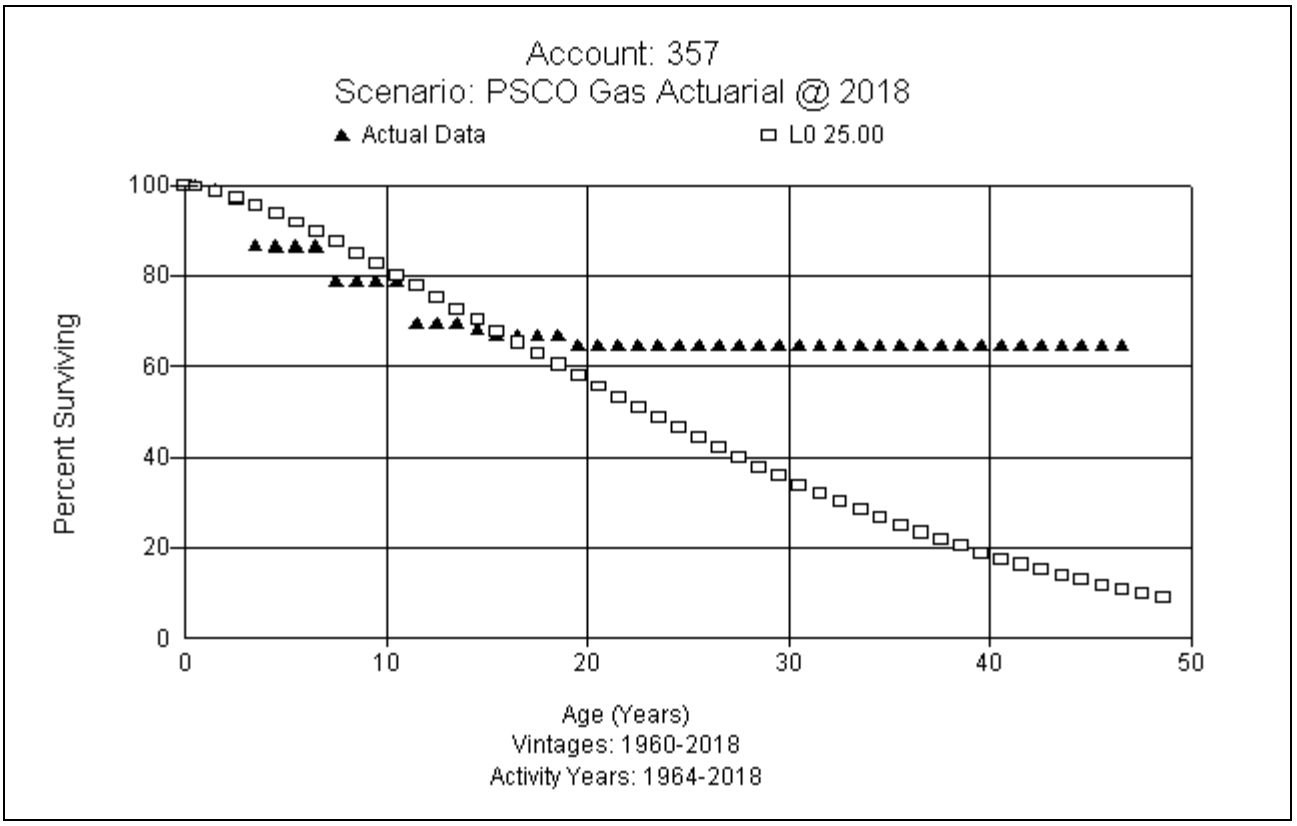
FERC Account 356 Purification Equipment (33 R2)

This account consists of underground storage purification equipment and related equipment. The balance in this account is $4.7 million. The approved life for this account is 50 years with an R3 dispersion. Company experts have different operational life expectations for various assets in this account: separators are expected to last 35-40 years; dehydration tanks are original equipment (with the vessel of the dehydration tank being pressurized, a life longer than 40 years would not be advisable); and most of the other equipment would have a shorter life. Measuring and regulating equipment is generally orifice meters, and Company personnel report their operational expectations that electronic associated with these meters would have only a 20-25 year life. Based on the actuarial analysis and company input, this study recommends moving to a 33 year life with an R2 dispersion. A graph of the actual experience and the selected Iowa Curve is shown below.



FERC Account 357 Other Equipment (25 L0)

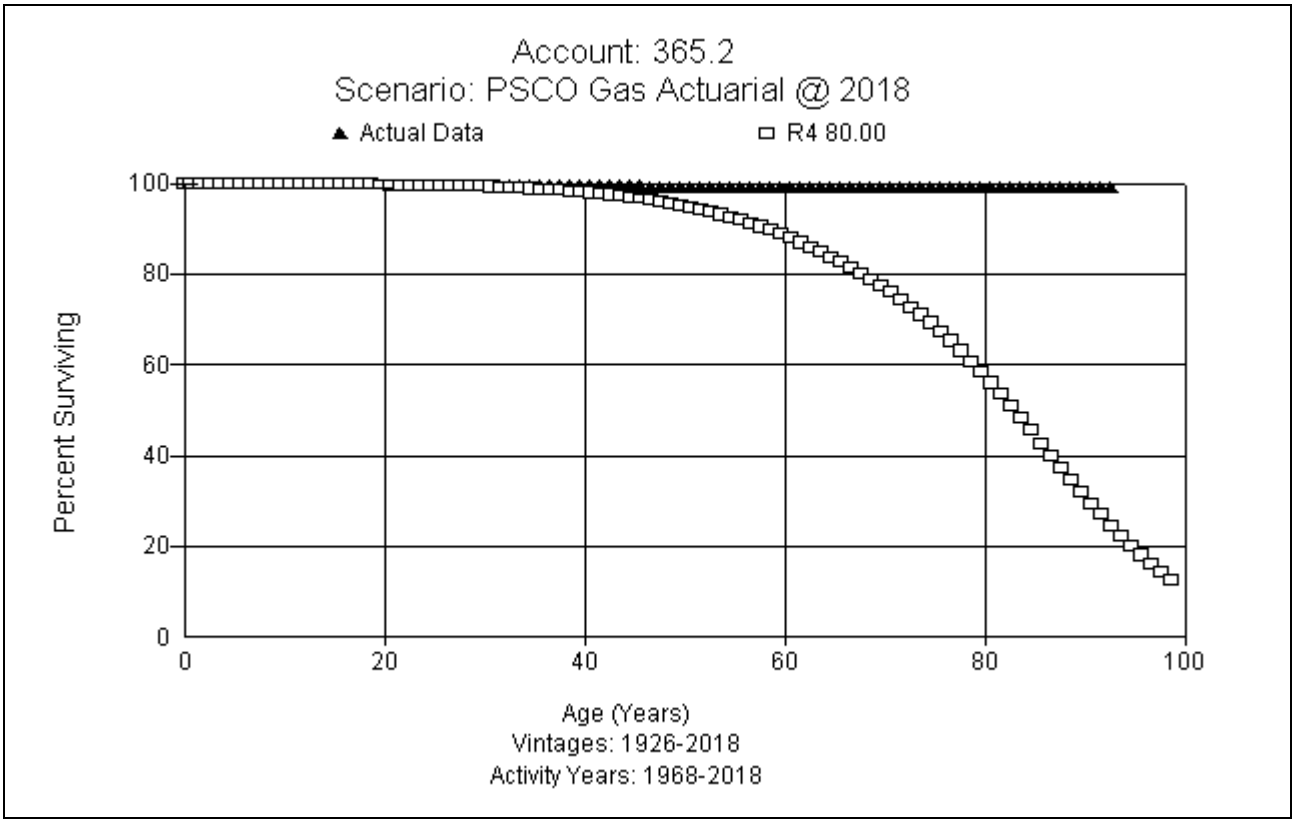
This account consists of underground storage controls, communication equipment, and other related equipment. The balance in this account is $56 thousand. The approved life for this account is 16 years with an L1.5 dispersion. Actuarial analysis shows a slightly longer life than currently approved. This study recommends moving to a 25 year life and an L0 dispersion. A graph of the actual experience and the selected Iowa Curve is shown below.



Gas Transmission Accounts, FERC Accounts 365.2-370

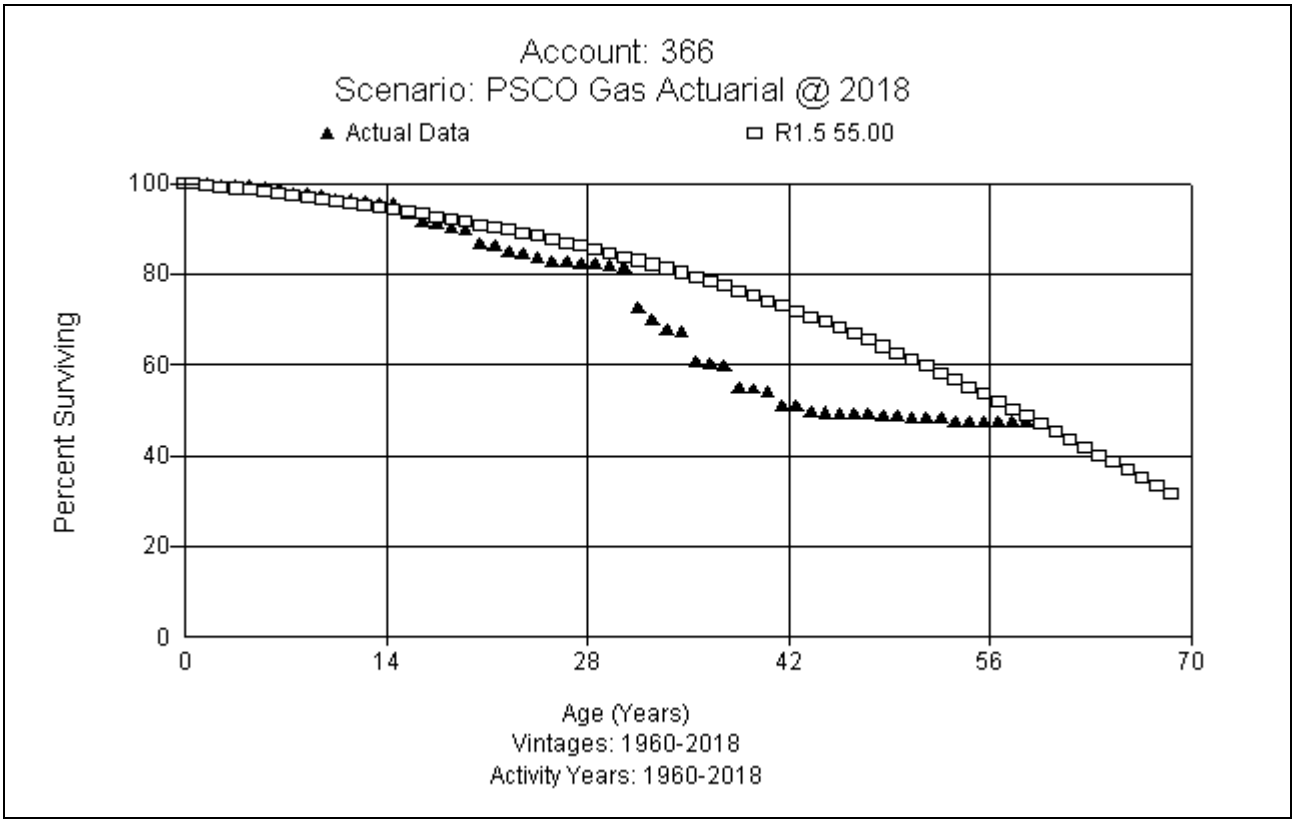
FERC Account 365.2 Land Rights (80 R4)

This account consists of land rights associated with transmission facilities. The balance in this account is $35.6 million. The approved life for this account is 65 years with an R4 dispersion. Due to the low level of retirements, actuarial analysis was not used to determine life characteristics for this account. Company experts expect the land rights to be in service at least as long as Account 367, Transmission Mains. Based on the investment in this account, this study recommends moving to an 80 year life and an R4 dispersion. The life proposed for Transmission Mains in Account 367 in this depreciation study is 72 years. A graph of the actual experience and the selected Iowa Curve is shown below.



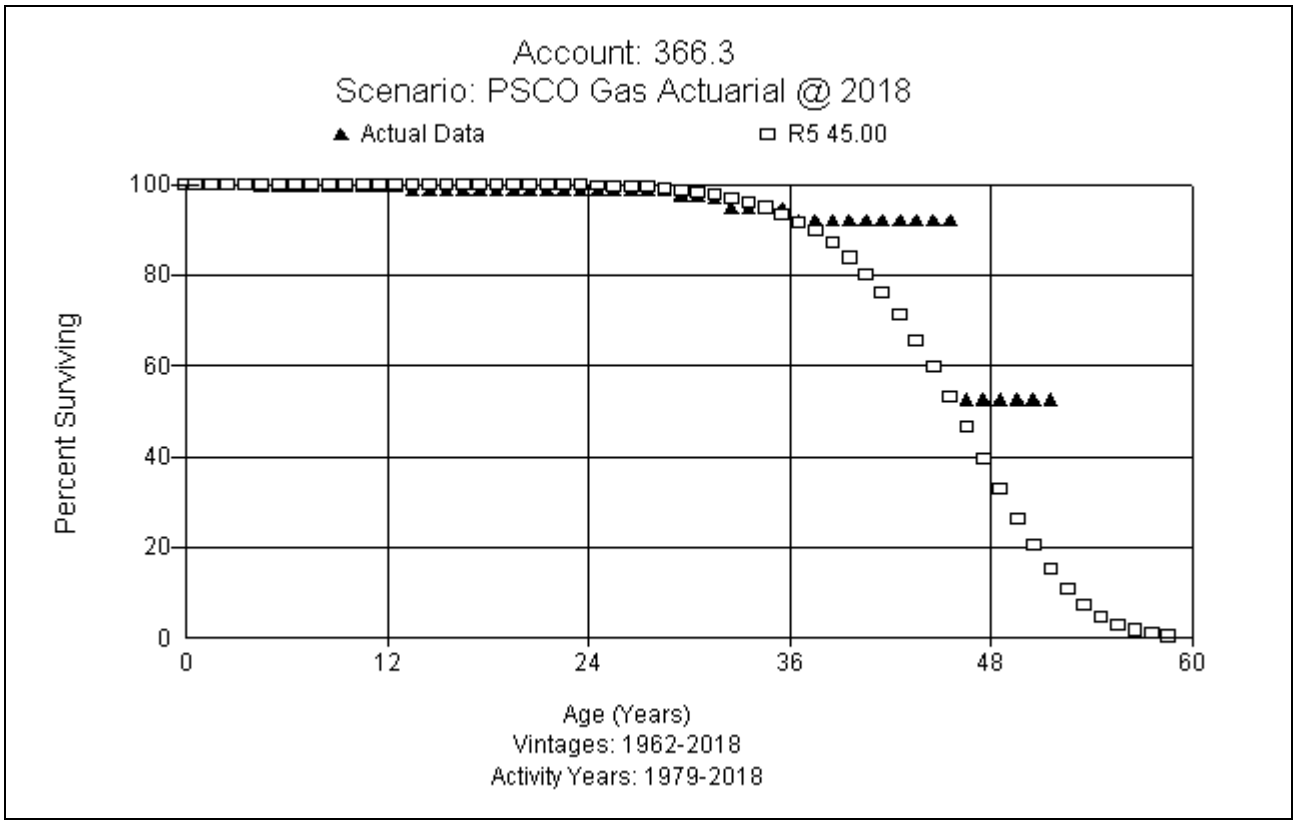
FERC Account 366 Structures and Improvements (55 R1.5)

This account consists of buildings and other related structures and improvements related to transmission operations. The balance in this account is $31.1 million. The approved life for this account is 55 years with an R1.5 dispersion. Company personnel see no operational reason that the life for assets in this account to decrease, even though some actuarial analysis bands indicate a shorter average service life. Based on input from Company personnel and judgment, this study recommends retaining the 55 year life and R1.5 dispersion. A graph of the actual experience and the selected Iowa Curve is shown below.



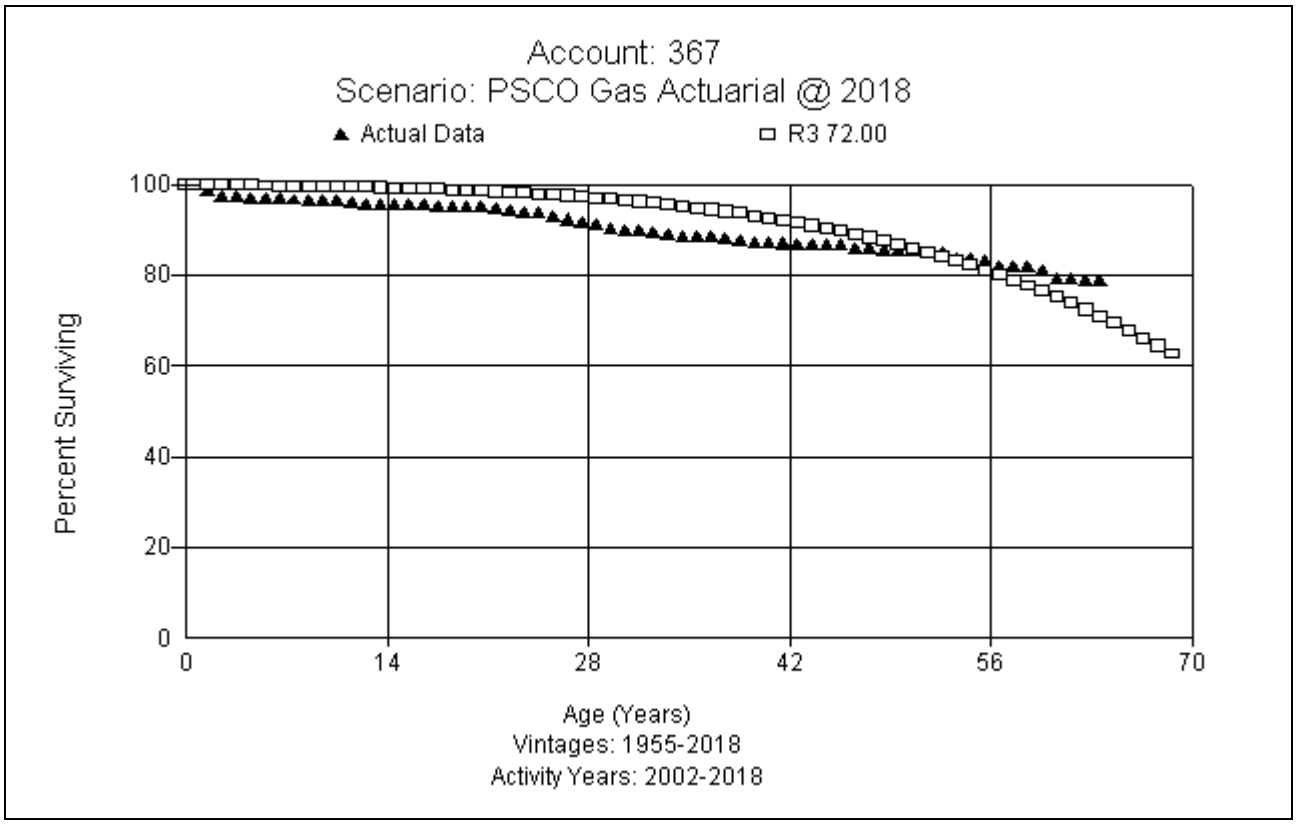
FERC Account 366.3 Other Structures (45 R5)

This account consists primarily of structures and assets related to control of the transmission system. The balance in this account is $179 thousand. The approved life for this account is 38 years with an S5 dispersion. This study recommends moving to a 45 year life with an R5 dispersion. A graph of the actual experience and the selected Iowa Curve is shown below.



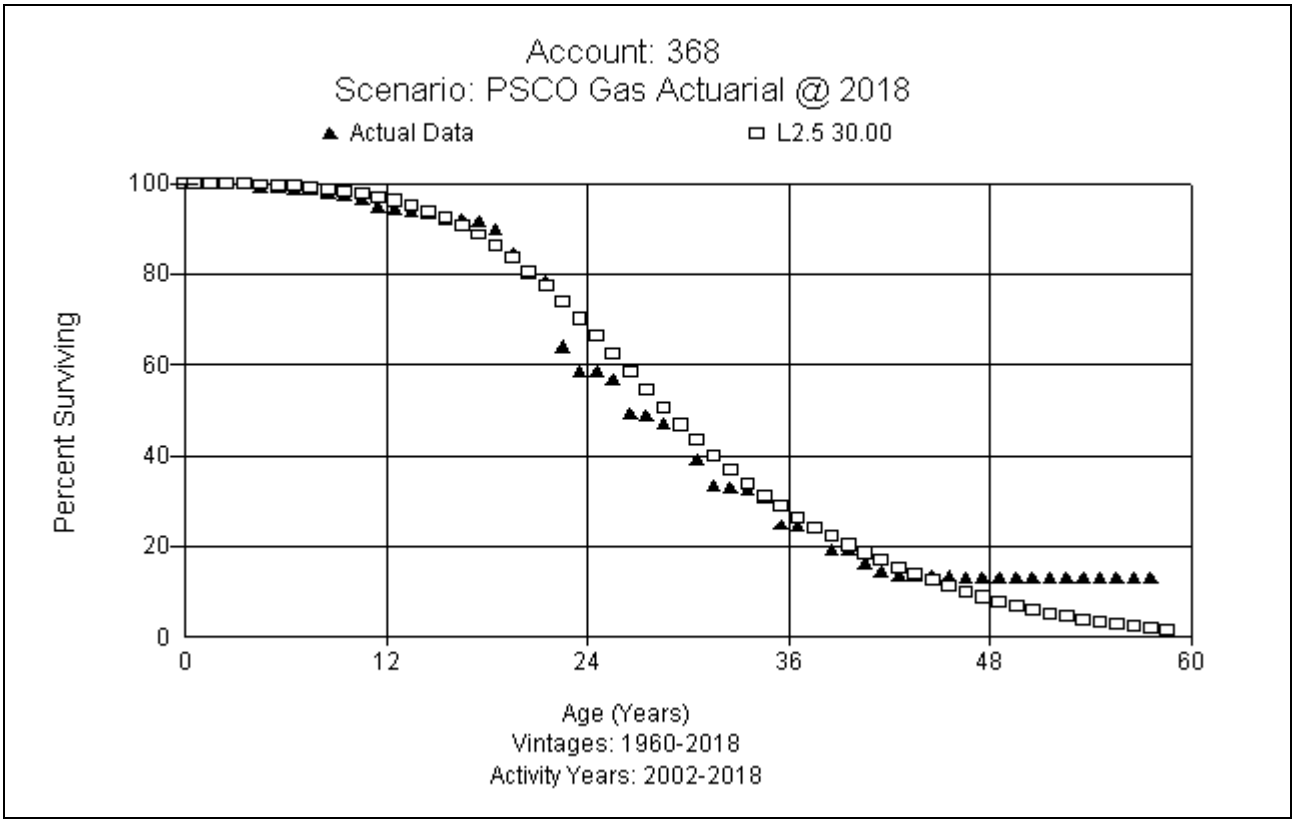
FERC Account 367 Mains (72 R3)

This account consists of transmission mains and related assets. The balance in this account is $701.9 million. The approved life for this account is 72 years with an R3 dispersion. Company personnel indicate that Pipeline Hazardous Materials Safety Administration ("PHMSA") issued a final rule late 2019 with an effectiveness date of July 2020 entitled "Safety of Gas Transmission Pipelines: MAOP Reconfirmation, Expansion of Assessment Requirements and Other Related Amendments." This rule requires operators to replace or test gas transmission pipelines that lack records used to establish Maximum Allowable Operating Pressure (MAOP). PSCo's gas transmission system has significant mileage of legacy pipeline that was originally installed prior to federal code requirements which the Company has been replacing and retiring to remove from active status. Company personnel report that if certain records are missing, the Company will have to either retest or replace pipe. PSCo has 15 years to work through the pipe that would be at issue, and this could trigger a shorter life for some pipe. Company personnel report that there is a high concentration of pre-1970s pipe that will be at risk. The West Main project, which was completed in 2016, was necessitated by the integrity findings. The project replaced 85 miles of mains and focused on assets older than the 1950s, which were older than 65 years at the time of replacement. As of year end 2018, the Company has inspected around 80% of transmission system. As a result of those inspections, Company personnel report that much of the 1950s pipe is still in very good condition. Prior to the 1950s installations, the pipe/coatings/CP/welding practices were not as good. With the uncertainty of the full effect of the PHMSA rules, Company personnel recommend that leaving the life as approved would be most appropriate. Based on input from Company personnel and actuarial analysis, this study recommends retaining the 72 year life and R3 dispersion. A graph of the actual experience and the selected Iowa Curve is shown below.


Account: 367
Scenario: PSCO Gas Actuarial @ 2018
Actual Data
R3 72.00
Percent Surviving
100
80
60
40
20
0
0
14
28
42
56
70
Age (Years)
Vintages: 1955-2018
Activity Years: 2002-2018

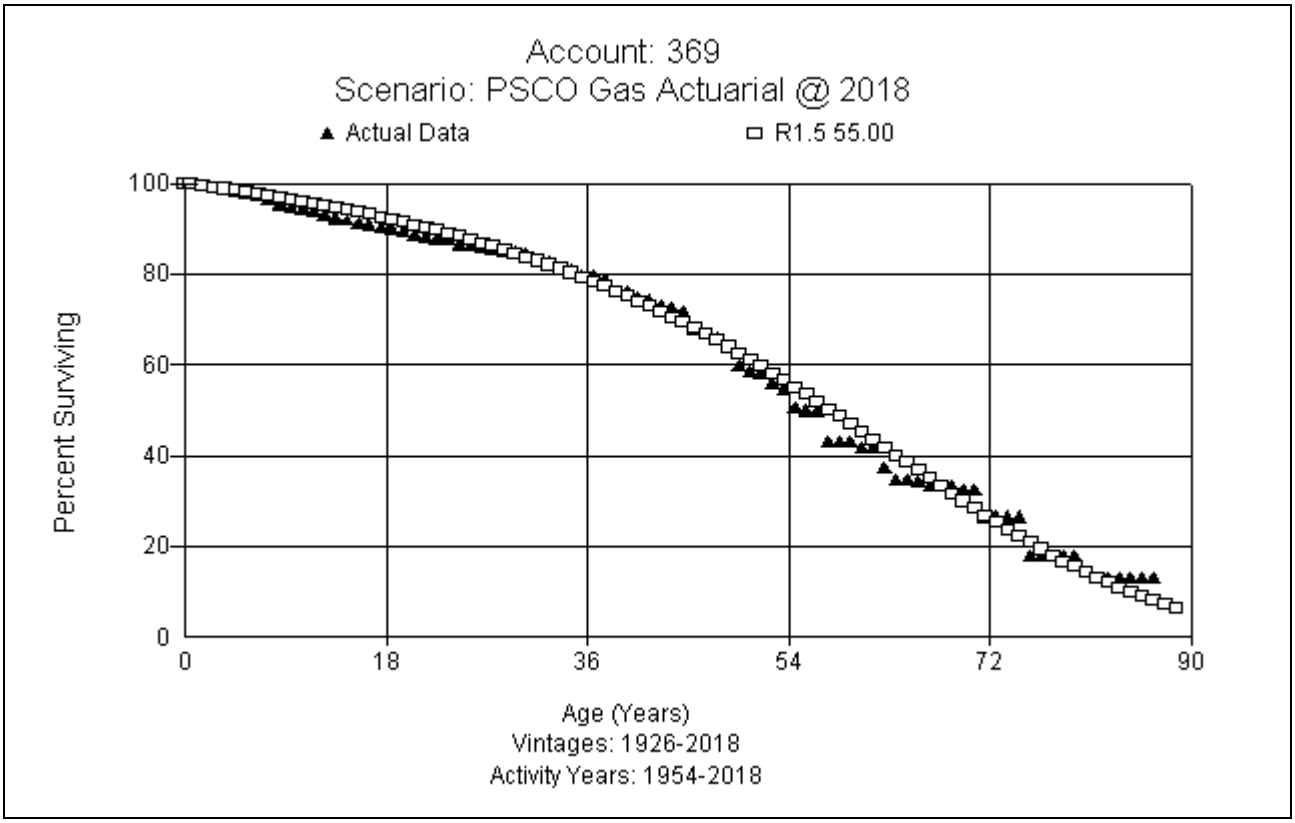
FERC Account 368 Compressor Station Equipment (30 L2.5)

This account consists of gas and air compressors, electrical, odorizers, controls used in transmission compression, and related assets. The balance in this account is $142.8 million. The approved life for this account is 35 years with an L2 dispersion. Company personnel report that refurbishments occur between 5-10 years for most machines, which occur between 30,000- 40,000 run hours. Nearly everything except the block is replaced during an overhaul. The cost to strip the compressor down is charged as removal cost. Company personnel report that they are running units more, which triggers shorter cycles for overhauls, thereby shortening the life. Based on input from Company personnel and actuarial analysis, this study recommends moving to a 30 year life with an L2.5 dispersion. A graph of the actual experience and the selected Iowa Curve is shown below.



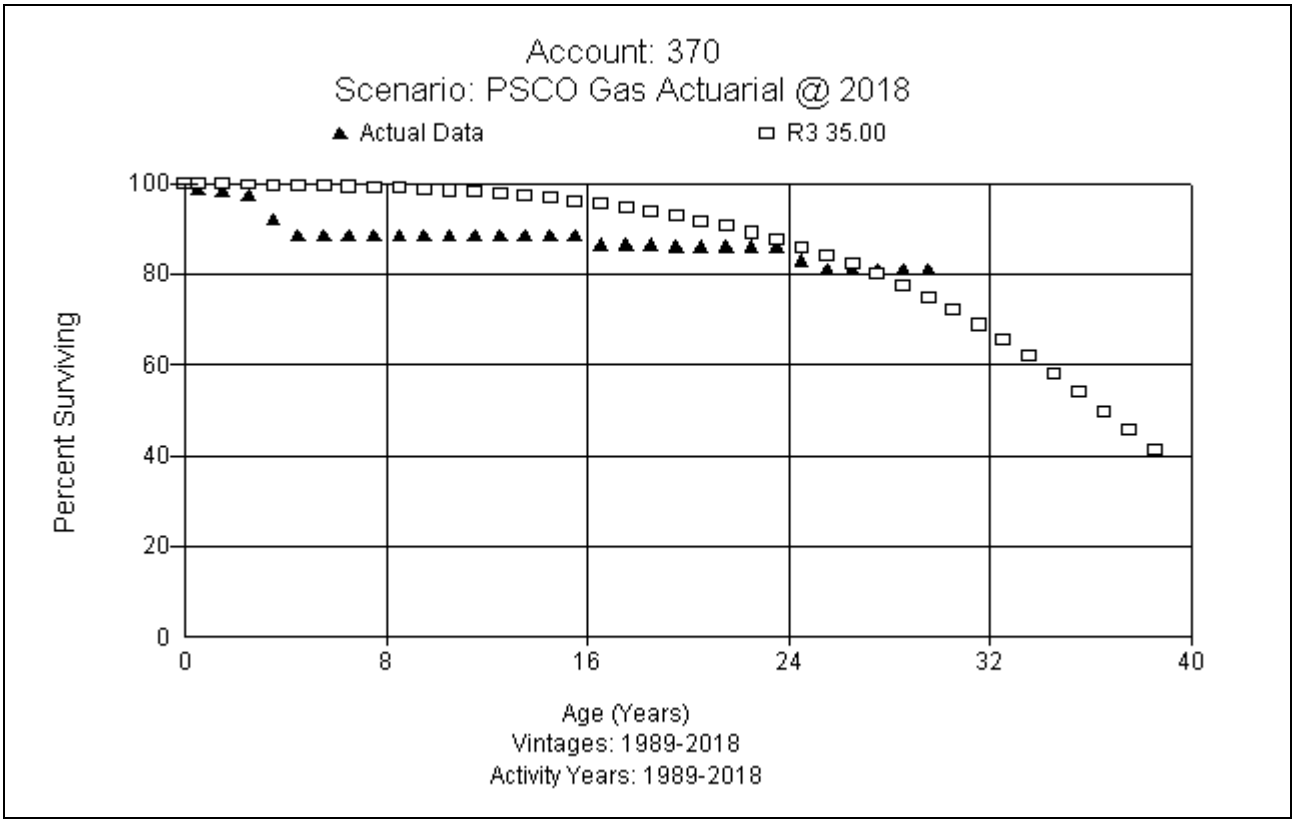
FERC Account 369 Measuring & Regulating Station Equipment (55 R1.5)

This account consists of transmission metering and regulating station equipment. The balance in this account is $107.7 million. The approved life for this account is 50 years with an R2 dispersion. The Company has added many remote shut-off valves in the last few years along with more remote monitoring equipment, which may catch problems earlier. The majority of meters are still turbine rotary. Company personnel expect the life of transmission valves (absent the remote control issue) to be close to, but less than, the life of the underlying pipe, and they expect the life of transmission M&R in this account to be slightly shorter than city gates in Account 379. Actuarial analysis reflects a longer life for this account. Based on input from Company personnel and actuarial analysis, this study recommends moving to a 55 year life with an R1.5 dispersion. A graph of the actual experience and the selected Iowa Curve is shown below.



FERC Account 370 Communication Equipment (35 R3)

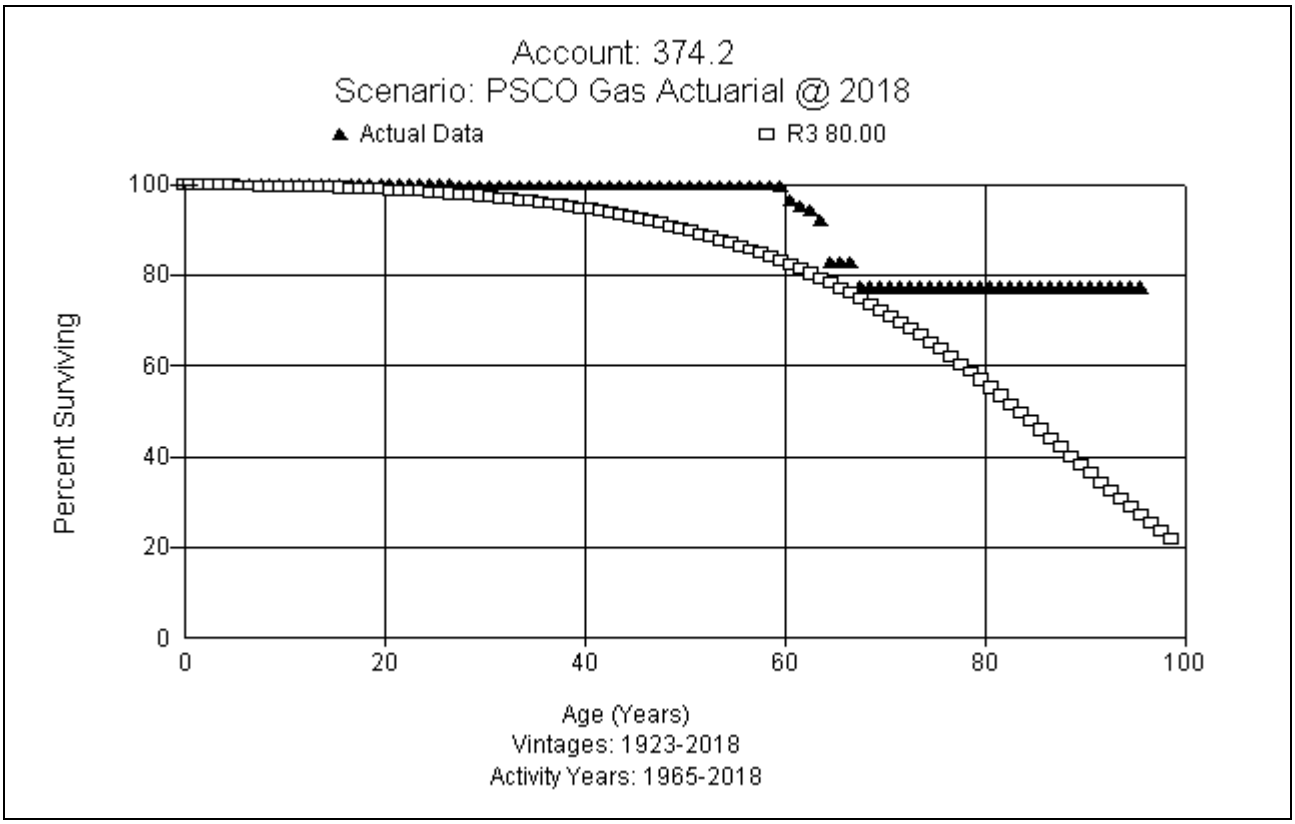
This account consists of microwave and radio communication equipment and related assets. The balance in this account is $2 million. The approved life for this account is 25 years with an R1.5 dispersion. Company personnel report that the existing life is short from an operational standpoint given the type of assets in the account. Based on actuarial analysis and judgement, this study recommends moving to a 35 year life with an R3 dispersion. A graph of the actual experience and the selected Iowa Curve is shown below.



Gas Distribution Accounts, FERC Accounts 374.2-383 and 387

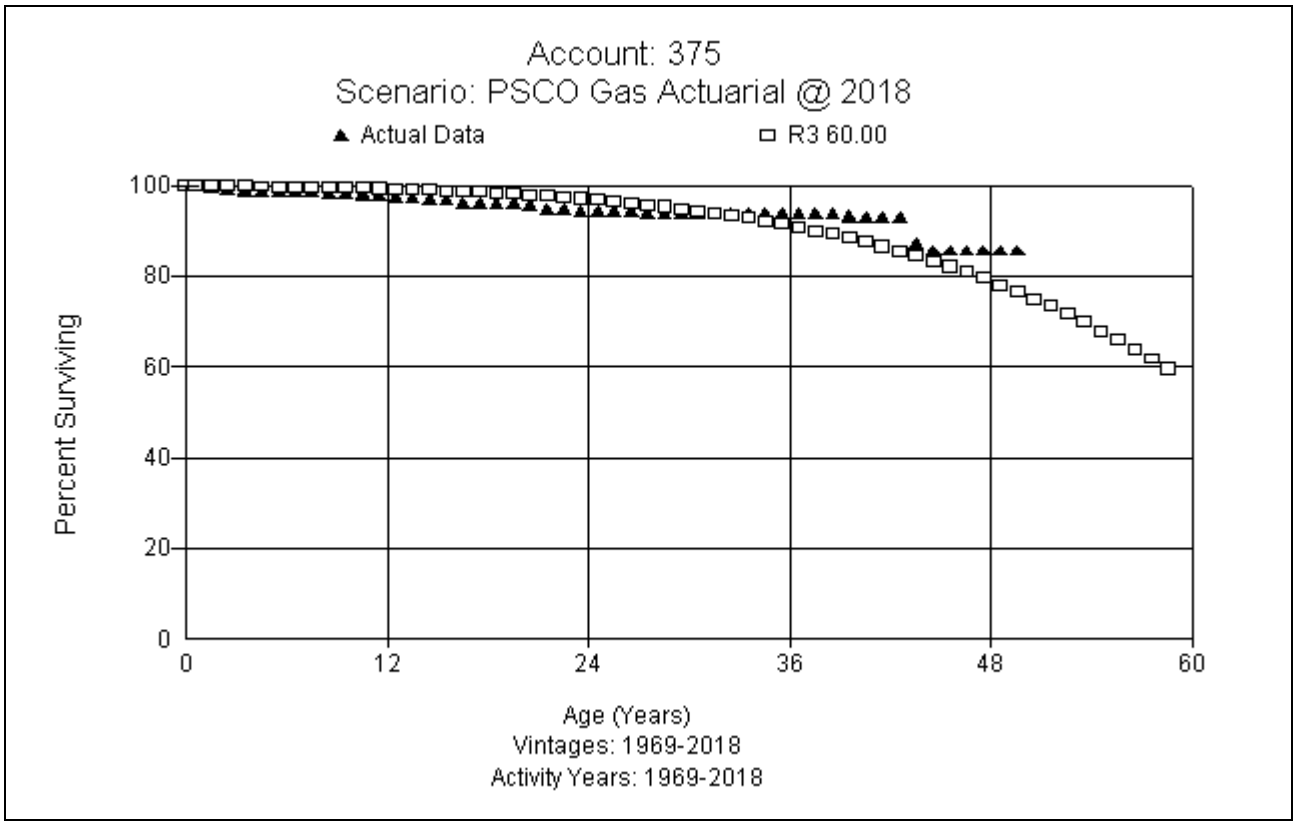
FERC Account 374.2 Land Rights (80 R3)

This account consists of land rights associated with distribution operations. The balance in this account is $21.4 million. The approved life for this account is 80 years with an R3 dispersion. Actuarial analysis reveals few retirements for this account. The life of land rights is tied to mains and other assets, and this study recommends retention of the same life for mains in Accounts 376.1 and 376.2. Accordingly, this study recommends retention of the existing 80 year life with an R3 dispersion. A graph of the actual experience and the selected Iowa Curve is shown below.



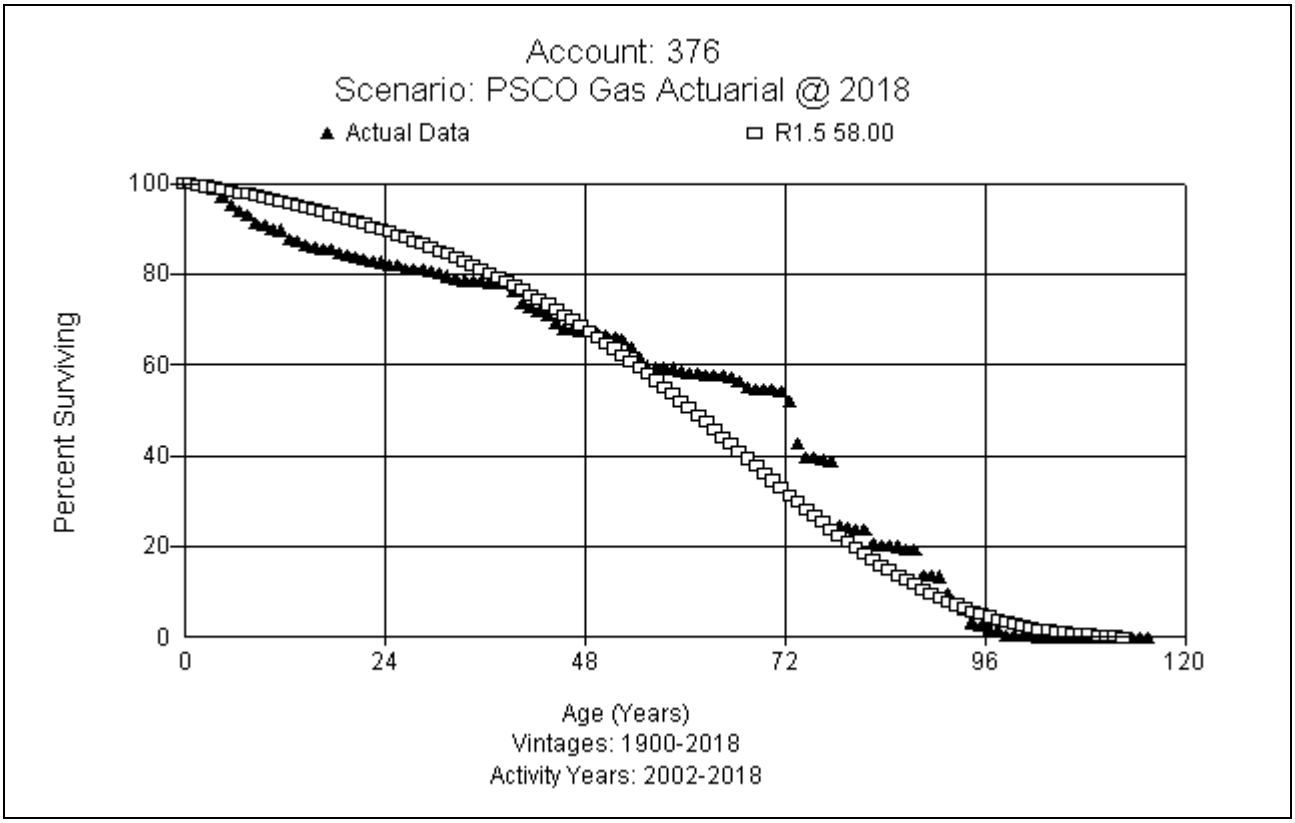
FERC Account 375 Structures and Improvements (60 R3)

This account consists of structures and controls related to distribution operations. The balance in this account is $7 million. The approved life for this account is 60 years with an R3 dispersion. This study recommends retention of the existing 60 year life and R3 dispersion. A graph of the actual experience and the selected Iowa Curve is shown below.



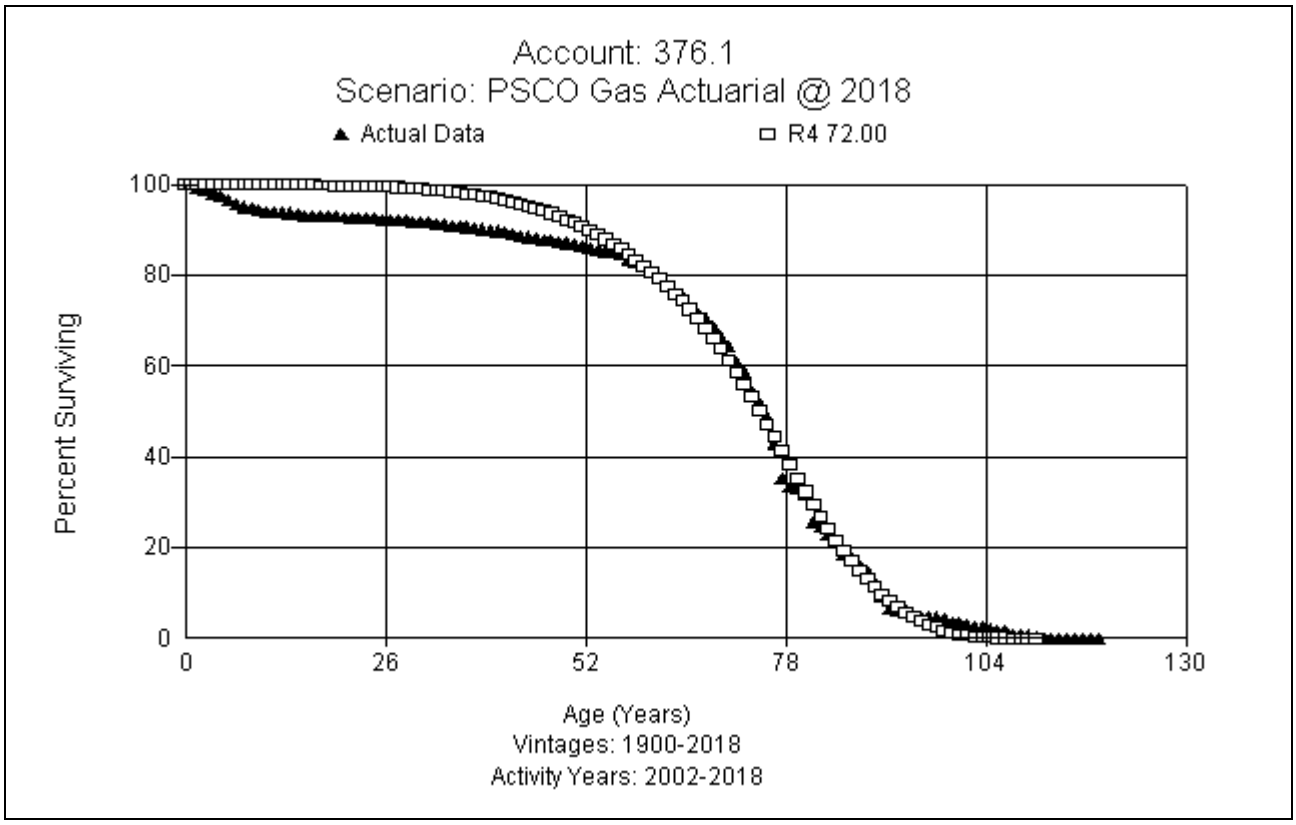
FERC Account 376 Mains (58 R1.5)

There are three sub-accounts for distribution mains. This account consists of valves and yard improvements. The balance in this account is $5.8 million. The approved life for this account is 60 years with an R0.5 dispersion. The Company has an effort in place to replace valves that are not operable. Some valves, such as, for example, those in downtown Denver, are extremely expensive to replace. Company experts anticipate that valves would have a shorter operational life than the pipe, either steel or plastic. Company personnel report that there are times when valves are replaced without replacing the pipe, but, conversely, when the pipe is replaced, it cannot be replaced without replacing the valve as well. Based on judgment and current conditions, this study recommends moving to a 58 year life with an R1.5 dispersion. A graph of the actual experience and the selected Iowa Curve is shown below.



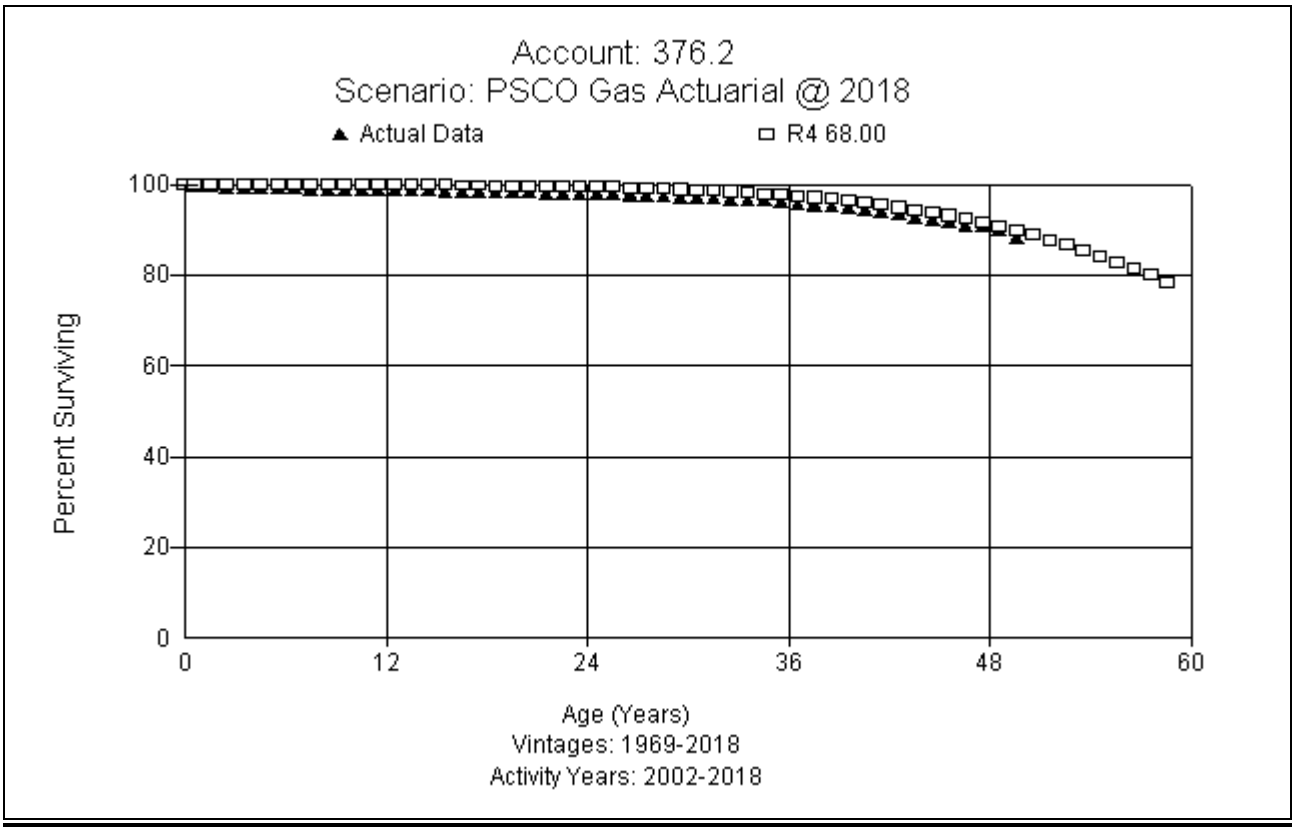
FERC Account 376.1 Mains - Metallic (72 R4)

This account consists of distribution mains made of steel or coated steel of various diameters. The balance in this account is $702.1 million. The approved life for this account is 72 years with an R3 dispersion. Over the years, PSCo investment in this account has changed from bare steel to wrapped to fusion bonded pipe. Anodes are much more predominant in distribution. A cast iron replacement program was put in place that replaced all known cast iron by 2015. Company personnel report that the Company has been replacing older assets in this account for 20 years, and that aggressive replacement of assets in this account began in 2008. Company personnel report that pipe installed before 1950 is subject to retirement due to the lack of cathodic protection in early years, and that they anticipate a longer life for newer pipe installed after the 1970s. Construction methods have improved over the years, due to factors such as improved welding practices and moving from wrapped to fusion bond. Company personnel expect that forces of retirement would be higher in the distribution function than the transmission system due to damage from third parties, relocations, and load growth. Soil conditions may also impact life, specifically bentonite and freeze/thaw cycles. In the early 1950s, there were a lot of compression couplings and threaded couplings installed. In the early 1960s, PSCo stopped using those couplings. Leak surveys show more leaks in the 1950s pipe and the focus in 2016-2017 was replacement of early 1950s vintage steel. Given that the Company is actively engaged in a pipeline integrity program in which many of the older distribution mains will be replaced, and incorporating judgment and current conditions, this study recommends retention of the 72 year life with R4 dispersion. A graph of the actual experience and the selected Iowa Curve is shown below.


Account: 376.1
Scenario: PSCO Gas Actuarial @ 2018
Actual Data
R4 72.00
Percent Surviving
100
80
60
40
20
0
0
26
52
78
104
130
Age (Years)
Vintages: 1900-2018
Activity Years: 2002-2018

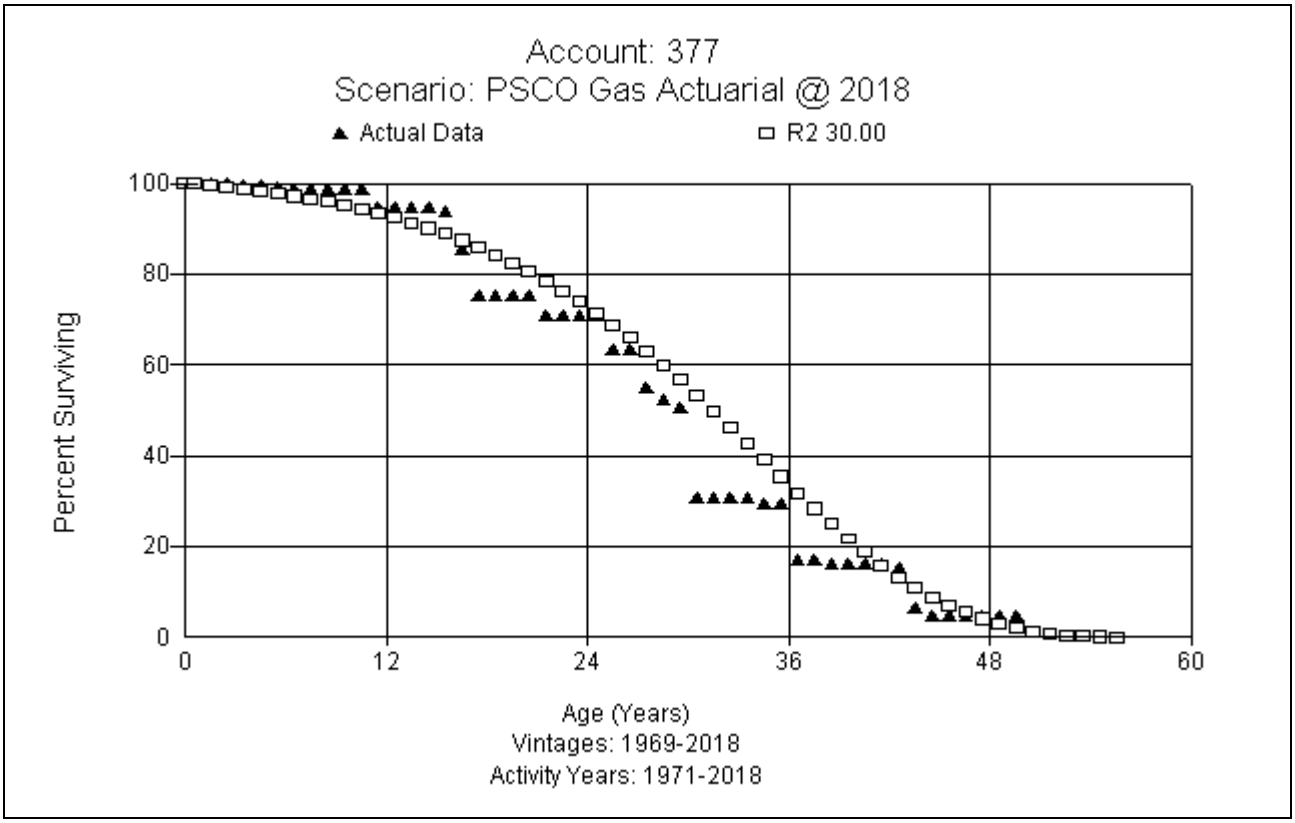
FERC Account 376.2 Mains - Plastic (68 R4)

This account consists of plastic distribution mains of various diameters and associated equipment. The balance in this account is $835.9 million. The approved life for this account is 68 years with an R3 dispersion. One of the newest drivers of retirement are regulatory rules from both the Federal and State level. Some of the early generations of plastic, such as Aldyl-A and PVC, have been problematic, and have had to be replaced earlier than anticipated. All 1st and 2nd generation plastic pipe has to be replaced earlier than anticipated. Early installations that used PVC will also have earlier than anticipated retirement. Most of the pipes targeted are in the 1960s and 1970s (pre-1973). Polyethylene is predominant in the later 1970s and after. The Company has programs in place to replace early generations of plastic, such as the Accelerated Main replacement Program and Problematic Pipe Replacement Program ("PPRP"), which have been under way for some years and will continue for a number of years into the future. The experience with plastic is not long enough with the newer resins to project a materially changed life from what is currently estimated. The early generations are not making it to the 68 year life but it is likely that the newer generations of resins will. Given that the Company is actively engaged in a pipeline integrity program where many of the older distribution mains will be replaced, no change in life is recommended for this account. Based on judgment and current conditions, this study recommends retention of the 68 year life with R4 dispersion. A graph of the actual experience and the selected Iowa Curve is shown below.


Account: 376.2
Scenario: PSCO Gas Actuarial @ 2018
Actual Data
R4 68.00
Percent Surviving
100
80
60
40
20
0
0
12
24
36
48
60
Age (Years)
Vintages: 1969-2018
Activity Years: 2002-2018

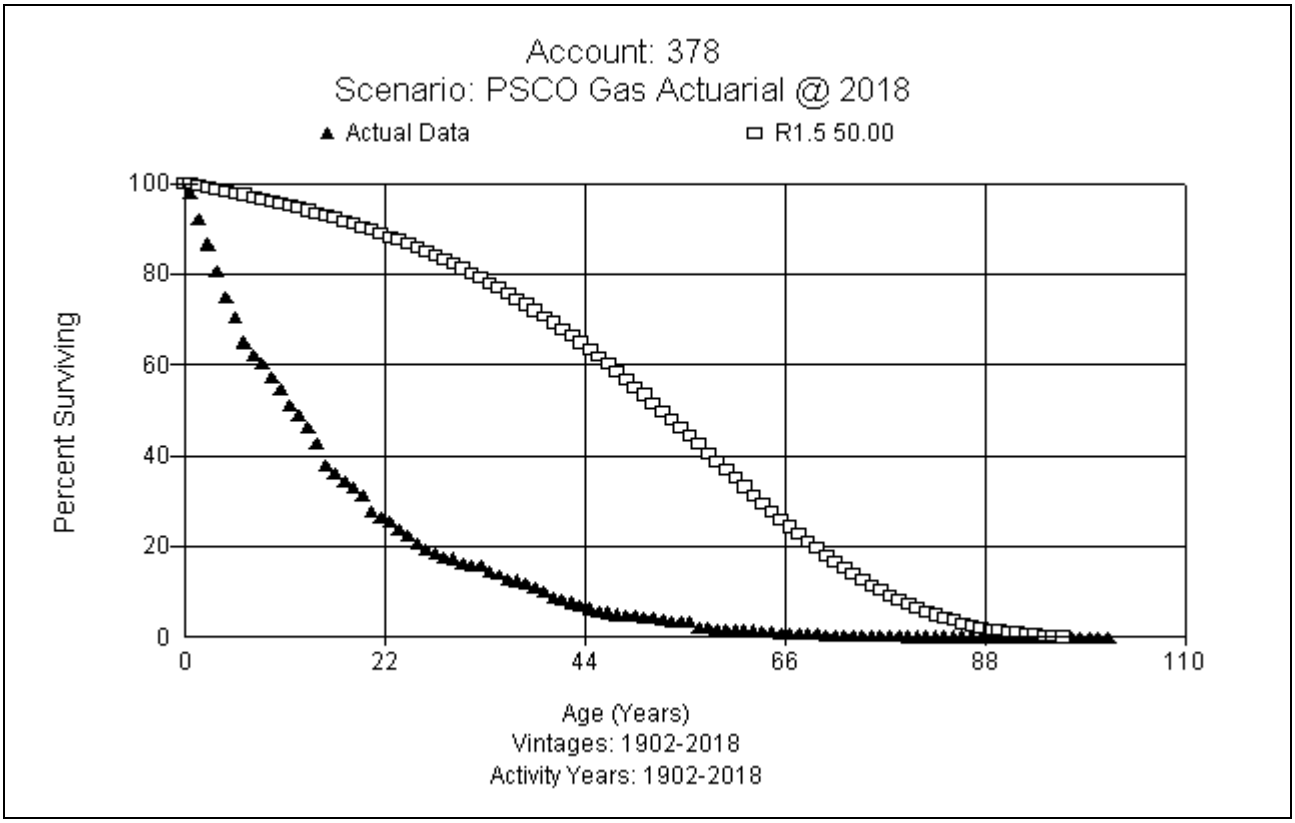
FERC Account 377 Compressor Station Equipment (30 R2)

This account consists of distribution compressors, piping, and associated assets. The balance in this account is $10.8 million. The approved life for this account is 32 years with an R1 dispersion. There is one distribution compressor station within the distribution function, at Deer Creek. Company personnel report that the run hours are increasing. Company personnel believe that the life of this account should be comparable to transmission compressor stations in Account 368, which has a proposed life of 30 years in this study. The cycle is 5-10 years for rebuild, depending on how much the unit runs. Company personnel report that there are other forces that will trigger retirements of compressors, such as capacity requirements. Based on actuarial analysis and input from Company personnel, this study recommends moving to a 30 year life and moving to an R2 dispersion. A graph of the actual experience and the selected Iowa Curve is shown below.



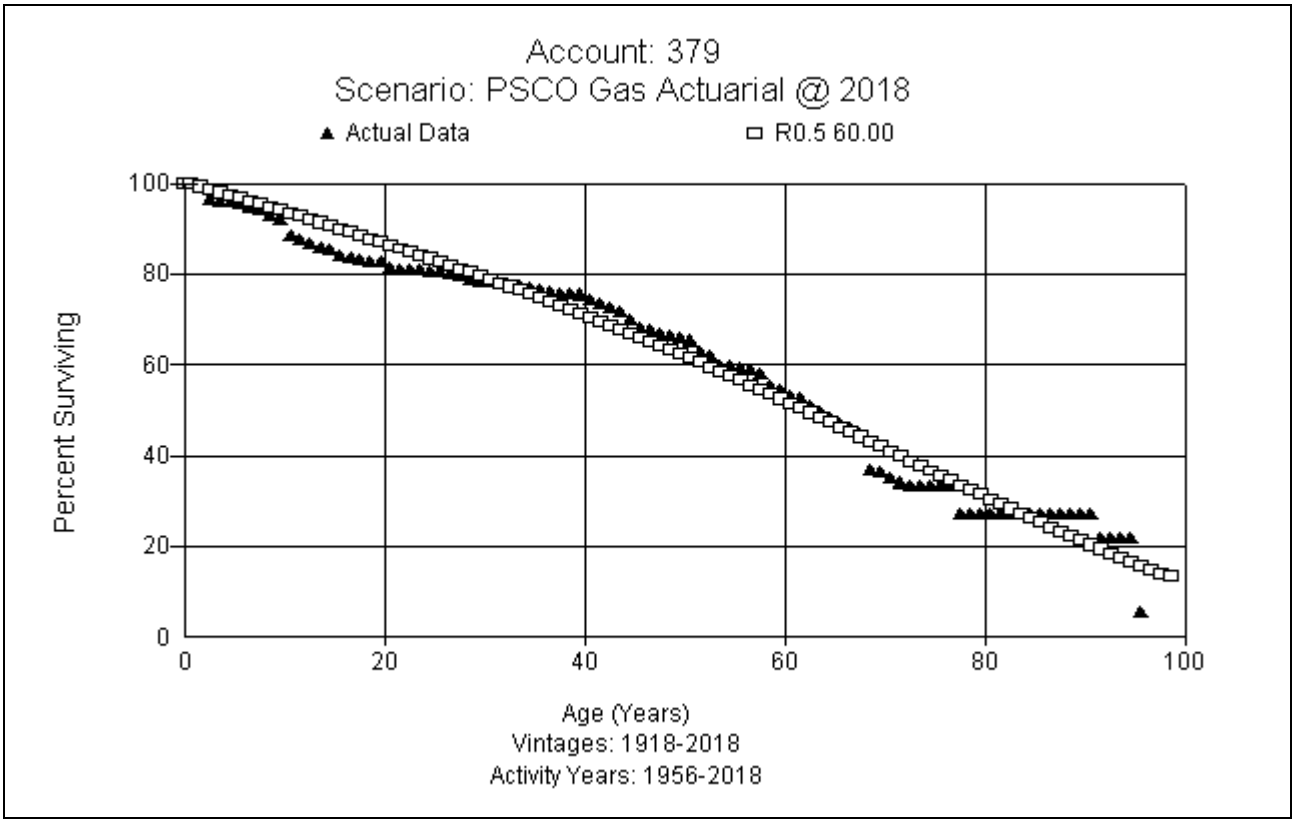
FERC Account 378 Measuring & Regulating Station Equipment – General (50 R1.5)

This account consists of M&R station piping, regulators, controls, odorizers, and other equipment used in distribution measuring and regulating stations. The balance in this account is $42.2 million. The approved life for this account is 58 years with an R1.5 dispersion. In the last few years, the Company has been upgrading stations to make them compliant with current codes, and a number of stations were actually rebuilt. Overall, stations are not lasting as long as anticipated, and Company personnel expect to see the operational life of distribution regulating stations decrease. The actuarial analysis shows a dramatically shorter life than previously experienced. Such a dramatic reduction, however, is not warranted given the current fact pattern. To move in the direction indicated by Company personnel, this study recommends moving to a 50 year life with an R1.5 dispersion. A graph of the actual experience and the selected Iowa Curve is shown below.



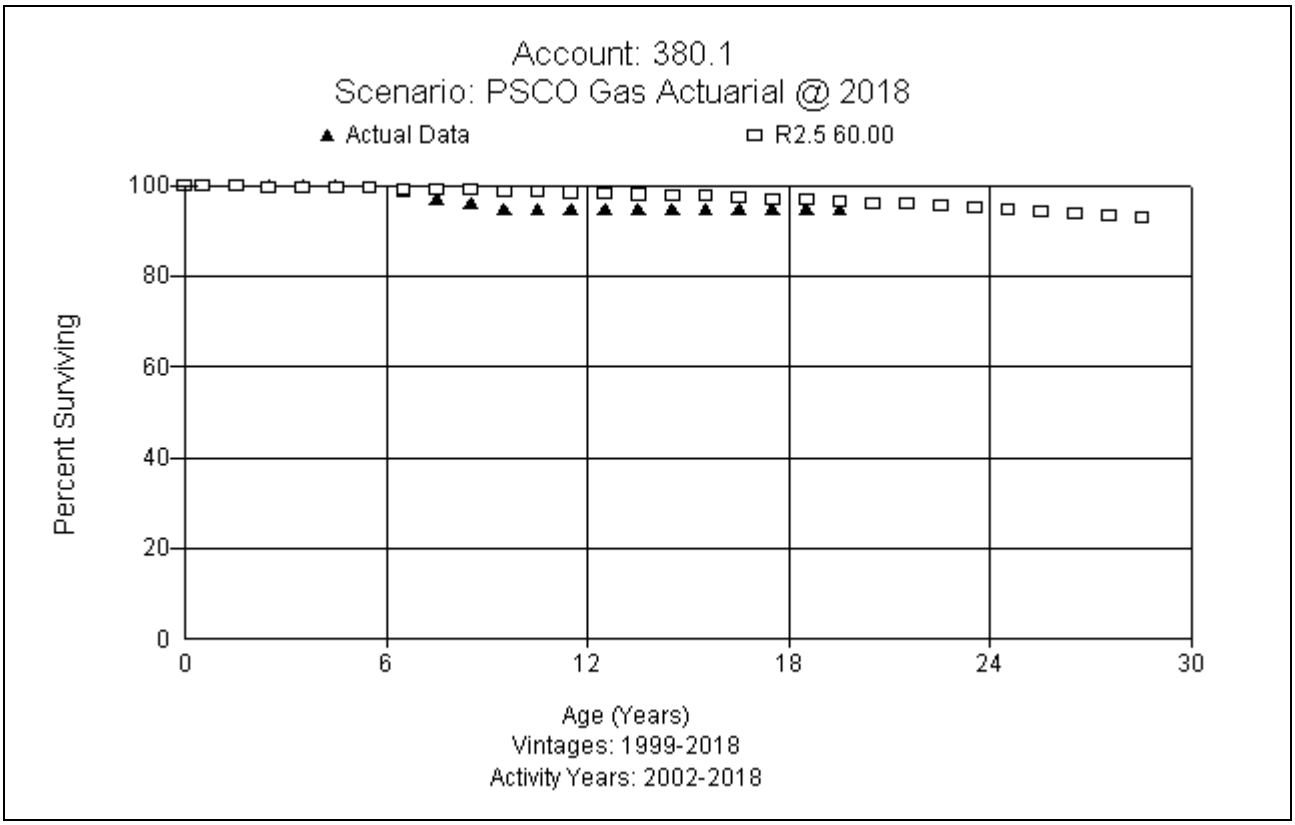
FERC Account 379 Measuring & Regulating Station Equipment – City Gate (60 R0.5)

This account consists of M&R station piping, regulators, controls, odorizers, and other equipment used in city gate distribution measuring and regulating stations. The balance in this account is $7.2 million. The approved life for this account is 51 years with an R0.5 dispersion. Company personnel expect that operationally, assets in this account will last longer than distribution regulator stations in Account 378. Capacity needs would drive changes in distribution regulator stations in Account 378 more frequently than the assets in this account. There is a higher focus on maintaining the city gate stations, and Company personnel believe that an increase in the life of this account is operationally reasonable. This study recommends moving to a 60 year life with an R0.5 dispersion. A graph of the actual experience and the selected Iowa Curve is shown below.



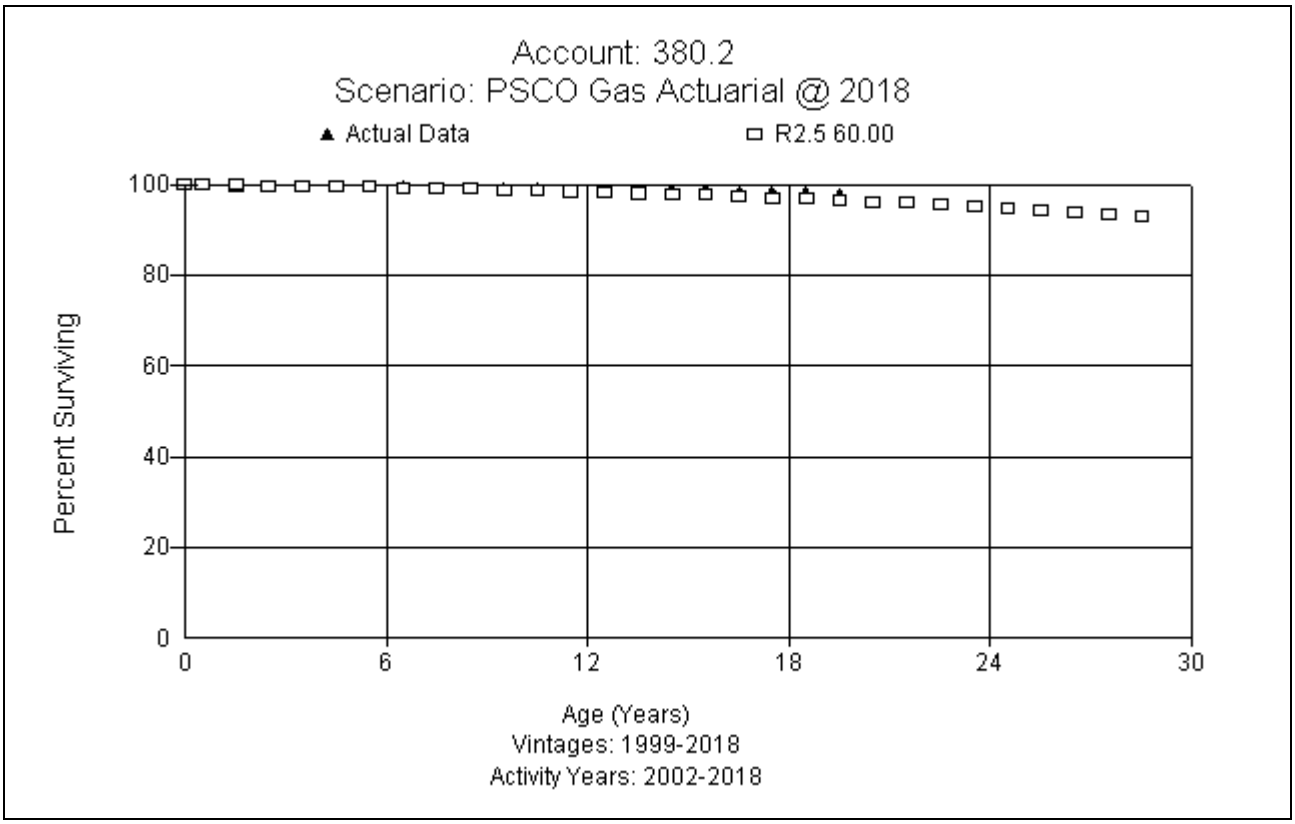
FERC Account 380.1 Services - Metallic (60 R2.5)

This account consists of assets related to metallic distribution services. The balance in this account is $90.9 million. The approved life for this account is 55 years with an R3 dispersion. The actuarial analysis runs would suggest a slightly longer life and this study recommends moving to a 60 year life with an R2.5 dispersion. A graph of the actual experience and the selected Iowa Curve is shown below.



FERC Account 380.2 Services - Plastic (60 R2.5)

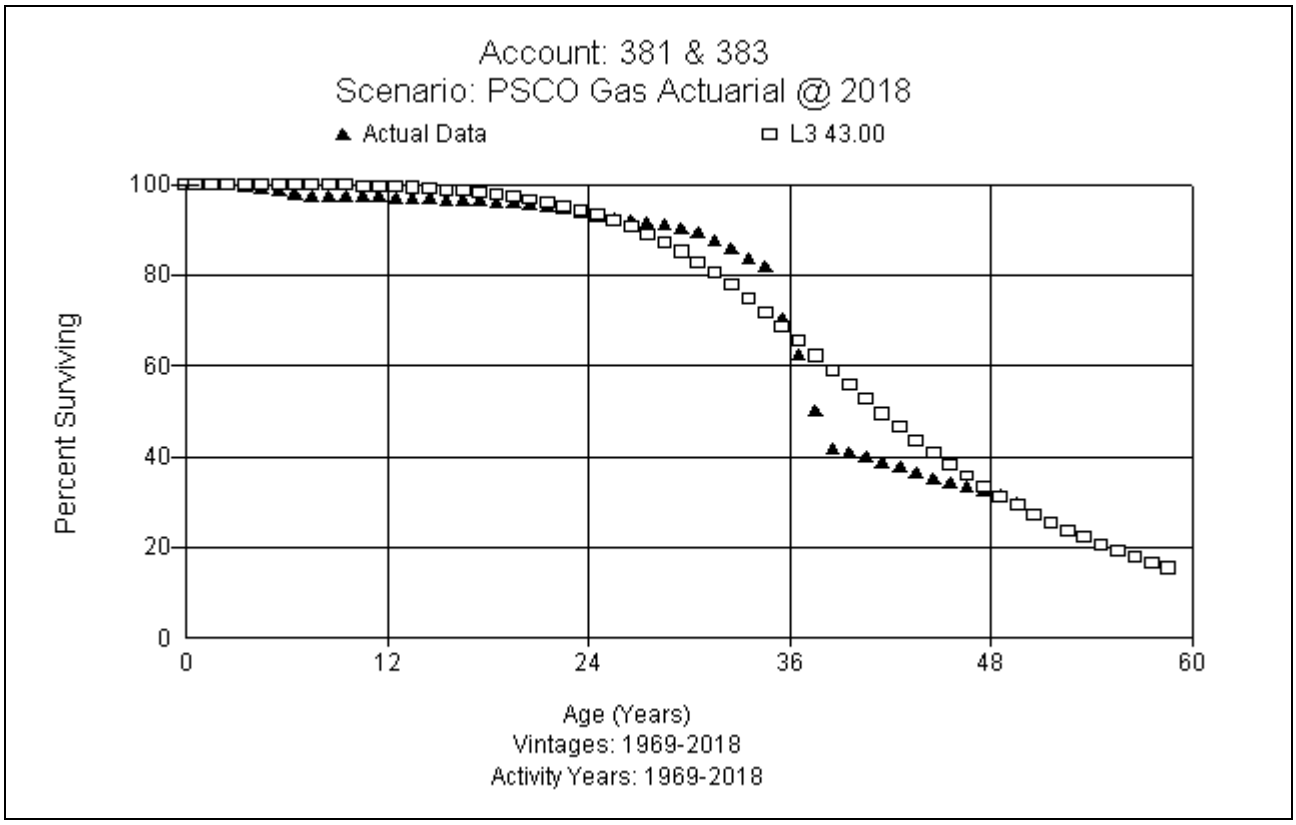
This account consists of assets related to plastic distribution services. The balance in this account is $762.2 million. The approved life for this account is 55 years with an R3 dispersion. For a time, PSCo used Cellulose Acetate Butyrate ("CAB"), which is now showing issues. The Company has replaced all known CAB. Company experts report that generally they will replace mains and services at the same time. However, there will be factors that will shorten the life of services as compared to the mains. This study recommends moving to a 60 year life with an R2.5 dispersion. A graph of the actual experience and the selected Iowa Curve is shown below.



FERC Account 381 Meters (43 L3)

This account consists of electromechanical distribution meters and equipment. Due to the similarity in the way operations handles Accounts 381 Meters and 383 House Regulators, they were combined for life analysis purposes. The balances in these accounts are $337.3 million for Meters and Installations, and $69.0 million for House Regulators. In September 2019, the Company identified $30.6 million in retirements that should have retired in prior periods for Account 382. That amount was included in the depreciation study life analysis data since all retirements should have occurred in prior transaction years. The inclusion of these retirements adjusted the plant balance in Account 382 to $69.1 million and the remaining 382 balance then was transferred to 381 in November 2019. The company is no longer using 382 meter installations account. As of December 1, 2019, meters and their installations are in account 381 Meters.

The approved life for the combined account is 45 years with an R4 dispersion. The average age of investment in each account is 14.28 and 14.98 years, respectively. Company personnel report that there are now 1.4 million gas meters, all of which have ERTs. Actuarial analysis is reflecting a 43 year life for this combined account with an L3 dispersion. Based on input from Company personnel and history, this study recommends moving to a 43 year life for these accounts with an L3 dispersion. A graph of the actual experience and the selected Iowa Curve is shown below.


Account: 381 & 383
Scenario: PSCO Gas Actuarial @ 2018
Actual Data
L3 43.00
Percent Surviving
100
80
60
40
20
0
0
12
24
36
48
60
Age (Years)
Vintages: 1969-2018
Activity Years: 1969-2018

FERC Account 381.2 Meters – AMR (15 SQ)

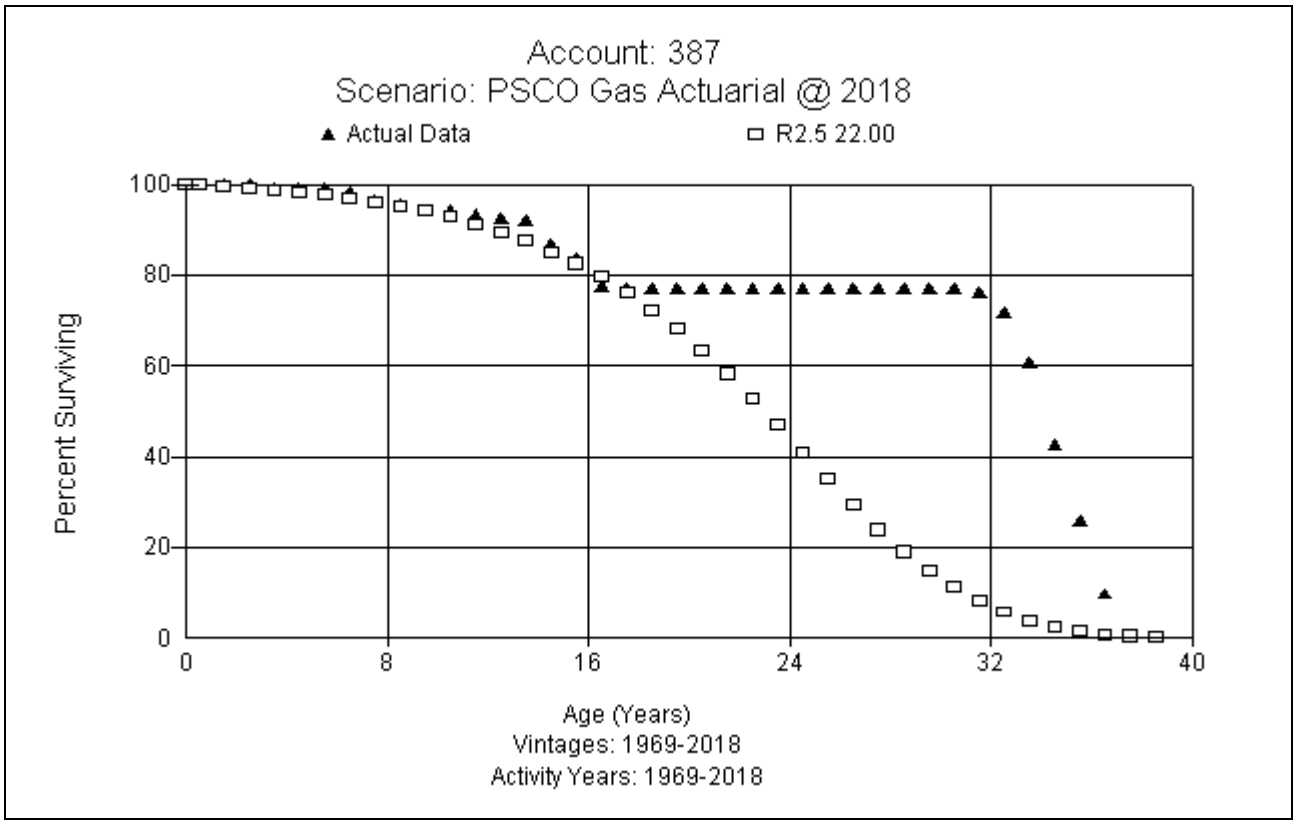
This account consists of automated meter reading equipment and meters. The balance in this account is $74.7 million with $37.6 million of the balance still having a depreciable base. The approved life for this account is 15 years with an SQ dispersion. Currently, these assets are being treated with vintage group amortization, and the accrual rate is applied to assets that are not fully amortized. Those assets that are fully depreciated are not included in the amortization calculation. All meters now have ERTs. Company personnel report that they are considering replacing all ERTs with AMI modules. They believe the ERTs may last slightly longer than the current 15 years. ERTs are sent back to Itron who will dispose of at no cost. Given the potential changes that may occur in the future, this study recommends retaining the 15 year life and SQ dispersion. Using a 15 year life for AMR meters gives this account the same life as Communication Equipment in Account 397.

FERC Account 383 House Regulators (43 L3)

This account consists of house regulators. Due to the similarity in the way operations handles Accounts 381 Meters and 383 House Regulators, they were combined for life analysis purposes. The balances in these accounts are $337.3 million for Meters and $69.0 million for House Regulators. The approved life for the combined account is 45 years with an R4 dispersion. Based on that input and history, this study recommends a 43 year life with an L3 dispersion for these. A graph of the actual experience and the selected Iowa Curve is shown in the write-up for Account 381 Meters.

FERC Account 387 Other Equipment (22 R2.5)

This account consists of other assets not previously included in other distribution accounts. The balance in this account is $308. The current life of this account is 25 years with an R0.5 dispersion. After analyzing various bands, this study recommends a slightly shorter life of 22 years with an R2.5 dispersion. A graph of the actual experience and the selected Iowa Curve is shown below.



Gas Intangible and General Accounts, FERC Accounts 303 and 389.1-398

In Docket No. 17-AL-0363G, PSCo established lives and net salvage parameters for its intangible and general plant assets. Given the recent decision date, the Company requests retention of the existing lives for intangible and general plant as shown in the table below.

Intangible and General Plant Current and Proposed Lives

Account	Description	Life	Curve
303.3	Computer Software - 3 Year	3	SQ
303.3	Computer Software - 7 Year	7	SQ
303.1	Computer Software - 10 Year	10	SQ
303.5	Computer Software - 15 Year	15	SQ
389.2	Land Rights	60	R4
390	Structures & Improvements	45	R1.5
391	Office Furniture & Equipment	20	SQ
391.4	Network Equipment	6	SQ
392.1	Transportation Equipment - Automobiles	12	SQ
392.2	Transportation Equipment - Light Trucks	12	SQ
392.3	Transportation Equipment - Trailers	25	SQ
392.4	Transportation Equipment - Heavy Trucks	14	SQ
393	Stores Equipment	30	SQ
394	Tools, Shop & Garage Equipment	25	SQ
395	Laboratory Equipment	10	SQ
396	Power Operated Equipment	14	SQ
397	Communication Equipment	15	SQ
398	Miscellaneous Equipment	20	SQ

NET SALVAGE ANALYSIS

When a capital asset is retired, physically removed from service, and finally disposed of, terminal retirement is said to have occurred. The residual value of a terminal retirement is called gross salvage. Net salvage is the difference between the gross salvage (what the asset was sold for) and the removal cost (cost to remove and dispose of the asset).

Gross salvage and cost of removal related to retirements are recorded to the general ledger in the accumulated provision for depreciation at the time retirements occur within the system.

Removal cost percentages are calculated by dividing the current cost of removal by the original installed cost of the asset. Some plant assets can experience significant negative removal cost percentages due to the timing of the addition versus the retirement. For example, a distribution asset in FERC Account 376.1 Steel Mains with a current installed cost of $500 (2019) would have had an installed cost of $15.54[2] in 1947 (which is the average life of the account). A removal cost of $50 for the asset calculated (incorrectly) on current installed cost would only have a negative 10 percent removal cost ($50/$500). However, a correct removal cost calculation would show a negative 322 percent removal cost for that asset ($50/$15.54). Inflation from the time of installation of the asset until the time of its removal must be taken into account in the calculation of the removal cost percentage because the depreciation rate, which includes the removal cost percentage, will be applied to the original installed cost of assets.

2 Using the Handy-Whitman Bulletin No. 190, G-5, line 44, $15.54 = $500 x 27/869.

Factors Impacting Removal Cost

At Alliance Consulting Group's request, Company experts analyzed factors that impact removal cost of gas transmission and distribution mains. While gas mains for transmission and distribution are usually abandoned in place, the following removal costs are incurred per 49 CFR 192.727 (entitled "Abandonment or deactivation of facilities"). This regulation provides as follows:

> (a) Each operator shall conduct abandonment or deactivation of pipelines in accordance with the requirements of this section.
>
> (b) Each pipeline abandoned in place must be disconnected from all sources and supplies of gas; purged of gas; in the case of offshore pipelines, filled with water or inert materials; and sealed at the ends. However, the pipeline need not be purged when the volume of gas is so small that there is no potential hazard.
>
> (c) Except for service lines, each inactive pipeline that is not being maintained under this part must be disconnected from all sources and supplies of gas; purged of gas; in the case of offshore pipelines, filled with water or inert materials; and sealed at the ends. However, the pipeline need not be purged when the volume of gas is so small that there is no potential hazard.

The cost of deactivation, abandon in place, and removal of gas mains for transmission and distribution assets has increased over time due to several general factors, including:

Time Value of Money

Many gas main assets have a life cycle of 60 years or more. Some of the assets being removed were installed over 60 years ago when materials, labor, and cost of goods were cheaper.

Change in PHMSA requirements

The PHMSA has issued Advisory Bulletins and a Notice of Proposed Rule Making that requires operators to replace or test gas transmission pipelines that lack records used to establish Maximum Allowable Operating Pressure (MAOP). PSCo has started this work and in most cases will be replacing existing gas transmission pipelines, regardless of whether or not they have reached the average service life.

PHMSA released the final rule late 2019 with an effectiveness date of July 2020 entitled "Safety of Gas Transmission Pipelines: MAOP Reconfirmation, Expansion of Assessment Requirements and Other Related Amendments." Having preliminary versions of the rule with intent to proactively comply has resulted in accelerated replacement and retirement of legacy gas transmission pipeline lacking sufficient records to operate under current federal requirements. The PSCo gas transmission system has significant mileage of legacy pipeline that was originally installed prior to federal code requirements which the Company has been replacing and retiring to remove from active status. Annual budgets for this replacement work have increased along with associated abandonment costs.

Urban Area

The majority of the construction and reconstruction projects are in urban areas. Many cities require permits. These permits may impose certain limitations such as the closure of roads during high traffic times. These permits may also require construction to occur in the evening or on weekends, requiring overtime for crews. Municipalities are increasingly requiring PSCo to repave more of the road than just the paving disturbed by excavation activity. For example, the City of Aurora requires the entire block to be repaved if the amount of disturbed paving exceeds a certain criteria.

Contract Labor

In the last decade, investment in utility gas main renewal projects has increased substantially across the country. In addition, the same skills and resources are needed in the larger oil and gas industry. This has created a high demand for the limited number of qualified personnel available to construct the work. The increases in capital expenditures are such that utilities now have to augment their internal workforces with external contract construction providers, and the cost of external contracts has increased due to supply and demand factors. Over ninety percent of PSCo gas renewal construction is performed by contractors.

Safety Requirements

The industry, and specifically PSCo, has strived to provide a very high level of safe working practices. The equipment and provisions required today have increased substantially from 60 years ago. PSCo uses excavation and trenching work practices that align with modern industry practice. These policies have increased the cost of doing business, but are an important part of the strong safety principles at PSCo.

Increased Financial Controls

Financial standards and regulations have increased over time. PSCo has adopted the best practices and incorporated cost and quality controls measures into the close out of construction work orders. This provides greater details of costs associated with removal work compared to several years prior. As can be seen with the review of the FERC plant of accounts, cost of removal varies year by year, but the information collected has improved since 2007 after the 2007 Removal Work In Progress (RWIP) Audit. Cost of removal for mains has increased, beginning in 2010 and going forward.

Pipeline System Integrity Adjustment (PSIA)

One of PSCo's goals is to ensure safe reliable natural gas service. The Company systematically inspects, repairs, and replaces as necessary, portions of PSCo's more than 24,000 miles of natural gas pipelines in Colorado that deliver natural gas. This proactive approach complies with and complements governmental requirements. In recent years, PSCo has replaced all known cast iron pipe and Cellulose Acetate Butyrate (CAB) plastic pipe. In the next 7 years, PSCo also intends to replace all Bare Steel main and Polyvinyl Chloride (PVC) pipe. These materials have been identified throughout the industry as poor performing pipe types. The PSIA started in 2011 as a method to recover costs to modernize and upgrade the Company's natural gas pipeline system. In addition, the PSIA efforts also include the following facility efforts:

- Programmatic Risk-Based Replacement Program - The program identifies and systematically replaces distribution mains not covered by the Accelerated Main Replacement Program or CAB Gas Service Replacement Program that have a higher relative risk to public safety than other pipes within the gas distribution system.
- Distribution Valve Replacement Project - The Company has identified a need to add, replace, or otherwise rehabilitate existing valves to continue to improve overall public safety.
- Bridge Crossings/Exposed Pipes Project – The project identifies and evaluates bridge crossings and exposed pipelines with observed atmospheric corrosion for remediation or replacement.
- Shorted Casings Project – The project evaluates pipelines that have been installed in a steel casing and identified as having a potential for corrosion for remediation or replacement.
- West Main Pipeline Replacement - The West Main pipeline is an 80-mile pipeline serving Fort Collins, Loveland, Longmont, and Boulder. The Company concluded that the pipeline needed to be replaced based on assessments. The West Main pipeline, along with other pipelines in the Company's system of the same vintage, was constructed prior to modern construction methods and

prior to the Natural Gas Pipeline Safety Act of 1968 that provided for the establishment of pipeline safety standards by the U.S. Department of Transportation ("DOT"). Additionally, the West Main pipeline was installed prior to corrosion control requirements becoming the industry standard for newly-constructed, buried metallic pipes.

- Transmission Pipeline Assessments - Capital expenditures associated with Transmission Pipeline Assessments are primarily attributable to baseline assessments and associated infrastructure investments, such as the installation of launchers, receivers and fittings to allow in-line-inspection tools to navigate through a pipeline, and new pipelines and regulators necessary to maintain service to customers during an assessment.

- Distribution Valve Replacement Project - The Company has identified a need to add, replace, or otherwise rehabilitate existing valves to continue to improve overall public safety.
- Maximum Allowable Operating Pressure (MAOP) Replacement Project – PHMSA Pipeline Safety rule requiring Operators to confirm traceable, verifiable and complete records document safe and reliable operation of Gas Transmission pipeline and assets consisting of pressure test records and material construction records for pressure retaining components. Legacy pipeline lacking sufficient records must be strength tested and/or replaced with new pipeline and subsequently abandoned.

A detailed discussion by plant account follows below:

Production & Gathering Accounts, FERC Accts 325.4, 327-329, 332-334, & 337

FERC Account 325.4 Land Rights (0% Net Salvage)

This account consists of any gross salvage and removal cost associated with land rights related to production activity. The approved net salvage for this account is 0 percent. There have been limited retirements in this account in recent years. Land rights generally have no salvage or removal cost. This study recommends maintaining the currently approved 0 percent net salvage for this account.

FERC Account 327 Field Compressor Station Structures (0% net salvage)

This account consists of any gross salvage and removal cost associated with a building and yard improvements related to production field compressor station activities. The approved net salvage for this account is 0 percent. There have been no retirements in this account in recent years. This study recommends maintaining the currently approved 0 percent net salvage for this account.

FERC Account 328 Field M&R Station Structures (0% net salvage)

This account consists of any gross salvage and removal cost associated with building and yard improvements related to production measuring and regulating station activities. The approved net salvage for this account is 0 percent. There have been few retirements in this account in recent years with limited gross salvage or removal cost. This study recommends retaining a 0 percent net salvage for this account.

FERC Account 329 Other Structures (0% net salvage)

This account consists of any gross salvage and removal cost associated with roadway related to production activities. The approved net salvage for this account is 0 percent. There have been no retirements in this account in recent years. This study recommends maintaining the currently approved 0 percent net salvage for this account.

FERC Account 332 Field Lines (-5% net salvage)

This account consists of any gross salvage and removal cost associated with production field lines and associated equipment. The approved net salvage for this account is negative 3 percent. In the most recent transaction year, negative net salvage has increased, with the 5-year and 10-year moving averages showing negative 10 and negative 23 percent, respectively. This study recommends moving to a negative 5 percent net salvage for this account.

FERC Account 333 Field Compressor Station Equipment (0% net salvage)

This account consists of any gross salvage and removal cost associated with production compressors, piping, and associated equipment. The approved net salvage for this account is 0 percent. There have been few retirements in this account in recent years and no salvage or removal cost. This study recommends maintaining the currently approved 0 percent net salvage for this account.

FERC Account 334 Field M&R Station Equipment (-3% net salvage)

This account consists of any gross salvage and removal cost associated with station piping, dehydrator, meters, regulators, and associated measuring and regulating equipment. The approved net salvage for this account is 0 percent. In the most recent transaction year, negative net salvage has increased, with the 5-year and 10-year moving averages showing negative 3 and negative 4 percent, respectively. This study recommends moving to a negative 3 percent net salvage for this account.

FERC Account 337 Other Equipment (0% net salvage)

This account consists of any gross salvage and removal cost associated with other equipment used in production and gathering. The approved net salvage for this account is 0 percent. There have been no retirements in this account in recent years and no salvage or removal cost. This study recommends maintaining the currently approved 0 percent net salvage for this account for any new assets added to this

account.

Gas Products Extraction Accounts, FERC Accounts 341-346

FERC Account 341 Structures and Improvements (0% net salvage)

This account consists of any gross salvage and removal cost associated with production extraction station controls, yard improvements, and associated equipment and structures. The approved net salvage for this account is 0 percent. There have been no retirements in this account in recent years and no salvage or removal cost. This study recommends maintaining the currently approved 0 percent net salvage for this account.

FERC Account 342 Extraction and Refining Equipment (-10% net salvage)

This account consists of any gross salvage and removal cost associated with production extraction equipment, piping and associated equipment. The approved net salvage for this account is negative 2 percent. In the most recent transaction year, negative net salvage has increased, with the 5-year and 10-year moving averages showing negative 65 and negative 46 percent, respectively. To move in the direction of this trend, this study recommends moving to a negative 10 percent net salvage for this account.

FERC Account 343 Pipe Lines (0 & net salvage)

This account consists of the any gross salvage or removal cost associated with costs associated with gas and liquid pipelines used in connection with the processing of natural gas. This account has no approved net salvage parameter. Thus there is no historic data where net salvage could be used to determine net salvage characteristic for this account. Based on judgment, this study recommends 0 percent net salvage, which is the current proposal for Account 344, Extracted Products Storage Equipment.

FERC Account 344 Extracted Product Storage Equipment (0% net salvage)

This account consists of any gross salvage and removal cost associated with production extraction storage tanks and associated equipment. The approved net salvage for this account is 0 percent. There have been few retirements in this account in recent years, which generated some gross salvage and removal cost. Since the activity in this account is sparse, this study recommends maintaining the currently approved 0 percent net salvage for this account.

FERC Account 345 Compressor Equipment (0% net salvage)

This account consists of any gross salvage and removal cost associated with production extraction compressor and controls. The approved net salvage for this account is 0 percent. There have been few retirements in this account in recent years and no salvage or removal cost. This study recommends maintaining the currently approved 0 percent net salvage for this account.

FERC Account 346 Gas M&R Equipment (0% net salvage)

This account consists of any gross salvage and removal cost associated with metering and regulating station controls, meters, and associated equipment. The approved net salvage for this account is 0 percent. There have been no retirements in this account in recent years and no salvage or removal cost. This study recommends maintaining the currently approved 0 percent net salvage for this account.

Underground Storage Accounts, FERC Accounts 351 – 357

FERC Account 351 Structures and Improvements (-3 % net salvage)

This account consists of any gross salvage and removal cost associated with underground storage station controls and other associated equipment. The approved net salvage for this account is negative 10 percent. In recent years, retirement activity has generated lower (less negative) net salvage. In the most recent transaction year, negative net salvage has decreased, with the 5-year and 10-year moving averages showing negative 17 and negative 3 percent, respectively. Considering recent trends, this study recommends moving to negative 3 percent net salvage for this account.

FERC Account 352.1 Storage Leaseholds and Rights (0% net salvage)

This account consists of any gross salvage and removal cost associated with storage leaseholds and rights. The approved net salvage for this account is 0 percent. Based on judgment, this study recommends retention of 0 percent net salvage for this account.

FERC Account 352.2 Reservoirs (-30% net salvage)

This account consists of any gross salvage and removal cost associated with gas wells used as storage reservoirs. The approved net salvage for this account is negative 35 percent. In recent years, retirement activity has generated slightly lower (less negative) net salvage. In the most recent transaction year, negative net salvage has increased, with the 5-year and 10-year moving averages showing negative 29 percent in both periods. This study recommends moving to negative 30 percent net salvage for this account.

FERC Account 352.3 Nonrecoverable Natural Gas (0% net salvage)

This account consists of any gross salvage and removal cost associated with non-recoverable gas in storage reservoirs. The approved net salvage percent for this account is 0 percent. There has been no retirement activity or net salvage activity in

this account. Based on judgment, this study recommends retention of 0 percent net salvage for this account.

FERC Account 353 Lines (-20% net salvage)

This account consists of any gross salvage and removal cost associated with underground storage lines and associated equipment. The approved net salvage for this account is 0 percent. The approved net salvage for this account is negative 35 percent. In recent years, retirement activity has generated greater (more negative) net salvage. In the most recent transaction year, negative net salvage has increased, with the 5-year and 10-year moving averages showing negative 27 and negative 34 percent, respectively. Based on recent activity, this study recommends moving to negative 20 percent net salvage for this account.

FERC Account 354 Compressor Station Equipment (-15% net salvage)

This account consists of any gross salvage and removal cost associated with compressor station equipment and piping for underground storage operations and associated equipment. The approved net salvage for this account is negative 10 percent. The retirements in this account in recent years have reflected an increase in removal cost. The overall moving average net salvage percentages are negative 58 and negative 67 percent, respectively, for the 5-year and 10-year periods. To moderate the change in net salvage, this study recommends moving to a negative 15 percent net salvage for this account.

FERC Account 355 M&R Station Equipment (-10% net salvage)

This account consists of any gross salvage and removal cost associated with underground storage metering and regulating piping and related equipment. The approved net salvage for this account is negative 10 percent. Since the last depreciation study, there has been additional retirement and net salvage activity. The overall moving average net salvage percentages are negative 15 percent for the 5-year and 10-year periods. Based on recent experience, this study recommends

retention of negative 10 percent net salvage for this account.

FERC Account 356 Purification Equipment (-10% net salvage)

This account consists of any gross salvage and removal cost associated with underground storage purification equipment and related equipment. The approved net salvage for this account is 0 percent. The retirements in this account in recent years have reflected an increase in removal cost. The overall moving average net salvage percentages are negative 32 and negative 22 percent, respectively, for the 5-year and 10-year periods. To move in the direction of this trend, this study recommends moving to negative 10 percent net salvage for this account.

FERC Account 357 Other Equipment (0% net salvage)

This account consists of any gross salvage and removal cost associated with underground storage controls, communication equipment, and other related equipment. The approved net salvage for this account is 0 percent. The retirements in this account in recent years have reflected a slight increase in removal cost. The overall moving average net salvage percentages are negative 3 percent for the 5-year and 10-year periods. Given the small amount of removal cost, this study recommends retaining 0 percent net salvage for this account.

Gas Transmission Accounts, FERC Accounts 365.2-370

FERC Account 365.2 Land Rights (0% net salvage)

This account consists of any gross salvage and removal cost associated with land rights associated with transmission facilities. The approved net salvage for this account is 0 percent. The retirements in this account in recent years have generated no salvage or removal cost. This study recommends maintaining the currently approved 0 percent net salvage for this account.

FERC Account 366 Structures and Improvements (-4% net salvage)

This account consists of any gross salvage and removal cost associated with buildings and other related structures and improvements related to transmission operations. The approved net salvage for this account is negative 4 percent. The overall moving average net salvage percentages are negative 18 and negative 5 percent, respectively, for the 5-year and 10-year periods. Since the net salvage has been erratic in recent years, there is insufficient indication to recommend a change in net salvage at this time. This study recommends retaining the negative 4 percent net salvage for this account and re-examining it in the next depreciation study.

FERC Account 366.3 Other Structures (0% net salvage)

This account consists of any gross salvage and removal cost associated primarily with structures and assets related to control of the transmission system. The approved net salvage for this account is 0 percent. There have been few retirements in this account in recent years, which have not generated any gross salvage or cost of removal. This study recommends maintaining the currently approved 0 percent net salvage for this account.

FERC Account 367 Mains (-35% net salvage)

This account consists of any gross salvage and removal cost associated with transmission mains and related assets. The approved net salvage for this account is

negative 25 percent. The retirements in this account in recent years have an increased removal cost. The overall moving average net salvage percentages are negative 47 and negative 50 percent, respectively, for the 5-year and 10-year periods. To moderate the change in net salvage, this study recommends moving to negative 35 percent net salvage for this account.

FERC Account 368 Compressor Station Equipment (-15 % net salvage)

This account consists of any gross salvage and removal cost associated with gas and air compressors, electrical, odorizers, and controls used in transmission compression and related assets. The approved net salvage for this account is negative 4 percent. The retirements in this account in recent years have reflected a more negative net salvage than the approved negative 4 percent. The overall moving average net salvage percentages are negative 49 and negative 24 percent, respectively, for the 5-year and 10-year periods. Based on recent activity, this study recommends moving to a negative 15 percent net salvage for this account.

FERC Account 369 M & R Station Equipment (-15% net salvage)

This account consists of any gross salvage and removal cost associated with transmission metering and regulating station equipment. The approved net salvage for this account is negative 10 percent. The retirements in this account in recent years have reflected a more negative net salvage than the approved negative 10 percent. The overall moving average net salvage percentages are negative 38 and negative 44 percent, respectively, for the 5-year and 10-year periods. Based on recent trends, this study recommends moving from the currently approved negative 10 percent net salvage to a negative 15 percent net salvage for this account.

FERC Account 370 Communication Equipment (0% net salvage)

This account consists of any gross salvage and removal cost associated with microwave and radio communication equipment and related assets. The approved net salvage for this account is 0 percent. The retirements in this account in recent

years have reflected small amounts of gross salvage or removal cost in recent years. The overall moving average net salvage percentages are negative 2 and negative 6 percent, respectively, for the 5-year and 10-year periods. This study recommends maintaining the currently approved negative 0 percent net salvage for this account.

Gas Distribution Accounts, FERC Accounts 374.2-383 and 387

FERC Account 374.2 Land Rights (0% net salvage)

This account consists of any gross salvage and removal cost associated with land rights associated with distribution operations. The approved net salvage for this account is 0 percent. Land rights typically have no salvage or removal cost. This study recommends maintaining the currently approved 0 percent net salvage for this account.

FERC Account 375 Structures and Improvements (-10% net salvage)

This account consists of any gross salvage and removal cost associated with structures and controls related to distribution operations. The approved net salvage for this account is negative 10 percent. The recent retirements in this account reflect an increase in removal cost. The overall moving average net salvage percentages are negative 136 and negative 54 percent, respectively, for the 5-year and 10-year periods. Given the small level of retirements reflected in recent years, this study recommends retaining the currently approved 10 percent net salvage for this account.

FERC Account 376 Mains (-50% net salvage)

This account consists of any gross salvage and removal cost associated with distribution mains and associated equipment. The approved net salvage for this account is negative 50 percent. The recent retirements in this account reflect a change in removal cost. The overall moving average net salvage percentages are negative 70 and negative 180 percent, respectively, for the 5-year and 10-year periods. Since the retirement activity is sparse relative to the plant balance, this study

recommends retaining the current negative 50 percent net salvage for this account.

FERC Account 376.1 Mains – Metallic (-85% net salvage)

This account consists of any gross salvage and removal cost associated with distribution mains and associated equipment. The approved net salvage for this account is negative 50 percent. The recent retirements in this account reflect an increase in removal cost. The overall moving average net salvage percentages are negative 200 and negative 171 percent, respectively, for the 5-year and 10-year periods. To move in the direction of higher removal cost, this study recommends moving to negative 85 percent net salvage for this account.

FERC Account 376.2 Mains - Plastic (-50% net salvage)

This account consists of any gross salvage and removal cost associated with distribution mains and associated equipment. The approved net salvage for this account is negative 35 percent. The overall moving average net salvage percentages are negative 136 and negative 101 percent, respectively, for the 5-year and 10-year periods. To move in the direction of higher removal cost, this study recommends moving negative 50 percent net salvage for this account.

FERC Account 377 Compressor Station Equipment (-10% net salvage)

This account consists of any gross salvage and removal cost associated with distribution compressors, piping, and associated assets. The approved net salvage for this account is 0 percent. The overall moving average net salvage percentages are negative 14 and negative 34 percent, respectively, for the 5-year and 10-year periods. Based on recent history, this study recommends moving to a negative 10 percent net salvage for this account.

FERC Account 378 M & R Station Equipment – General (-35% net salvage)

This account consists of any gross salvage and removal cost associated with M&R station piping, regulators, controls, odorizers, and other equipment used in

distribution measuring and regulating stations. The approved net salvage for this account is negative 35 percent. The overall moving average net salvage percentages are negative 55 and negative 53 percent, respectively, for the 5-year and 10-year periods. This study recommends retention of negative 35 percent net salvage for this account.

FERC Account 379 M & R Station Equipment – City Gate (-30% net salvage)

This account consists of any gross salvage and removal cost associated with M&R station piping, regulators, controls, odorizers, and other equipment used in city gate distribution measuring and regulating stations. The approved net salvage for this account is negative 20 percent. The recent retirements in this account reflect an increase in removal cost. The overall moving average net salvage percentages are negative 162 and negative 158 percent, respectively, for the 5-year and 10-year periods. This study recommends moving from the currently approved negative 20 percent net salvage to a negative 30 percent net salvage for this account.

FERC Account 380.1 Services - Metallic (-150% net salvage)

This account consists of any gross salvage and removal cost associated with assets related to distribution services. The approved net salvage for this account is negative 125 percent. The retirements in this account in recent years have reflected an increase in removal cost. The overall moving average net salvage percentages are negative 175 and negative 216 percent, respectively, for the 5-year and 10-year periods. This study recommends moving from the currently approved negative 125 percent net salvage to a negative 150 percent net salvage for this account.

FERC Account 380.2 Services - Plastic (-125% net salvage)

This account consists of any gross salvage and removal cost associated with assets related to distribution services. The approved net salvage for this account is negative 125 percent. The overall moving average net salvage percentages are negative 133 and negative 137 percent, respectively, for the 5-year and 10-year

periods. This study recommends retaining from the currently approved negative 125 percent net salvage for this account.

FERC Account 381 Meters (-10% net salvage)

This account consists of any gross salvage and removal cost associated with electromechanical distribution meters. The approved net salvage for this account is negative 10 percent. The recent retirements in this account reflect a decrease in removal cost. The overall moving average shows negative 14 percent net salvage and negative 18 percent for the 5-year and 10-year periods for his account. To move in the direction of the change, this study recommends retaining the currently approved negative 10 percent net salvage net salvage for this account.

FERC Account 381.2 Meters – AMR (0% net salvage)

This account consists of any gross salvage and removal cost associated with automated meter reading equipment and meters. The approved net salvage for this account is 0 percent. The recent retirements in this account reflect no salvage or removal cost. This study recommends retaining the currently approved 0 percent net salvage for this account.

FERC Account 383 House Regulators (0% net salvage)

This account consists of any gross salvage and removal cost associated with house regulators. The approved net salvage for this account is 0 percent. The recent retirements in this account reflect no significant net salvage. Based on recent history, this study recommends retaining the currently approved 0 percent net salvage for this account.

FERC Account 387 Other Equipment (0% net salvage)

This account consists of any gross salvage and removal cost associated with other distribution equipment. The approved net salvage for this account is 0 percent.

The recent retirements in this account reflect no net salvage. This study recommends retaining the currently approved 0 percent net salvage for this account.

Gas Intangible and General Accounts, FERC Accounts 303 and 389.1-398

In Docket No. 17-AL-0363G, PSCo established lives and net salvage parameters for its intangible and general plant assets. Given the recent decision date, the Company requests retention of the existing net salvage percentages for intangible and general plant as shown in the table below.

Intangible and General Plant Current and Proposed Net Salvage Percentages

Account	Description	Net Salvage Percentage
303.3	Computer Software - 3 Year	0%
303.3	Computer Software - 7 Year	0%
303.1	Computer Software - 10 Year	0%
303.5	Computer Software - 15 Year	0%
389.2	Land Rights	0%
390	Structures & Improvements	-10%
391	Office Furniture & Equipment	0%
391.4	Network Equipment	0%
392.1	Transportation Equipment - Automobiles	10%
392.2	Transportation Equipment - Light Trucks	10%
392.3	Transportation Equipment - Trailers	20%
392.4	Transportation Equipment - Heavy Trucks	10%
393	Stores Equipment	0%
394	Tools, Shop & Garage Equipment	0%
395	Laboratory Equipment	0%
396	Power Operated Equipment	15%
397	Communication Equipment	0%
398	Miscellaneous Equipment	0%

APPENDIX A
PROPOSED DEPRECIATION RATES

PUBLIC SERVICE OF COLORADO- GAS UTILITY
COMPUTATION OF ANNUAL ACCRUAL RATE
AT JUNE 30, 2019

FERC Account	Account Description	Plant Balance 6/30/19	Depreciation Reserve Balance 6/30/19	Est. Future Net Salvage %	Est. Future Net Salvage Amount	Unacrrued Balance	Remaining Life (Yrs)	Annual Accrual	Depr Rate
	PRODUCTION & GATHERING								
325.4	Land Rights	99,049	70,502	0.00%	0	28,547	16.86	1,693	1.7097%
327	Field Compressor Station Structures	16,804	15,699	0.00%	0	1,105	19.21	58	0.3425%
328	Field Measuring & Regulating Station Structures	102,512	94,216	0.00%	0	8,297	12.72	652	0.6364%
329	Other Structures	8,799	8,799	0.00%	0	0	0.00	0	0.0000%
332	Field Lines	3,575,726	3,062,513	-5.00%	(178,786)	692,000	20.22	34,220	0.9570%
333	Field Compressor Station Equipment	378,268	267,959	0.00%	0	110,308	19.79	5,573	1.4733%
334	Field Measuring & Regulating Station Equipment	937,979	953,951	-3.00%	(28,139)	12,167	7.96	1,529	0.1630%
337	Other Equipment	0	0	0.00%	0	0	0.00	0	0.0000%
	TOTAL PRODUCTION & GATHERING	5,119,137	4,473,638		(206,926)	852,424		43,725	
	PRODUCTS EXTRACTION								
341	Structures & Improvements	450,221	397,554	0.00%	0	52,666	4.64	11,345	2.5199%
342	Extraction & Refining Equipment	8,498,702	3,031,460	-10.00%	(849,870)	6,317,112	28.27	223,420	2.6289%
343	Pipe Lines	0	0	0.00%	0	0	0.00	0	0.0000%
344	Extracted Product Storage Equipment	206,316	77,560	0.00%	0	128,755	25.61	5,028	2.4371%
345	Compressor Equipment	452,870	233,240	0.00%	0	219,630	17.75	12,376	2.7328%
346	Gas Measuring & Regulating Equipment	84,346	55,063	0.00%	0	29,283	7.46	3,923	4.6510%
	TOTAL PRODUCTS EXTRACTION	9,692,454	3,794,877		(849,870)	6,747,447		256,092	
	UNDERGROUND STORAGE								
351	Structures & Improvements	1,452,227	729,139	-3.00%	(43,567)	766,655	37.75	20,306	1.3983%
352.1	Storage Leaseholds & Rights	688,227	285,177	0.00%	0	403,050	37.98	10,613	1.5420%
352.2	Reservoirs	11,584,476	6,855,738	-30.00%	(3,475,343)	8,204,081	35.90	228,498	1.9724%
352.3	Nonrecoverable Natural Gas	133,441	105,333	0.00%	0	28,108	18.95	1,483	1.1114%
353	Lines	3,854,410	2,002,869	-20.00%	(770,882)	2,622,424	26.96	97,261	2.5234%
354	Compressor Station Equipment	10,827,736	5,426,941	-15.00%	(1,624,160)	7,024,955	30.01	234,084	2.1619%
355	Measuring & Regulating Equipment	532,251	462,878	-10.00%	(53,225)	122,599	12.15	10,092	1.8961%
356	Purification Equipment	4,651,503	1,117,262	-10.00%	(465,150)	3,999,391	26.80	149,225	3.2081%
357	Other Equipment	55,881	24,375	0.00%	0	31,507	15.62	2,017	3.6088%
	TOTAL UNDERGROUND STORAGE	33,780,154	17,009,711		(6,432,328)	23,202,770		753,580	
	TRANSMISSION PLANT								
365.2	Land Rights	35,639,122	4,359,438	0.00%	0	31,279,683	68.19	458,699	1.2871%
366	Structures & Improvements	31,079,679	4,208,524	-4.00%	(1,243,187)	28,114,342	46.52	604,314	1.9444%
366.3	Other Structures	178,924	117,882	0.00%	0	61,042	9.23	6,616	3.6978%
367	Mains	701,880,923	113,747,058	-35.00%	(245,658,323)	833,792,188	61.57	13,542,005	1.9294%
368	Compressor Station Equipment	142,778,979	46,530,887	-15.00%	(21,416,847)	117,664,939	19.74	5,960,225	4.1744%
369	Measuring & Regulating Station Equipment	107,692,594	14,247,653	-15.00%	(16,153,889)	109,598,830	47.37	2,313,910	2.1486%
370	Communication Equipment	1,980,323	1,072,130	0.00%	0	908,192	12.14	74,835	3.7789%
	TOTAL TRANSMISSION PLANT	1,021,230,543	184,283,572		(284,472,246)	1,121,419,217		22,960,603	
	DISTRIBUTION PLANT								
374.2	Land Rights	21,398,456	2,328,026	0.00%	0	19,070,429	69.09	276,009	1.2899%
375	Structures & Improvements	7,026,158	1,456,798	-10.00%	(702,616)	6,271,976	45.83	136,859	1.9479%
376	Mains	5,820,793	2,888,084	-50.00%	(2,910,396)	5,843,106	33.96	172,065	2.9560%
376.1	Mains - Metallic	702,134,631	219,416,035	-85.00%	(596,814,436)	1,079,533,032	56.76	19,019,460	2.7088%
376.2	Mains - Plastic	835,881,714	191,368,342	-50.00%	(417,940,857)	1,062,454,229	54.99	19,319,380	2.3113%
377	Compressor Station Equipment	10,778,649	1,702,973	-10.00%	(1,077,865)	10,153,542	24.60	412,740	3.8292%
378	Measuring & Regulating Station Equipment - General	42,182,076	8,208,818	-35.00%	(14,763,727)	48,736,985	40.97	1,189,635	2.8202%
379	Measuring & Regulating Station Equipment - City Gate	7,204,086	1,677,222	-30.00%	(2,161,226)	7,688,090	46.53	165,212	2.2933%
380.1	Services - Metallic	90,914,330	73,205,545	-150.00%	(136,371,495)	154,080,281	35.78	4,305,936	4.7363%
380.2	Services - Plastic	762,223,084	257,572,967	-125.00%	(952,778,855)	1,457,428,972	48.71	29,921,910	3.9256%
381	Meters	337,344,301	92,204,945	-10.00%	(33,734,430)	278,873,786	29.61	9,417,931	2.7918%
381 AMR	Meters - AMR	74,730,677	60,944,002	0.00%	0	13,786,675	4.11	3,358,386	4.4940%
383	House Regulators	68,992,787	15,992,010	0.00%	0	53,000,777	30.51	1,737,159	2.5179%
387	Other Equipment	308	179	0.00%	0	129	6.00	22	6.9961%
	TOTAL DISTRIBUTION PLANT	2,966,632,049	928,965,944		(2,159,255,903)	4,196,922,008		89,432,703	
	TOTAL DEPRECIABLE PLANT EXCLUDING INTANGIBLES AND GENERAL	**4,036,454,337**	**1,138,527,744**		**(2,451,217,273)**	**5,349,143,866**		**113,446,703**	

APPENDIX B
COMPARISON OF ACCRUAL RATES

PUBLIC SERVICE OF COLORADO - GAS UTILITY
COMPARISON OF ANNUAL ACCRUAL RATE
AT JUNE 30, 2019

FERC Account	Account Description	Plant Balance 06/30/2019	Approved -12AL-1268G and 17-AL-0363G		Proposed			Proposed Less Present Accrual
			Annual Rate	Annual Accrual	Annual Rate	Notes	Annual Accrual	
	INTANGIBLE PLANT							
303.3	Computer Software - 3 Year	$ -	33.3333%	$ -	33.3333%	(1)	$ -	$ -
303.4	Computer Software - 7 Year	35,002,651	14.2857%	5,000,374	14.2857%	(1)	5,000,374	0
303.1	Computer Software - 10 Year	0	10.0000%	0	10.0000%	(1)	0	0
303.5	Computer Software - 15 Year	0	6.6667%	0	6.6667%	(1)	0	0
	TOTAL INTANGIBLE PLANT	**35,002,651**	**14.2857%**	**5,000,374**	**14.2857%**		**5,000,374**	**0**
	PRODUCTION & GATHERING							
325.4	Land Rights	99,049	0.0000%	0	1.7097%		1,693	1,693
327	Field Compressor Station Structures	16,804	0.2444%	41	0.3425%		58	16
328	Field Measuring & Regulating Station Structures	102,512	0.6761%	693	0.6364%		652	(41)
329	Other Structures	8,799	0.0000%	0	0.0000%		0	0
332	Field Lines	3,575,726	0.7575%	27,086	0.9570%		34,220	7,134
333	Field Compressor Station Equipment	378,268	0.2613%	988	1.4733%		5,573	4,584
334	Field Measuring & Regulating Station Equipment	937,979	0.5410%	5,074	0.1630%		1,529	(3,546)
337	Other Equipment	0	5.0000%	0	5.0000%	(2)	0	0
	TOTAL PRODUCTION & GATHERING	**5,119,137**	**0.6619%**	**33,883**	**0.8541%**		**43,725**	**9,842**
	PRODUCTS EXTRACTION							
341	Structures & Improvements	450,221	2.0163%	9,078	2.5199%		11,345	2,267
342	Extraction & Refining Equipment	8,498,702	2.4903%	211,643	2.6289%		223,420	11,777
343	Pipe Lines	0	N/A	0	2.5000%	(2)	0	0
344	Extracted Product Storage Equipment	206,316	2.8060%	5,789	2.4371%		5,028	(761)
345	Compressor Equipment	452,870	2.5283%	11,450	2.7328%		12,376	926
346	Gas Measuring & Regulating Equipment	84,346	3.5135%	2,964	4.6510%		3,923	959
	TOTAL PRODUCTS EXTRACTION	**9,692,454**	**2.4857%**	**240,924**	**2.6422%**		**256,092**	**15,169**
	UNDERGROUND STORAGE							
351	Structures & Improvements	1,452,227	1.2901%	18,735	1.3983%		20,306	1,571
352.1	Storage Leaseholds & Rights	688,227	1.2100%	8,328	1.5420%		10,613	2,285
352.2	Reservoirs	11,584,476	1.7370%	201,222	1.9724%		228,498	27,276
352.3	Nonrecoverable Natural Gas	133,441	0.2088%	279	1.1114%		1,483	1,204
353	Lines	3,854,410	1.5361%	59,208	2.5234%		97,261	38,054
354	Compressor Station Equipment	10,827,736	1.5567%	168,555	2.1619%		234,084	65,529
355	Measuring & Regulating Equipment	532,251	0.7446%	3,963	1.8961%		10,092	6,129
356	Purification Equipment	4,651,503	1.4331%	66,661	3.2081%		149,225	82,564
357	Other Equipment	55,881	1.2359%	691	3.6088%		2,017	1,326
	TOTAL UNDERGROUND STORAGE	**33,780,154**	**1.5620%**	**527,641**	**2.2308%**		**753,580**	**225,938**
	TRANSMISSION PLANT							
365.2	Land Rights	35,639,122	1.4594%	520,117	1.2871%		458,699	(61,419)
366	Structures & Improvements	31,079,679	1.7270%	536,746	1.9444%		604,314	67,568
366.3	Other Structures	178,924	1.0939%	1,957	3.6978%		6,616	4,659
367	Mains	701,880,923	1.7310%	12,149,559	1.9294%		13,542,005	1,392,446
368	Compressor Station Equipment	142,778,979	2.6315%	3,757,229	4.1744%		5,960,225	2,202,996
369	Measuring & Regulating Station Equipment	107,692,594	2.0149%	2,169,898	2.1486%		2,313,910	144,012
370	Communication Equipment	1,980,323	2.4075%	47,676	3.7789%		74,835	27,159
	TOTAL TRANSMISSION PLANT	**1,021,230,543**	**1.8784%**	**19,183,183**	**2.2483%**		**22,960,603**	**3,777,421**
	DISTRIBUTION PLANT							
374.2	Land Rights	21,398,456	1.2781%	273,494	1.2899%		276,009	2,516
375	Structures & Improvements	7,026,158	2.0083%	141,106	1.9479%		136,859	(4,247)
376	Mains	5,820,793	2.6007%	151,381	2.9560%		172,065	20,684
376.1	Mains - Metallic	702,134,631	2.2582%	15,855,604	2.7088%		19,019,460	3,163,856
376.2	Mains - Plastic	835,881,714	2.0395%	17,047,808	2.3113%		19,319,380	2,271,572
377	Compressor Station Equipment	10,778,649	3.1983%	344,734	3.8292%		412,740	68,006
378	Measuring & Regulating Station Equipment - General	42,182,076	2.4462%	1,031,858	2.8202%		1,189,635	157,777
379	Measuring & Regulating Station Equipment - City Gate	7,204,086	2.5119%	180,959	2.2933%		165,212	(15,748)
380.1	Services - Metallic	90,914,330	5.0616%	4,601,720	4.7363%		4,305,936	(295,783)
380.2	Services - Plastic	762,223,084	4.2888%	32,690,224	3.9256%		29,921,910	(2,768,314)
381	Meters	337,344,301	2.7030%	9,118,416	2.7918%		9,417,931	299,514
AMR	Meters - AMR	74,730,677	2.5910%	1,936,272	4.4940%		3,358,386	1,422,114
383	House Regulators	68,992,787	2.4489%	1,689,564	2.5179%		1,737,159	47,595
387	Other Equipment	308	4.2919%	13	6.9961%		22	8
	TOTAL DISTRIBUTION PLANT	**2,966,632,049**	**2.8673%**	**85,063,153**	**3.0146%**		**89,432,703**	**4,369,550**

PUBLIC SERVICE OF COLORADO - GAS UTILITY
COMPARISON OF ANNUAL ACCRUAL RATE
AT JUNE 30, 2019

FERC Account	Account Description	Plant Balance 06/30/2019	Approved -12AL-1268G and 17-AL-0363G		Proposed			Proposed Less Present Accrual
			Annual Rate	Annual Accrual	Annual Rate	Notes	Annual Accrual	
	GENERAL PLANT							
389.2	Land Rights	8,533	1.9985%	171	1.9985%	(3)	171	0
390	Structures & Improvements	2,739,949	2.1680%	59,402	2.1680%	(3)	59,402	0
390.6	Structures & Improvements - Remodeling	432,569	Various	0	Various		0	0
391	Office Furniture & Equipment	848,988	4.5126%	38,311	4.5126%	(3)	38,311	0
391.4	Network Equipment	292,863	14.6928%	43,030	14.6928%	(3)	43,030	0
392.1	Transportation Equipment - Automobiles	794,647	6.8350%	54,314	6.8350%	(3)	54,314	0
392.2	Transportation Equipment - Light Trucks	20,703,490	6.8568%	1,419,597	6.8568%	(3)	1,419,597	0
392.3	Transportation Equipment - Trailers	2,070,891	3.0906%	64,003	3.0906%	(3)	64,003	0
392.4	Transportation Equipment - Heavy Trucks	13,628,564	5.6499%	770,000	5.6499%	(3)	770,000	0
393	Stores Equipment	-	3.3333%	0	3.3333%	(3)	0	0
394	Tools, Shop & Garage Equipment	22,229,920	3.7813%	840,580	3.7813%	(3)	840,580	0
395	Laboratory Equipment	18,498	9.4473%	1,748	9.4473%	(3)	1,748	0
396	Power Operated Equipment	4,889,842	5.4899%	268,447	5.4899%	(3)	268,447	0
397	Communication Equipment	69,934,964	6.3102%	4,413,036	6.3102%	(3)	4,413,036	0
398	Miscellaneous Equipment	5,830	4.1711%	243	4.1711%	(3)	243	0
	TOTAL GENERAL PLANT	**138,599,549**	**5.7525%**	**7,972,882**	**5.7525%**		**7,972,882**	**0**
	TOTAL DEPRECIABLE PLANT	**$ 4,210,056,537**	**2.8033%**	**$ 118,022,040**	**3.00%**		**$ 126,419,959**	**$ 8,397,919**

Notes:

(1) Software is amortized based on approved rates for gas utilty from Docket No. 17AL-0363G and plant excludes fully depreciated assets.

(2) There is currently no balance in this account. When plant is recorded to this account, PSCo requests authorization to use the depreciation rate listed, which is the whole life rate.

(3) General Plant is depreciated based on approved rates for gas utilty from Docket No. 17AL-0363G.

APPENDIX C

COMPARISON OF PARAMETERS

PUBLIC SERVICE OF COLORADO - GAS UTILITY
DEPRECIATION STUDY AT JUNE 30, 2019
COMPARISON OF DEPRECIATION PARAMETERS

Acct	Description	Approved Life	Approved Curve	Approved NS	Proposed Life	Proposed Curve	Proposed NS	Difference Life	Difference NS	Notes	Docket Establishing Approved Parameters
	INTANGIBLE PLANT										
303.3	Computer Software - 3 Year	3		0.00%	3		0.00%	0	0.00%		PSCo-CO-Gas-17AL-0363G
303.4	Computer Software - 7 Year	7		0.00%	7		0.00%	0	0.00%		PSCo-CO-Gas-17AL-0363G
303.1	Computer Software - 10 Year	10		0.00%	10		0.00%	0	0.00%		PSCo-CO-Gas-17AL-0363G
303.5	Computer Software - 15 Year	15		0.00%	15		0.00%	0	0.00%		PSCo-CO-Gas-17AL-0363G
	PRODUCTION & GATHERING										
325.4	Land Rights	33	R4	0.00%	40	R4	0.00%	7	0.00%		PSCo-CO-Gas-12AL-1268G
327	Field Compressor Station Structures	40	L0.5	0.00%	40	L0.5	0.00%	0	0.00%		PSCo-CO-Gas-12AL-1268G
328	Field Measuring & Regulating Station Structures	27	L0	0.00%	27	L0	0.00%	0	0.00%		PSCo-CO-Gas-12AL-1268G
329	Other Structures	40	SQ	0.00%	40	SQ	0.00%	0	0.00%		PSCo-CO-Gas-12AL-1268G
332	Field Lines	37	L0	-3.00%	37	L0	-5.00%	0	-2.00%		PSCo-CO-Gas-12AL-1268G
333	Field Compressor Station Equipment	30	R2.5	0.00%	37	R2	0.00%	7	0.00%		PSCo-CO-Gas-12AL-1268G
334	Field Measuring & Regulating Station Equipment	21	L0	0.00%	21	L0	-3.00%	0	-3.00%		PSCo-CO-Gas-12AL-1268G
337	Other Equipment	20	SQ	0.00%	20	SQ	0.00%	0	0.00%		PSCo-CO-Gas-12AL-1268G
	PRODUCTS EXTRACTION										
341	Structures & Improvements	30	SQ	0.00%	30	SQ	0.00%	0	0.00%		PSCo-CO-Gas-12AL-1268G
342	Extraction & Refining Equipment	35	R1.5	-2.00%	41	R2.5	-10.00%	6	-8.00%		PSCo-CO-Gas-12AL-1268G
343	Pipe Lines	N/A	N/A	0.00%	40	R0.5	0.00%	N/A	N/A		PSCo-CO-Gas-12AL-1268G
344	Extracted Product Storage Equipment	31	R0.5	0.00%	40	R0.5	0.00%	9	0.00%		PSCo-CO-Gas-12AL-1268G
345	Compressor Equipment	35	R3	0.00%	35	R4	0.00%	0	0.00%		PSCo-CO-Gas-12AL-1268G
346	Gas Measuring & Regulating Equipment	23	L1.5	0.00%	20	L2	0.00%	-3	0.00%		PSCo-CO-Gas-12AL-1268G
	UNDERGROUND STORAGE										
351	Structures & Improvements	50	R1	-10.00%	65	R1.5	-3.00%	15	7.00%		PSCo-CO-Gas-12AL-1268G
352.1	Storage Leaseholds & Rights	50	R1	0.00%	59	R2	0.00%	9	0.00%		PSCo-CO-Gas-12AL-1268G
352.2	Reservoirs	50	R1	-35.00%	59	R2	-30.00%	9	5.00%		PSCo-CO-Gas-12AL-1268G
352.3	Nonrecoverable Natural Gas	50	R1	0.00%	59	R2	0.00%	9	0.00%		PSCo-CO-Gas-12AL-1268G
353	Lines	55	R3	0.00%	43	R3	-20.00%	-12	-20.00%		PSCo-CO-Gas-12AL-1268G
354	Compressor Station Equipment	55	R4	-10.00%	48	R4	-15.00%	-7	-5.00%		PSCo-CO-Gas-12AL-1268G
355	Measuring & Regulating Equipment	28	R1	-10.00%	38	R2	-10.00%	10	0.00%		PSCo-CO-Gas-12AL-1268G
356	Purification Equipment	50	R3	0.00%	33	R2	-10.00%	-17	-10.00%		PSCo-CO-Gas-12AL-1268G
357	Other Equipment	16	L1.5	0.00%	25	L0	0.00%	9	0.00%		PSCo-CO-Gas-12AL-1268G
	TRANSMISSION PLANT										
365.2	Land Rights	65	R4	0.00%	80	R4	0.00%	15	0.00%		PSCo-CO-Gas-12AL-1268G
366	Structures & Improvements	55	R1.5	-4.00%	55	R1.5	-4.00%	0	0.00%		PSCo-CO-Gas-12AL-1268G
366.3	Other Structures	38	S5	0.00%	45	R5	0.00%	7	0.00%		PSCo-CO-Gas-12AL-1268G
367	Mains	72	R3	-25.00%	72	R3	-35.00%	0	-10.00%		PSCo-CO-Gas-17AL-0363G
368	Compressor Station Equipment	35	L2	-4.00%	30	L2.5	-15.00%	-5	-11.00%		PSCo-CO-Gas-12AL-1268G
369	Measuring & Regulating Station Equipment	50	R2	-10.00%	55	R1.5	-15.00%	5	-5.00%		PSCo-CO-Gas-12AL-1268G
370	Communication Equipment	25	R1.5	0.00%	35	R3	0.00%	10	0.00%		PSCo-CO-Gas-12AL-1268G
	DISTRIBUTION PLANT										
374.2	Land Rights	80	R3	0.00%	80	R3	0.00%	0	0.00%		PSCo-CO-Gas-12AL-1268G
375	Structures & Improvements	60	R3	-10.00%	60	R3	-10.00%	0	0.00%		PSCo-CO-Gas-12AL-1268G
376	Mains	60	R0.5	-50.00%	58	R1.5	-50.00%	-2	0.00%		PSCo-CO-Gas-17AL-0363G
376.1	Mains - Metallic	72	R3	-50.00%	72	R4	-85.00%	0	-35.00%		PSCo-CO-Gas-17AL-0363G
376.2	Mains - Plastic	68	R3	-35.00%	68	R4	-50.00%	0	-15.00%		PSCo-CO-Gas-17AL-0363G
377	Compressor Station Equipment	32	R1	0.00%	30	R2	-10.00%	-2	-10.00%		PSCo-CO-Gas-12AL-1268G
378	Measuring & Regulating Station Equipment - General	58	R1.5	-35.00%	50	R1.5	-35.00%	-8	0.00%		PSCo-CO-Gas-12AL-1268G
379	Measuring & Regulating Station Equipment - City Gate	51	R0.5	-20.00%	60	R0.5	-30.00%	9	-10.00%		PSCo-CO-Gas-12AL-1268G
380.1	Services - Metallic	55	R3	-125.00%	60	R2.5	-150.00%	5	-25.00%		PSCo-CO-Gas-12AL-1268G
380.2	Services - Plastic	55	R3	-125.00%	60	R2.5	-125.00%	5	0.00%		PSCo-CO-Gas-12AL-1268G
381	Meters	45	R4	-10.00%	43	L3	-10.00%	-2	0.00%		PSCo-CO-Gas-12AL-1268G
381 AMR	Meters - AMR	15	SQ	0.00%	15	SQ	0.00%	0	0.00%		PSCo-CO-Gas-12AL-1268G
382	Meter Installations	45	R4	-10.00%	N/A	N/A	N/A	N/A	N/A	(1)	PSCo-CO-Gas-12AL-1268G
383	House Regulators	45	R4	0.00%	43	L3	0.00%	-2	0.00%		PSCo-CO-Gas-12AL-1268G
387	Other Equipment	25	R0.5	0.00%	22	R2.5	0.00%	-3	0.00%		PSCo-CO-Gas-12AL-1268G

PUBLIC SERVICE OF COLORADO - GAS UTILITY
DEPRECIATION STUDY AT JUNE 30, 2019
COMPARISON OF DEPRECIATION PARAMETERS

Acct	Description	Approved Life	Approved Curve	Approved NS	Proposed Life	Proposed Curve	Proposed NS	Difference Life	Difference NS	Notes	Docket Establishing Approved Parameters
	GENERAL PLANT										
389.2	Land Rights	60	R4	0.00%	60	R4	0.00%	0	0.00%		PSCo-CO-Gas-17AL-0363G
390	Structures & Improvements	45	R1.5	-10.00%	45	R1.5	-10.00%	0	0.00%		PSCo-CO-Gas-17AL-0363G
390.6	Structures & Improvements - Remodeling										
391	Office Furniture & Equipment	20	SQ	0.00%	20	SQ	0.00%	0	0.00%		PSCo-CO-Gas-17AL-0363G
391.4	Network Equipment	6	SQ	0.00%	6	SQ	0.00%	0	0.00%		PSCo-CO-Gas-17AL-0363G
392.1	Transportation Equipment - Automobiles	12	SQ	10.00%	12	SQ	10.00%	0	0.00%		PSCo-CO-Gas-17AL-0363G
392.2	Transportation Equipment - Light Trucks	12	SQ	10.00%	12	SQ	10.00%	0	0.00%		PSCo-CO-Gas-17AL-0363G
392.3	Transportation Equipment - Trailers	25	SQ	20.00%	25	SQ	20.00%	0	0.00%		PSCo-CO-Gas-17AL-0363G
392.4	Transportation Equipment - Heavy Trucks	14	SQ	10.00%	14	SQ	10.00%	0	0.00%		PSCo-CO-Gas-17AL-0363G
393	Stores Equipment	30	SQ	0.00%	30	SQ	0.00%	0	0.00%		PSCo-CO-Gas-17AL-0363G
394	Tools, Shop & Garage Equipment	25	SQ	0.00%	25	SQ	0.00%	0	0.00%		PSCo-CO-Gas-17AL-0363G
395	Laboratory Equipment	10	SQ	0.00%	10	SQ	0.00%	0	0.00%		PSCo-CO-Gas-17AL-0363G
396	Power Operated Equipment	14	SQ	15.00%	14	SQ	15.00%	0	0.00%		PSCo-CO-Gas-17AL-0363G
397	Communication Equipment	15	SQ	0.00%	15	SQ	0.00%	0	0.00%		PSCo-CO-Gas-17AL-0363G
398	Miscellaneous Equipment	20	SQ	0.00%	20	SQ	0.00%	0	0.00%		PSCo-CO-Gas-17AL-0363G

Notes:
(1) All 382 account balance was transferred to 381 or retired in 2019. PSCo is no longer using 382 account.

APPENDIX D
COMPARISON OF ACTUAL AND REALLOCATED
DEPRECIATION RESERVE

PUBLIC SERVICE OF COLORADO - GAS UTILITY
COMPARISON OF BOOK AND REALLOCATED DEPRECIATION RESERVE
AT JUNE 30, 2019

FERC Account	Account Description	Plant Balance 06/30/2019	Book Reserve	Reallocated Reserve	Difference
	INTANGIBLE PLANT				
303.3	Computer Software - 3 Year	$ -	$ -	$ -	$ -
303.4	Computer Software - 7 Year	35,002,651	27,611,829	27,611,829	0
303.1	Computer Software - 10 Year	0	0	0	0
303.5	Computer Software - 15 Year	0	0	0	0
	TOTAL INTANGIBLE PLANT	**35,002,651**	**27,611,829**	**27,611,829**	**0**
	PRODUCTION & GATHERING				
325.4	Land Rights	99,049	61,984	70,502	8,518
327	Field Compressor Station Structures	16,804	16,146	15,699	(447)
328	Field Measuring & Regulating Station Structures	102,512	94,350	94,216	(135)
329	Other Structures	8,799	8,799	8,799	0
332	Field Lines	3,575,726	3,123,189	3,062,513	(60,677)
333	Field Compressor Station Equipment	378,268	251,285	267,959	16,674
334	Field Measuring & Regulating Station Equipment	937,979	917,884	953,951	36,067
337	Other Equipment	0		0	0
	TOTAL PRODUCTION & GATHERING	**5,119,137**	**4,473,638**	**4,473,638**	**(0)**
	PRODUCTS EXTRACTION				
341	Structures & Improvements	450,221	410,751	397,554	(13,196)
342	Extraction & Refining Equipment	8,498,702	2,968,669	3,031,460	62,791
343	Pipe Lines	0	0	0	0
344	Extracted Product Storage Equipment	206,316	128,413	77,560	(50,852)
345	Compressor Equipment	452,870	220,291	233,240	12,949
346	Gas Measuring & Regulating Equipment	84,346	66,753	55,063	(11,691)
	TOTAL PRODUCTS EXTRACTION	**9,692,454**	**3,794,877**	**3,794,877**	**0**
	UNDERGROUND STORAGE				
351	Structures & Improvements	1,452,227	1,047,566	729,139	(318,427)
352.1	Storage Leaseholds & Rights	688,227	333,082	285,177	(47,905)
352.2	Reservoirs	11,584,476	8,465,232	6,855,738	(1,609,494)
352.3	Nonrecoverable Natural Gas	133,441	129,142	105,333	(23,809)
353	Lines	3,854,410	1,270,905	2,002,869	731,964
354	Compressor Station Equipment	10,827,736	5,020,955	5,426,941	405,986
355	Measuring & Regulating Equipment	532,251	566,156	462,878	(103,279)
356	Purification Equipment	4,651,503	131,040	1,117,262	986,223
357	Other Equipment	55,881	45,634	24,375	(21,259)
	TOTAL UNDERGROUND STORAGE	**33,780,154**	**17,009,711**	**17,009,711**	**0**
	TRANSMISSION PLANT				
365.2	Land Rights	35,639,122	6,926,022	4,359,438	(2,566,584)
366	Structures & Improvements	31,079,679	4,966,697	4,208,524	(758,173)
366.3	Other Structures	178,924	104,218	117,882	13,664
367	Mains	701,880,923	111,319,413	113,747,058	2,427,645
368	Compressor Station Equipment	142,778,979	38,811,512	46,530,887	7,719,375
369	Measuring & Regulating Station Equipment	107,692,594	20,382,766	14,247,653	(6,135,113)
370	Communication Equipment	1,980,323	1,772,944	1,072,130	(700,814)
	TOTAL TRANSMISSION PLANT	**1,021,230,543**	**184,283,572**	**184,283,572**	**0**
	DISTRIBUTION PLANT				
374.2	Land Rights	21,398,456	2,724,995	2,328,026	(396,969)
375	Structures & Improvements	7,026,158	1,591,447	1,456,798	(134,649)
376	Mains	5,820,793	2,700,426	2,888,084	187,658
376.1	Mains - Metallic	702,134,631	152,585,717	219,416,035	66,830,318
376.2	Mains - Plastic	835,881,714	175,907,437	191,368,342	15,460,904
377	Compressor Station Equipment	10,778,649	944,497	1,702,973	758,476
378	Measuring & Regulating Station Equipment - General	42,182,076	7,056,659	8,208,818	1,152,159
379	Measuring & Regulating Station Equipment - City Gate	7,204,086	1,898,498	1,677,222	(221,276)
380.1	Services - Metallic	90,914,330	80,896,006	73,205,545	(7,690,460)
380.2	Services - Plastic	762,223,084	317,054,395	257,572,967	(59,481,428)
381	Meters	337,344,301	95,316,800	92,204,945	(3,111,856)
381 AMR	Meters - AMR	74,730,677	60,944,002	60,944,002	0
383	House Regulators	68,992,787	29,344,890	15,992,010	(13,352,880)
387	Other Equipment	308	175	179	4
	TOTAL DISTRIBUTION PLANT	**2,966,632,049**	**928,965,944**	**928,965,944**	**(0)**

PUBLIC SERVICE OF COLORADO - GAS UTILITY
COMPARISON OF BOOK AND REALLOCATED DEPRECIATION RESERVE
AT JUNE 30, 2019

FERC Account	Account Description	Plant Balance 06/30/2019	Book Reserve	Reallocated Reserve	Difference
	General Plant				
389.2	Land Rights	8,533	2,096	2,096	0
390	Structures & Improvements	2,739,949	1,353,220	1,353,220	0
390.6	Structures & Improvements - Remodeling	432,569	387,897	387,897	0
391	Office Furniture & Equipment	848,988	456,638	456,638	0
391.4	Network Equipment	292,863	95,024	95,024	0
392.1	Transportation Equipment - Automobiles	794,647	342,004	342,004	0
392.2	Transportation Equipment - Light Trucks	20,703,490	8,062,528	8,062,528	0
392.3	Transportation Equipment - Trailers	2,070,891	301,747	301,747	0
392.4	Transportation Equipment - Heavy Trucks	13,628,564	5,103,874	5,103,874	0
393	Stores Equipment	-	0	0	0
394	Tools, Shop & Garage Equipment	22,229,920	7,590,029	7,590,029	0
395	Laboratory Equipment	18,498	(1,575)	(1,575)	0
396	Power Operated Equipment	4,889,842	2,419,028	2,419,028	0
397	Communication Equipment	69,934,964	19,746,444	19,746,444	0
398	Miscellaneous Equipment	5,830	3,391	3,391	0
	TOTAL GENERAL PLANT	**138,599,549**	**45,862,345**	**45,862,345**	**0**
	TOTAL DEPRECIABLE PLANT	**$ 4,210,056,537**	**$ 1,212,001,918**	**$ 1,212,001,918**	**$ 0**

APPENDIX E
NET SALVAGE ANALYSIS

PUBLIC SERVICE OF COLORADO -GAS UTILITY
RETIREMENTS, GROSS SALVAGE, AND COST OF REMOVAL 1999-2018
AS ADJUSTED

Transaction Year	Account	Retirements	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2-yr Net Salv. %	3-yr Net Salv. %	4-yr Net Salv. %	5-yr Net Salv. %	6-yr Net Salv. %	7-yr Net Salv. %	8-yr Net Salv. %	9-yr Net Salv. %	10-yr Net Salv. %
1999	3254	0	0	0	0	NA									
2000	3254	0	0	0	0	NA	NA								
2001	3254	0	0	0	0	NA	NA	NA							
2002	3254	0	0	0	0	NA	NA	NA	NA						
2003	3254	0	0	0	0	NA	NA	NA	NA	NA					
2004	3254	0	0	0	0	NA	NA	NA	NA	NA	NA				
2005	3254	0	0	0	0	NA	NA	NA	NA	NA	NA	NA			
2006	3254	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA		
2007	3254	5,169	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
2008	3254	0	0	0	0	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2009	3254	0	0	0	0	NA	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2010	3254	0	0	0	0	NA	NA	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2011	3254	0	0	0	0	NA	NA	NA	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2012	3254	0	0	0	0	NA	NA	NA	NA	NA	0.0%	0.0%	0.0%	0.0%	0.0%
2013	3254	0	0	0	0	NA	NA	NA	NA	NA	NA	0.0%	0.0%	0.0%	0.0%
2014	3254	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	0.0%	0.0%	0.0%
2015	3254	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	0.0%	0.0%
2016	3254	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0%
2017	3254	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2018	3254	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1999	327	0	0	0	0	NA									
2000	327	0	0	0	0	NA	NA								
2001	327	0	0	0	0	NA	NA	NA							
2002	327	0	0	0	0	NA	NA	NA	NA						
2003	327	0	0	0	0	NA	NA	NA	NA	NA					
2004	327	0	0	0	0	NA	NA	NA	NA	NA	NA				
2005	327	0	0	0	0	NA	NA	NA	NA	NA	NA	NA			
2006	327	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA		
2007	327	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2008	327	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2009	327	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2010	327	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2011	327	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2012	327	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2013	327	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2014	327	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2015	327	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2016	327	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2017	327	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2018	327	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

PUBLIC SERVICE OF COLORADO -GAS UTILITY
RETIREMENTS, GROSS SALVAGE, AND COST OF REMOVAL 1999-2018
AS ADJUSTED

Transaction Year	Account	Retirements	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2-yr Net Salv. %	3-yr Net Salv. %	4-yr Net Salv. %	5-yr Net Salv. %	6-yr Net Salv. %	7-yr Net Salv. %	8-yr Net Salv. %	9-yr Net Salv. %	10-yr Net Salv. %
1999	328	4,726	0	0	0	0.0%									
2000	328	0	0	0	0	NA	0.0%								
2001	328	0	0	0	0	NA	NA	0.0%							
2002	328	0	0	0	0	NA	NA	NA	0.0%						
2003	328	0	0	0	0	NA	NA	NA	NA	0.0%					
2004	328	0	0	0	0	NA	NA	NA	NA	NA	0.0%				
2005	328	0	0	0	0	NA	NA	NA	NA	NA	NA	0.0%			
2006	328	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	0.0%		
2007	328	27,084	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
2008	328	0	0	0	0	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2009	328	0	0	0	0	NA	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2010	328	0	0	0	0	NA	NA	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2011	328	0	0	0	0	NA	NA	NA	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2012	328	0	0	68	(68)	NA	NA	NA	NA	NA	-0.3%	-0.3%	-0.3%	-0.3%	-0.3%
2013	328	0	0	0	0	NA	NA	NA	NA	NA	NA	-0.3%	-0.3%	-0.3%	-0.3%
2014	328	21,183	0	727	(727)	-3.4%	-3.4%	-3.8%	-3.8%	-3.8%	-3.8%	-3.8%	-1.6%	-1.6%	-1.6%
2015	328	0	0	0	0	NA	-3.4%	-3.4%	-3.8%	-3.8%	-3.8%	-3.8%	-3.8%	-1.6%	-1.6%
2016	328	0	0	0	0	NA	NA	-3.4%	-3.4%	-3.8%	-3.8%	-3.8%	-3.8%	-3.8%	-1.6%
2017	328	0	0	0	0	NA	NA	NA	-3.4%	-3.4%	-3.8%	-3.8%	-3.8%	-3.8%	-3.8%
2018	328	0	0	0	0	NA	NA	NA	NA	-3.4%	-3.4%	-3.8%	-3.8%	-3.8%	-3.8%
1999	329	0	0	0	0	NA									
2000	329	0	0	0	0	NA	NA								
2001	329	0	0	0	0	NA	NA	NA							
2002	329	0	0	0	0	NA	NA	NA	NA						
2003	329	0	0	0	0	NA	NA	NA	NA	NA					
2004	329	0	0	0	0	NA	NA	NA	NA	NA	NA				
2005	329	0	0	0	0	NA	NA	NA	NA	NA	NA	NA			
2006	329	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA		
2007	329	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2008	329	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2009	329	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2010	329	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2011	329	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2012	329	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2013	329	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2014	329	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2015	329	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2016	329	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2017	329	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2018	329	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

PUBLIC SERVICE OF COLORADO -GAS UTILITY
RETIREMENTS, GROSS SALVAGE, AND COST OF REMOVAL 1999-2018
AS ADJUSTED

Transaction Year	Account	Retirements	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2-yr Net Salv. %	3-yr Net Salv. %	4-yr Net Salv. %	5-yr Net Salv. %	6-yr Net Salv. %	7-yr Net Salv. %	8-yr Net Salv. %	9-yr Net Salv. %	10-yr Net Salv. %
1999	332	51,452	0	0	0	0.0%									
2000	332	0	0	0	0	NA	0.0%								
2001	332	0	0	0	0	NA	NA	0.0%							
2002	332	10	0	0	0	0.0%	0.0%	0.0%	0.0%						
2003	332	71,308	0	2,722	(2,722)	-3.8%	-3.8%	-3.8%	-3.8%	-2.2%					
2004	332	0	0	0	0	NA	-3.8%	-3.8%	-3.8%	-3.8%	-2.2%				
2005	332	0	0	0	0	NA	NA	-3.8%	-3.8%	-3.8%	-3.8%	-2.2%			
2006	332	167,819	0	0	0	0.0%	0.0%	0.0%	-1.1%	-1.1%	-1.1%	-1.1%	-0.9%		
2007	332	254,497	0	0	0	0.0%	0.0%	0.0%	0.0%	-0.6%	-0.6%	-0.6%	-0.6%	-0.5%	
2008	332	0	0	0	0	NA	0.0%	0.0%	0.0%	0.0%	-0.6%	-0.6%	-0.6%	-0.6%	-0.5%
2009	332	0	0	16,509	(16,509)	NA	NA	-6.5%	-3.9%	-3.9%	-3.9%	-3.9%	-3.9%	-3.9%	-3.9%
2010	332	21,836	0	0	0	0.0%	-75.6%	-75.6%	-6.0%	-3.7%	-3.7%	-3.7%	-3.7%	-3.7%	-3.7%
2011	332	0	0	0	0	NA	0.0%	-75.6%	-75.6%	-6.0%	-3.7%	-3.7%	-3.7%	-3.7%	-3.7%
2012	332	9,724	0	2,796	(2,796)	-28.8%	-28.8%	-8.9%	-61.2%	-61.2%	-6.7%	-4.3%	-4.3%	-4.3%	-4.2%
2013	332	27,917	0	7,720	(7,720)	-27.7%	-27.9%	-27.9%	-17.7%	-45.4%	-45.4%	-8.6%	-5.6%	-5.6%	-5.6%
2014	332	100,300	0	8,330	(8,330)	-8.3%	-12.5%	-13.7%	-13.7%	-11.8%	-22.1%	-22.1%	-8.5%	-6.1%	-6.1%
2015	332	2,161	0	721	(721)	-33.4%	-8.8%	-12.9%	-14.0%	-14.0%	-12.1%	-22.3%	-22.3%	-8.7%	-6.2%
2016	332	0	0	0	0	NA	-33.4%	-8.8%	-12.9%	-14.0%	-14.0%	-12.1%	-22.3%	-22.3%	-8.7%
2017	332	0	0	0	0	NA	NA	-33.4%	-8.8%	-12.9%	-14.0%	-14.0%	-12.1%	-22.3%	-22.3%
2018	332	78	0	778	(778)	-992.0%	-992.0%	-992.0%	-67.0%	-9.6%	-13.5%	-14.5%	-14.5%	-12.6%	-22.7%
1999	333	0	0	0	0	NA									
2000	333	0	0	0	0	NA	NA								
2001	333	0	0	0	0	NA	NA	NA							
2002	333	0	0	0	0	NA	NA	NA	NA						
2003	333	0	0	0	0	NA	NA	NA	NA	NA					
2004	333	0	0	0	0	NA	NA	NA	NA	NA	NA				
2005	333	0	0	0	0	NA	NA	NA	NA	NA	NA	NA			
2006	333	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA		
2007	333	10,418	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
2008	333	0	0	0	0	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2009	333	0	0	0	0	NA	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2010	333	0	0	0	0	NA	NA	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2011	333	0	0	0	0	NA	NA	NA	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2012	333	0	0	0	0	NA	NA	NA	NA	NA	0.0%	0.0%	0.0%	0.0%	0.0%
2013	333	0	0	0	0	NA	NA	NA	NA	NA	NA	0.0%	0.0%	0.0%	0.0%
2014	333	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	0.0%	0.0%	0.0%
2015	333	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	0.0%	0.0%
2016	333	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0%
2017	333	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2018	333	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

PUBLIC SERVICE OF COLORADO -GAS UTILITY
RETIREMENTS, GROSS SALVAGE, AND COST OF REMOVAL 1999-2018
AS ADJUSTED

Transaction Year	Account	Retirements	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2-yr Net Salv. %	3-yr Net Salv. %	4-yr Net Salv. %	5-yr Net Salv. %	6-yr Net Salv. %	7-yr Net Salv. %	8-yr Net Salv. %	9-yr Net Salv. %	10-yr Net Salv. %
1999	334	82,389	0	0	0	0.0%									
2000	334	0	0	0	0	NA	0.0%								
2001	334	1,485	0	0	0	0.0%	0.0%	0.0%							
2002	334	0	0	0	0	NA	0.0%	0.0%	0.0%						
2003	334	8,512	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%					
2004	334	0	0	0	0	NA	0.0%	0.0%	0.0%	0.0%	0.0%				
2005	334	0	0	0	0	NA	NA	0.0%	0.0%	0.0%	0.0%	0.0%			
2006	334	2,535	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
2007	334	367,173	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
2008	334	0	0	0	0	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2009	334	0	0	0	0	NA	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2010	334	646	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2011	334	0	0	0	0	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2012	334	0	0	0	0	NA	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2010	334	646	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2011	334	0	0	0	0	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2012	334	2,745	0	1,753	(1,753)	-63.9%	-63.9%	-51.7%	-51.7%	-51.7%	-43.4%	-43.4%	-43.4%	-0.5%	-0.5%
2013	334	0	0	1,093	(1,093)	NA	-103.7%	-103.7%	-83.9%	-83.9%	-83.9%	-70.5%	-70.5%	-70.5%	-0.8%
2014	334	318,472	0	10,494	(10,494)	-3.3%	-3.6%	-4.2%	-4.2%	-4.1%	-4.1%	-4.1%	-4.1%	-4.1%	-4.1%
2015	334	0	0	0	0	NA	-3.3%	-3.6%	-4.2%	-4.2%	-4.1%	-4.1%	-4.1%	-4.1%	-4.1%
2016	334	0	0	0	0	NA	NA	-3.3%	-3.6%	-4.2%	-4.2%	-4.1%	-4.1%	-4.1%	-4.1%
2017	334	0	0	0	0	NA	NA	NA	-3.3%	-3.6%	-4.2%	-4.2%	-4.1%	-4.1%	-4.1%
2018	334	0	0	0	0	NA	NA	NA	NA	-3.3%	-3.6%	-4.2%	-4.2%	-4.1%	-4.1%
1999	337	0	0	0	0	NA									
2000	337	0	0	0	0	NA	NA								
2001	337	0	0	0	0	NA	NA	NA							
2002	337	0	0	0	0	NA	NA	NA	NA						
2003	337	0	0	0	0	NA	NA	NA	NA	NA					
2004	337	0	0	0	0	NA	NA	NA	NA	NA	NA				
2005	337	0	0	0	0	NA	NA	NA	NA	NA	NA	NA			
2006	337	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA		
2007	337	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2008	337	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2009	337	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2010	337	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2011	337	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2012	337	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2013	337	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2014	337	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2015	337	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2016	337	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2017	337	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2018	337	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

PUBLIC SERVICE OF COLORADO -GAS UTILITY
RETIREMENTS, GROSS SALVAGE, AND COST OF REMOVAL 1999-2018
AS ADJUSTED

Transaction Year	Account	Retirements	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2-yr Net Salv. %	3-yr Net Salv. %	4-yr Net Salv. %	5-yr Net Salv. %	6-yr Net Salv. %	7-yr Net Salv. %	8-yr Net Salv. %	9-yr Net Salv. %	10-yr Net Salv. %
1999	341	0	0	0	0	NA									
2000	341	0	0	0	0	NA	NA								
2001	341	0	0	0	0	NA	NA	NA							
2002	341	0	0	0	0	NA	NA	NA	NA						
2003	341	0	0	0	0	NA	NA	NA	NA	NA					
2004	341	0	0	0	0	NA	NA	NA	NA	NA	NA				
2005	341	0	0	0	0	NA	NA	NA	NA	NA	NA	NA			
2006	341	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA		
2007	341	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2008	341	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2009	341	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2010	341	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2011	341	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2012	341	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2013	341	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2014	341	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2015	341	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2016	341	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2017	341	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2018	341	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1999	342	0	0	0	0	NA									
2000	342	0	0	0	0	NA	NA								
2001	342	0	0	0	0	NA	NA	NA							
2002	342	33,861	0	0	0	0.0%	0.0%	0.0%	0.0%						
2003	342	0	0	0	0	NA	0.0%	0.0%	0.0%	0.0%					
2004	342	0	0	0	0	NA	NA	0.0%	0.0%	0.0%	0.0%				
2005	342	0	0	0	0	NA	NA	NA	0.0%	0.0%	0.0%	0.0%			
2006	342	0	0	0	0	NA	NA	NA	NA	0.0%	0.0%	0.0%	0.0%		
2007	342	0	0	0	0	NA	NA	NA	NA	NA	0.0%	0.0%	0.0%	0.0%	
2008	342	0	0	0	0	NA	NA	NA	NA	NA	NA	0.0%	0.0%	0.0%	0.0%
2009	342	26,113	0	275	(275)	-1.1%	-1.1%	-1.1%	-1.1%	-1.1%	-1.1%	-1.1%	-0.5%	-0.5%	-0.5%
2010	342	0	0	2,020	(2,020)	NA	-8.8%	-8.8%	-8.8%	-8.8%	-8.8%	-8.8%	-8.8%	-3.8%	-3.8%
2011	342	40,470	0	0	0	0.0%	-5.0%	-3.4%	-3.4%	-3.4%	-3.4%	-3.4%	-3.4%	-3.4%	-2.3%
2012	342	16,420	47,967	19,206	28,761	175.2%	50.6%	47.0%	31.9%	31.9%	31.9%	31.9%	31.9%	31.9%	31.9%
2013	342	16,468	0	18,666	(18,666)	-113.3%	30.7%	13.8%	11.0%	7.8%	7.8%	7.8%	7.8%	7.8%	7.8%
2014	342	0	0	0	0	NA	-113.3%	30.7%	13.8%	11.0%	7.8%	7.8%	7.8%	7.8%	7.8%
2015	342	35,443	0	32,818	(32,818)	-92.6%	-92.6%	-99.2%	-33.3%	-20.9%	-22.7%	-18.5%	-18.5%	-18.5%	-18.5%
2016	342	0	0	0	0	NA	-92.6%	-92.6%	-99.2%	-33.3%	-20.9%	-22.7%	-18.5%	-18.5%	-18.5%
2017	342	0	0	0	0	NA	NA	-92.6%	-92.6%	-99.2%	-33.3%	-20.9%	-22.7%	-18.5%	-18.5%
2018	342	241,285	0	147,217	(147,217)	-61.0%	-61.0%	-61.0%	-65.1%	-65.1%	-67.8%	-54.9%	-48.5%	-49.1%	-45.8%

PUBLIC SERVICE OF COLORADO -GAS UTILITY
RETIREMENTS, GROSS SALVAGE, AND COST OF REMOVAL 1999-2018
AS ADJUSTED

Transaction Year	Account	Retirements	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2-yr Net Salv. %	3-yr Net Salv. %	4-yr Net Salv. %	5-yr Net Salv. %	6-yr Net Salv. %	7-yr Net Salv. %	8-yr Net Salv. %	9-yr Net Salv. %	10-yr Net Salv. %
1999	343	0	0	0	0	NA									
2000	343	0	0	0	0	NA	NA								
2001	343	0	0	0	0	NA	NA	NA							
2002	343	0	0	0	0	NA	NA	NA	NA						
2003	343	0	0	0	0	NA	NA	NA	NA	NA					
2004	343	0	0	0	0	NA	NA	NA	NA	NA	NA				
2005	343	0	0	0	0	NA	NA	NA	NA	NA	NA	NA			
2006	343	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA		
2007	343	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2008	343	4,871	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2009	343	0	0	0	0	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2010	343	0	0	0	0	NA	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2011	343	0	0	0	0	NA	NA	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2012	343	0	0	0	0	NA	NA	NA	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2013	343	0	0	0	0	NA	NA	NA	NA	NA	0.0%	0.0%	0.0%	0.0%	0.0%
2014	343	0	0	0	0	NA	NA	NA	NA	NA	NA	0.0%	0.0%	0.0%	0.0%
2015	343	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	0.0%	0.0%	0.0%
2016	343	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	0.0%	0.0%
2017	343	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0%
2018	343	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1999	344	0	0	0	0	NA									
2000	344	0	0	0	0	NA	NA								
2001	344	0	0	0	0	NA	NA	NA							
2002	344	0	0	0	0	NA	NA	NA	NA						
2003	344	0	0	0	0	NA	NA	NA	NA	NA					
2004	344	0	0	0	0	NA	NA	NA	NA	NA	NA				
2005	344	0	0	0	0	NA	NA	NA	NA	NA	NA	NA			
2006	344	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA		
2007	344	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2008	344	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2009	344	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2010	344	9,861	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2011	344	0	0	0	0	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2012	344	0	4,843	678	4,164	NA	NA	42.2%	42.2%	42.2%	42.2%	42.2%	42.2%	42.2%	42.2%
2013	344	0	0	0	0	NA	NA	NA	42.2%	42.2%	42.2%	42.2%	42.2%	42.2%	42.2%
2014	344	0	0	0	0	NA	NA	NA	NA	42.2%	42.2%	42.2%	42.2%	42.2%	42.2%
2015	344	0	0	0	0	NA	NA	NA	NA	NA	42.2%	42.2%	42.2%	42.2%	42.2%
2016	344	0	0	0	0	NA	NA	NA	NA	NA	NA	42.2%	42.2%	42.2%	42.2%
2017	344	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	42.2%	42.2%	42.2%
2018	344	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	42.2%	42.2%

PUBLIC SERVICE OF COLORADO -GAS UTILITY
RETIREMENTS, GROSS SALVAGE, AND COST OF REMOVAL 1999-2018
AS ADJUSTED

Transaction Year	Account	Retirements	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2-yr Net Salv. %	3-yr Net Salv. %	4-yr Net Salv. %	5-yr Net Salv. %	6-yr Net Salv. %	7-yr Net Salv. %	8-yr Net Salv. %	9-yr Net Salv. %	10-yr Net Salv. %
1999	345	0	0	0	0	NA									
2000	345	0	0	0	0	NA	NA								
2001	345	0	0	0	0	NA	NA	NA							
2002	345	0	0	0	0	NA	NA	NA	NA						
2003	345	0	0	0	0	NA	NA	NA	NA	NA					
2004	345	0	0	0	0	NA	NA	NA	NA	NA	NA				
2005	345	0	0	0	0	NA	NA	NA	NA	NA	NA	NA			
2006	345	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA		
2007	345	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2008	345	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2009	345	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2010	345	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2011	345	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2012	345	54,338	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2013	345	0	0	0	0	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2014	345	0	0	0	0	NA	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2015	345	0	0	0	0	NA	NA	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2016	345	0	0	0	0	NA	NA	NA	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2017	345	0	0	0	0	NA	NA	NA	NA	NA	0.0%	0.0%	0.0%	0.0%	0.0%
2018	345	0	0	0	0	NA	NA	NA	NA	NA	NA	0.0%	0.0%	0.0%	0.0%
1999	346	1	0	0	0	0.0%									
2000	346	0	0	0	0	NA	0.0%								
2001	346	0	0	0	0	NA	NA	0.0%							
2002	346	0	0	0	0	NA	NA	NA	0.0%						
2003	346	0	0	0	0	NA	NA	NA	NA	0.0%					
2004	346	0	0	0	0	NA	NA	NA	NA	NA	0.0%				
2005	346	0	0	0	0	NA	NA	NA	NA	NA	NA	0.0%			
2006	346	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	0.0%		
2007	346	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	0.0%	
2008	346	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0%
2009	346	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2010	346	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2011	346	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2012	346	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2013	346	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2014	346	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2015	346	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2016	346	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2017	346	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2018	346	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

PUBLIC SERVICE OF COLORADO -GAS UTILITY
RETIREMENTS, GROSS SALVAGE, AND COST OF REMOVAL 1999-2018
AS ADJUSTED

Transaction Year	Account	Retirements	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2-yr Net Salv. %	3-yr Net Salv. %	4-yr Net Salv. %	5-yr Net Salv. %	6-yr Net Salv. %	7-yr Net Salv. %	8-yr Net Salv. %	9-yr Net Salv. %	10-yr Net Salv. %
1999	3504	0	0	0	0	NA									
2000	3504	0	0	0	0	NA	NA								
2001	3504	0	0	0	0	NA	NA	NA							
2002	3504	0	0	0	0	NA	NA	NA	NA						
2003	3504	0	0	0	0	NA	NA	NA	NA	NA					
2004	3504	0	0	0	0	NA	NA	NA	NA	NA	NA				
2005	3504	0	0	0	0	NA	NA	NA	NA	NA	NA	NA			
2006	3504	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA		
2007	3504	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2008	3504	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2009	3504	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2010	3504	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2011	3504	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2012	3504	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2013	3504	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2014	3504	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2015	3504	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2016	3504	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2017	3504	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2018	3504	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1999	351	3,901	0	0	0	0.0%									
2000	351	0	0	0	0	NA	0.0%								
2001	351	3,149	0	698	(698)	-22.2%	-22.2%	-9.9%							
2002	351	0	0	0	0	NA	-22.2%	-22.2%	-9.9%						
2003	351	0	0	0	0	NA	NA	-22.2%	-22.2%	-9.9%					
2004	351	0	0	0	0	NA	NA	NA	-22.2%	-22.2%	-9.9%				
2005	351	0	0	0	0	NA	NA	NA	NA	-22.2%	-22.2%	-9.9%			
2006	351	0	0	0	0	NA	NA	NA	NA	NA	-22.2%	-22.2%	-9.9%		
2007	351	0	0	0	0	NA	NA	NA	NA	NA	NA	-22.2%	-22.2%	-9.9%	
2008	351	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	-22.2%	-22.2%	-9.9%
2009	351	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	-22.2%	-22.2%
2010	351	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	-22.2%
2011	351	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2012	351	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2013	351	169,705	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2014	351	9,846	0	281	(281)	-2.9%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%
2015	351	19,231	0	5,004	(5,004)	-26.0%	-18.2%	-2.7%	-2.7%	-2.7%	-2.7%	-2.7%	-2.7%	-2.7%	-2.7%
2016	351	0	0	0	0	NA	-26.0%	-18.2%	-2.7%	-2.7%	-2.7%	-2.7%	-2.7%	-2.7%	-2.7%
2017	351	0	0	0	0	NA	NA	-26.0%	-18.2%	-2.7%	-2.7%	-2.7%	-2.7%	-2.7%	-2.7%
2018	351	2,612	0	0	0	0.0%	0.0%	0.0%	-22.9%	-16.7%	-2.6%	-2.6%	-2.6%	-2.6%	-2.6%

PUBLIC SERVICE OF COLORADO -GAS UTILITY
RETIREMENTS, GROSS SALVAGE, AND COST OF REMOVAL 1999-2018
AS ADJUSTED

Transaction Year	Account	Retirements	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2-yr Net Salv. %	3-yr Net Salv. %	4-yr Net Salv. %	5-yr Net Salv. %	6-yr Net Salv. %	7-yr Net Salv. %	8-yr Net Salv. %	9-yr Net Salv. %	10-yr Net Salv. %
1999	3521	0	0	0	0	NA									
2000	3521	0	0	0	0	NA	NA								
2001	3521	0	0	0	0	NA	NA	NA							
2002	3521	0	0	0	0	NA	NA	NA	NA						
2003	3521	0	0	0	0	NA	NA	NA	NA	NA					
2004	3521	0	0	0	0	NA	NA	NA	NA	NA	NA				
2005	3521	0	0	0	0	NA	NA	NA	NA	NA	NA	NA			
2006	3521	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA		
2007	3521	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2008	3521	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2009	3521	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2010	3521	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2011	3521	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2012	3521	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2013	3521	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2014	3521	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2015	3521	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2016	3521	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2017	3521	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2018	3521	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1999	3522	0	0	0	0	NA									
2000	3522	0	0	0	0	NA	NA								
2001	3522	43,887	0	23,450	(23,450)	-53.4%	-53.4%	-53.4%							
2002	3522	100	0	1,000	(1,000)	-1000.0%	-55.6%	-55.6%	-55.6%						
2003	3522	0	0	0	0	NA	-1000.0%	-55.6%	-55.6%	-55.6%					
2004	3522	0	0	0	0	NA	NA	-1000.0%	-55.6%	-55.6%	-55.6%				
2005	3522	0	0	0	0	NA	NA	NA	-1000.0%	-55.6%	-55.6%	-55.6%			
2006	3522	0	0	0	0	NA	NA	NA	NA	-1000.0%	-55.6%	-55.6%	-55.6%		
2007	3522	0	0	0	0	NA	NA	NA	NA	NA	-1000.0%	-55.6%	-55.6%	-55.6%	
2008	3522	0	0	0	0	NA	NA	NA	NA	NA	NA	-1000.0%	-55.6%	-55.6%	-55.6%
2009	3522	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	-1000.0%	-55.6%	-55.6%
2010	3522	25,191	0	5,521	(5,521)	-21.9%	-21.9%	-21.9%	-21.9%	-21.9%	-21.9%	-21.9%	-21.9%	-25.8%	-43.3%
2011	3522	0	0	17,240	(17,240)	NA	-90.4%	-90.4%	-90.4%	-90.4%	-90.4%	-90.4%	-90.4%	-90.4%	-94.0%
2012	3522	0	0	0	0	NA	NA	-90.4%	-90.4%	-90.4%	-90.4%	-90.4%	-90.4%	-90.4%	-90.4%
2013	3522	53,000	0	152	(152)	-0.3%	-0.3%	-32.8%	-29.3%	-29.3%	-29.3%	-29.3%	-29.3%	-29.3%	-29.3%
2014	3522	608,841	0	159,590	(159,590)	-26.2%	-24.1%	-24.1%	-26.7%	-26.6%	-26.6%	-26.6%	-26.6%	-26.6%	-26.6%
2015	3522	114,163	0	99,122	(99,122)	-86.8%	-35.8%	-33.4%	-33.4%	-35.6%	-35.2%	-35.2%	-35.2%	-35.2%	-35.2%
2016	3522	0	0	0	0	NA	-86.8%	-35.8%	-33.4%	-33.4%	-35.6%	-35.2%	-35.2%	-35.2%	-35.2%
2017	3522	0	0	0	0	NA	NA	-86.8%	-35.8%	-33.4%	-33.4%	-35.6%	-35.2%	-35.2%	-35.2%
2018	3522	185,115	0	792	(792)	-0.4%	-0.4%	-0.4%	-33.4%	-28.6%	-27.0%	-27.0%	-28.8%	-28.6%	-28.6%

PUBLIC SERVICE OF COLORADO -GAS UTILITY
RETIREMENTS, GROSS SALVAGE, AND COST OF REMOVAL 1999-2018
AS ADJUSTED

Transaction Year	Account	Retirements	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2-yr Net Salv. %	3-yr Net Salv. %	4-yr Net Salv. %	5-yr Net Salv. %	6-yr Net Salv. %	7-yr Net Salv. %	8-yr Net Salv. %	9-yr Net Salv. %	10-yr Net Salv. %
1999	3523	0	0	0	0	NA	NA								
2000	3523	0	0	0	0	NA	NA	NA							
2001	3523	0	0	0	0	NA	NA	NA	NA						
2002	3523	0	0	0	0	NA	NA	NA	NA	NA					
2003	3523	0	0	0	0	NA	NA	NA	NA	NA	NA				
2004	3523	0	0	0	0	NA	NA	NA	NA	NA	NA	NA			
2005	3523	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA		
2006	3523	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2007	3523	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2008	3523	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2009	3523	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2010	3523	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2012	3523	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2013	3523	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2014	3523	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2015	3523	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2016	3523	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2017	3523	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2018	3523	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1999	353	0	0	0	0	NA									
2000	353	10,306	0	0	0	0.0%	0.0%								
2001	353	71,791	0	0	0	0.0%	0.0%	0.0%							
2002	353	0	0	0	0	NA	0.0%	0.0%	0.0%						
2003	353	0	0	0	0	NA	NA	0.0%	0.0%	0.0%					
2004	353	0	0	0	0	NA	NA	NA	0.0%	0.0%	0.0%				
2005	353	0	0	0	0	NA	NA	NA	NA	0.0%	0.0%	0.0%			
2006	353	0	0	0	0	NA	NA	NA	NA	NA	0.0%	0.0%	0.0%		
2007	353	0	0	0	0	NA	NA	NA	NA	NA	NA	0.0%	0.0%	0.0%	
2008	353	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	0.0%	0.0%	0.0%
2009	353	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	0.0%	0.0%
2010	353	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0%
2011	353	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2012	353	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2013	353	163,237	0	73,471	(73,471)	-45.0%	-45.0%	-45.0%	-45.0%	-45.0%	-45.0%	-45.0%	-45.0%	-45.0%	-45.0%
2014	353	18,180	0	746	(746)	-4.1%	-40.9%	-40.9%	-40.9%	-40.9%	-40.9%	-40.9%	-40.9%	-40.9%	-40.9%
2015	353	0	0	0	0	NA	-4.1%	-40.9%	-40.9%	-40.9%	-40.9%	-40.9%	-40.9%	-40.9%	-40.9%
2016	353	0	0	0	0	NA	NA	-4.1%	-40.9%	-40.9%	-40.9%	-40.9%	-40.9%	-40.9%	-40.9%
2017	353	0	0	0	0	NA	NA	NA	-4.1%	-40.9%	-40.9%	-40.9%	-40.9%	-40.9%	-40.9%
2018	353	225,428	0	65,677	(65,677)	-29.1%	-29.1%	-29.1%	-29.1%	-27.3%	-34.4%	-34.4%	-34.4%	-34.4%	-34.4%

PUBLIC SERVICE OF COLORADO -GAS UTILITY
RETIREMENTS, GROSS SALVAGE, AND COST OF REMOVAL 1999-2018
AS ADJUSTED

Transaction Year	Account	Retirements	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2-yr Net Salv. %	3-yr Net Salv. %	4-yr Net Salv. %	5-yr Net Salv. %	6-yr Net Salv. %	7-yr Net Salv. %	8-yr Net Salv. %	9-yr Net Salv. %	10-yr Net Salv. %
1999	354	60,447	0	0	0	0.0%									
2000	354	0	0	0	0	NA	0.0%								
2001	354	8,498	0	0	0	0.0%	0.0%	0.0%							
2002	354	9,789	0	0	0	0.0%	0.0%	0.0%	0.0%						
2003	354	0	0	0	0	NA	0.0%	0.0%	0.0%	0.0%					
2004	354	8,327	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%				
2005	354	0	0	0	0	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
2006	354	0	0	0	0	NA	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
2007	354	0	0	0	0	NA	NA	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
2008	354	0	0	12,588	(12,588)	NA	NA	NA	NA	-151.2%	-151.2%	-69.5%	-47.3%	-47.3%	-14.5%
2009	354	0	0	0	0	NA	NA	NA	NA	NA	-151.2%	-151.2%	-69.5%	-47.3%	-47.3%
2010	354	1,290	0	1,841	(1,841)	-142.7%	-142.7%	-1118.5%	-1118.5%	-1118.5%	-1118.5%	-150.0%	-150.0%	-74.4%	-51.7%
2011	354	16,952	0	28,816	(28,816)	-170.0%	-168.1%	-168.1%	-237.1%	-237.1%	-237.1%	-237.1%	-162.8%	-162.8%	-118.9%
2012	354	0	0	0	0	NA	-170.0%	-168.1%	-168.1%	-237.1%	-237.1%	-237.1%	-237.1%	-162.8%	-162.8%
2013	354	0	0	0	0	NA	NA	-170.0%	-168.1%	-168.1%	-237.1%	-237.1%	-237.1%	-237.1%	-162.8%
2014	354	4,169	0	5,643	(5,643)	-135.4%	-135.4%	-135.4%	-163.2%	-162.0%	-162.0%	-218.1%	-218.1%	-218.1%	-218.1%
2015	354	328	0	455	(455)	-138.7%	-135.6%	-135.6%	-135.6%	-162.8%	-161.6%	-161.6%	-217.0%	-217.0%	-217.0%
2016	354	5,155	0	323	(323)	-6.3%	-14.2%	-66.5%	-66.5%	-66.5%	-132.5%	-132.9%	-132.9%	-178.1%	-178.1%
2017	354	0	0	0	0	NA	-6.3%	-14.2%	-66.5%	-66.5%	-66.5%	-132.5%	-132.9%	-132.9%	-178.1%
2018	354	200,173	0	115,292	(115,292)	-57.6%	-57.6%	-56.3%	-56.4%	-58.0%	-58.0%	-58.0%	-66.4%	-66.8%	-66.8%
1999	355	0	0	0	0	NA									
2000	355	0	0	0	0	NA	NA								
2001	355	1,388	0	761	(761)	-54.8%	-54.8%	-54.8%							
2002	355	4,648	0	0	0	0.0%	-12.6%	-12.6%	-12.6%						
2003	355	0	0	0	0	NA	0.0%	-12.6%	-12.6%	-12.6%					
2004	355	0	0	0	0	NA	NA	0.0%	-12.6%	-12.6%	-12.6%				
2005	355	0	0	0	0	NA	NA	NA	0.0%	-12.6%	-12.6%	-12.6%			
2006	355	0	0	0	0	NA	NA	NA	NA	0.0%	-12.6%	-12.6%	-12.6%		
2007	355	0	0	0	0	NA	NA	NA	NA	NA	0.0%	-12.6%	-12.6%	-12.6%	
2008	355	0	0	0	0	NA	NA	NA	NA	NA	NA	0.0%	-12.6%	-12.6%	-12.6%
2009	355	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	0.0%	-12.6%	-12.6%
2010	355	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	0.0%	-12.6%
2011	355	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0%
2012	355	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2013	355	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2014	355	40,539	0	712	(712)	-1.8%	-1.8%	-1.8%	-1.8%	-1.8%	-1.8%	-1.8%	-1.8%	-1.8%	-1.8%
2015	355	0	0	0	0	NA	-1.8%	-1.8%	-1.8%	-1.8%	-1.8%	-1.8%	-1.8%	-1.8%	-1.8%
2016	355	0	0	0	0	NA	NA	-1.8%	-1.8%	-1.8%	-1.8%	-1.8%	-1.8%	-1.8%	-1.8%
2017	355	0	0	0	0	NA	NA	NA	-1.8%	-1.8%	-1.8%	-1.8%	-1.8%	-1.8%	-1.8%
2018	355	188,328	0	33,020	(33,020)	-17.5%	-17.5%	-17.5%	-17.5%	-14.7%	-14.7%	-14.7%	-14.7%	-14.7%	-14.7%

PUBLIC SERVICE OF COLORADO -GAS UTILITY
RETIREMENTS, GROSS SALVAGE, AND COST OF REMOVAL 1999-2018
AS ADJUSTED

Transaction Year	Account	Retirements	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2-yr Net Salv. %	3-yr Net Salv. %	4-yr Net Salv. %	5-yr Net Salv. %	6-yr Net Salv. %	7-yr Net Salv. %	8-yr Net Salv. %	9-yr Net Salv. %	10-yr Net Salv. %
1999	356	1,737	0	0	0	0.0%									
2000	356	0	0	0	0	NA	0.0%								
2001	356	8,506	0	4,664	(4,664)	-54.8%	-54.8%	-45.5%							
2002	356	0	0	0	0	NA	-54.8%	-54.8%	-45.5%						
2003	356	0	0	0	0	NA	NA	-54.8%	-54.8%	-45.5%					
2004	356	0	0	0	0	NA	NA	NA	-54.8%	-54.8%	-45.5%				
2005	356	0	0	0	0	NA	NA	NA	NA	-54.8%	-54.8%	-45.5%			
2006	356	0	0	0	0	NA	NA	NA	NA	NA	-54.8%	-54.8%	-45.5%		
2007	356	0	0	0	0	NA	NA	NA	NA	NA	NA	-54.8%	-54.8%	-45.5%	
2008	356	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	-54.8%	-54.8%	-45.5%
2009	356	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	-54.8%	-54.8%
2010	356	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	-54.8%
2011	356	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2012	356	49,546	0	5,014	(5,014)	-10.1%	-10.1%	-10.1%	-10.1%	-10.1%	-10.1%	-10.1%	-10.1%	-10.1%	-10.1%
2013	356	324,137	0	25,792	(25,792)	-8.0%	-8.2%	-8.2%	-8.2%	-8.2%	-8.2%	-8.2%	-8.2%	-8.2%	-8.2%
2014	356	45,771	0	12,576	(12,576)	-27.5%	-10.4%	-10.3%	-10.3%	-10.3%	-10.3%	-10.3%	-10.3%	-10.3%	-10.3%
2015	356	0	0	0	0	NA	-27.5%	-10.4%	-10.3%	-10.3%	-10.3%	-10.3%	-10.3%	-10.3%	-10.3%
2016	356	32,727	0	3,542	(3,542)	-10.8%	-10.8%	-20.5%	-10.4%	-10.4%	-10.4%	-10.4%	-10.4%	-10.4%	-10.4%
2017	356	18,832	0	1,092	(1,092)	-5.8%	-9.0%	-9.0%	-17.7%	-10.2%	-10.2%	-10.2%	-10.2%	-10.2%	-10.2%
2018	356	396,350	0	142,014	(142,014)	-35.8%	-34.5%	-32.7%	-32.7%	-32.3%	-22.6%	-21.9%	-21.9%	-21.9%	-21.9%
1999	357	0	0	0	0	NA									
2000	357	0	0	0	0	NA	NA								
2001	357	0	0	0	0	NA	NA	NA							
2002	357	0	0	0	0	NA	NA	NA	NA						
2003	357	0	0	0	0	NA	NA	NA	NA	NA					
2004	357	0	0	0	0	NA	NA	NA	NA	NA	NA				
2005	357	0	0	0	0	NA	NA	NA	NA	NA	NA	NA			
2006	357	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA		
2007	357	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2008	357	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2009	357	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2010	357	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2011	357	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2012	357	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2013	357	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2014	357	3,491	0	216	(216)	-6.2%	-6.2%	-6.2%	-6.2%	-6.2%	-6.2%	-6.2%	-6.2%	-6.2%	-6.2%
2015	357	0	0	0	0	NA	-6.2%	-6.2%	-6.2%	-6.2%	-6.2%	-6.2%	-6.2%	-6.2%	-6.2%
2016	357	0	0	0	0	NA	NA	-6.2%	-6.2%	-6.2%	-6.2%	-6.2%	-6.2%	-6.2%	-6.2%
2017	357	0	0	0	0	NA	NA	NA	-6.2%	-6.2%	-6.2%	-6.2%	-6.2%	-6.2%	-6.2%
2018	357	3,071	0	0	0	0.0%	0.0%	0.0%	0.0%	-3.3%	-3.3%	-3.3%	-3.3%	-3.3%	-3.3%

PUBLIC SERVICE OF COLORADO -GAS UTILITY
RETIREMENTS, GROSS SALVAGE, AND COST OF REMOVAL 1999-2018
AS ADJUSTED

Transaction Year	Account	Retirements	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2-yr Net Salv. %	3-yr Net Salv. %	4-yr Net Salv. %	5-yr Net Salv. %	6-yr Net Salv. %	7-yr Net Salv. %	8-yr Net Salv. %	9-yr Net Salv. %	10-yr Net Salv. %
1999	3652	2,221	0	0	0	0.0%									
2000	3652	0	0	0	0	NA	0.0%								
2001	3652	311	0	0	0	0.0%	0.0%	0.0%							
2002	3652	0	0	0	0	NA	0.0%	0.0%	0.0%						
2003	3652	0	0	0	0	NA	NA	0.0%	0.0%	0.0%					
2004	3652	0	0	0	0	NA	NA	NA	0.0%	0.0%	0.0%				
2005	3652	329	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
2006	3652	0	0	0	0	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
2007	3652	0	0	0	0	NA	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
2008	3652	0	0	0	0	NA	NA	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2009	3652	541	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2010	3652	0	0	0	0	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2011	3652	1,260	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2012	3652	0	0	0	0	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2013	3652	4,307	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2014	3652	0	0	0	0	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2015	3652	0	0	0	0	NA	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2016	3652	0	0	0	0	NA	NA	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2017	3652	0	0	0	0	NA	NA	NA	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2018	3652	0	0	0	0	NA	NA	NA	NA	NA	0.0%	0.0%	0.0%	0.0%	0.0%
1999	366	174,992	0	0	0	0.0%									
2000	366	0	0	0	0	NA	0.0%								
2001	366	869	0	403	(403)	-46.3%	-46.3%	-0.2%							
2002	366	62,108	0	0	0	0.0%	-0.6%	-0.6%	-0.2%						
2003	366	7,374	0	586	(586)	-7.9%	-0.8%	-1.4%	-1.4%	-0.4%					
2004	366	0	0	0	0	NA	-7.9%	-0.8%	-1.4%	-1.4%	-0.4%				
2005	366	5,680	0	0	0	0.0%	0.0%	-4.5%	-0.8%	-1.3%	-1.3%	-0.4%			
2006	366	264,050	0	0	0	0.0%	0.0%	0.0%	-0.2%	-0.2%	-0.3%	-0.3%	-0.2%		
2007	366	0	0	1,762	(1,762)	NA	-0.7%	-0.7%	-0.7%	-0.8%	-0.7%	-0.8%	-0.8%	-0.5%	
2008	366	0	0	0	(0)	NA	NA	-0.7%	-0.7%	-0.7%	-0.8%	-0.7%	-0.8%	-0.8%	-0.5%
2009	366	16,558	0	349	(349)	-2.1%	-2.1%	-12.7%	-0.8%	-0.7%	-0.7%	-0.9%	-0.8%	-0.9%	-0.9%
2010	366	238,171	0	22,765	(22,765)	-9.6%	-9.1%	-9.1%	-9.8%	-4.8%	-4.7%	-4.7%	-4.8%	-4.3%	-4.3%
2011	366	0	0	5,382	(5,382)	NA	-11.8%	-11.2%	-11.2%	-11.9%	-5.8%	-5.8%	-5.8%	-5.8%	-5.2%
2012	366	284,322	0	0	0	0.0%	-1.9%	-5.4%	-5.3%	-5.3%	-5.6%	-3.8%	-3.7%	-3.7%	-3.8%
2013	366	655,321	0	0	0	0.0%	0.0%	-0.6%	-2.4%	-2.4%	-2.4%	-2.5%	-2.1%	-2.1%	-2.1%
2014	366	81,151	0	16,602	(16,602)	-20.5%	-2.3%	-1.6%	-2.2%	-3.6%	-3.5%	-3.5%	-3.7%	-3.0%	-3.0%
2015	366	3,273	0	5,999	(5,999)	-183.3%	-26.8%	-3.1%	-2.2%	-2.7%	-4.0%	-4.0%	-4.0%	-4.1%	-3.4%
2016	366	72,264	0	6,857	(6,857)	-9.5%	-17.0%	-18.8%	-3.6%	-2.7%	-3.2%	-4.3%	-4.3%	-4.3%	-4.4%
2017	366	44,296	0	2,434	(2,434)	-5.5%	-8.0%	-12.8%	-15.9%	-3.7%	-2.8%	-3.3%	-4.4%	-4.3%	-4.3%
2018	366	26,408	0	9,659	(9,659)	-36.6%	-17.1%	-13.3%	-17.1%	-18.3%	-4.7%	-3.6%	-4.0%	-5.0%	-4.9%

PUBLIC SERVICE OF COLORADO -GAS UTILITY
RETIREMENTS, GROSS SALVAGE, AND COST OF REMOVAL 1999-2018
AS ADJUSTED

Transaction Year	Account	Retirements	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2-yr Net Salv. %	3-yr Net Salv. %	4-yr Net Salv. %	5-yr Net Salv. %	6-yr Net Salv. %	7-yr Net Salv. %	8-yr Net Salv. %	9-yr Net Salv. %	10-yr Net Salv. %
1999	3663	0	0	0	0	NA									
2000	3663	0	0	0	0	NA	NA								
2001	3663	0	0	0	0	NA	NA	NA							
2002	3663	0	0	0	0	NA	NA	NA	NA						
2003	3663	0	0	0	0	NA	NA	NA	NA	NA					
2004	3663	0	0	0	0	NA	NA	NA	NA	NA	NA				
2005	3663	0	0	0	0	NA	NA	NA	NA	NA	NA	NA			
2006	3663	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA		
2007	3663	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2008	3663	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2009	3663	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2010	3663	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2011	3663	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2012	3663	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2013	3663	3,275	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2014	3663	0	0	0	0	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2015	3663	0	0	0	0	NA	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2016	3663	3,792	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2017	3663	0	0	0	0	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2018	3663	0	0	0	0	NA	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1999	367	44,054	0	0	0	0.0%									
2000	367	9,068	0	18,807	(18,807)	-207.4%	-35.4%								
2001	367	294,876	6,740	1,972	4,767	1.6%	-4.6%	-4.0%							
2002	367	21,689	0	853	(853)	-3.9%	1.2%	-4.6%	-4.0%						
2003	367	273,144	0	3,936	(3,936)	-1.4%	-1.6%	0.0%	-3.1%	-2.9%					
2004	367	43,279	0	5,431	(5,431)	-12.6%	-3.0%	-3.0%	-0.9%	-3.8%	-3.5%				
2005	367	1,386,243	0	74,984	(74,984)	-5.4%	-5.6%	-5.0%	-4.9%	-4.0%	-4.9%	-4.8%			
2006	367	744,601	0	37,374	(37,374)	-5.0%	-5.3%	-5.4%	-5.0%	-5.0%	-4.3%	-4.9%	-4.8%		
2007	367	836,712	0	176,790	(176,790)	-21.1%	-13.5%	-9.7%	-9.8%	-9.1%	-9.1%	-8.2%	-8.7%	-8.6%	
2008	367	921,895	0	26,257	(26,257)	-2.8%	-11.5%	-9.6%	-8.1%	-8.2%	-7.7%	-7.7%	-7.1%	-7.5%	-7.4%
2009	367	262,595	0	40,932	(40,932)	-15.6%	-5.7%	-12.1%	-10.2%	-8.6%	-8.6%	-8.2%	-8.2%	-7.6%	-7.9%
2010	367	928,609	0	417,730	(417,730)	-45.0%	-38.5%	-22.9%	-22.4%	-18.9%	-15.2%	-15.2%	-14.5%	-14.5%	-13.6%
2011	367	37,844	889	322,154	(321,265)	-848.9%	-76.5%	-63.5%	-37.5%	-32.9%	-27.3%	-21.4%	-21.3%	-20.3%	-20.3%
2012	367	44,232	0	299,617	(299,617)	-677.4%	-756.5%	-102.8%	-84.8%	-50.4%	-42.3%	-35.0%	-27.0%	-26.9%	-25.6%
2013	367	75,567	19,091	59,762	(40,671)	-53.8%	-284.0%	-419.7%	-99.4%	-83.0%	-50.5%	-42.6%	-35.3%	-27.4%	-27.3%
2014	367	2,074,043	889	973,635	(972,746)	-46.9%	-47.1%	-59.9%	-73.2%	-64.9%	-61.1%	-48.8%	-44.3%	-39.4%	-32.9%
2015	367	933,082	13,502	1,782,100	(1,768,598)	-189.5%	-91.2%	-90.2%	-98.6%	-107.5%	-93.3%	-88.6%	-73.7%	-66.5%	-59.8%
2016	367	327,450	1,059	428,654	(427,595)	-130.6%	-174.2%	-95.0%	-94.1%	-101.6%	-109.7%	-96.1%	-91.6%	-77.0%	-69.7%
2017	367	3,927,462	23,355	269,398	(246,043)	-6.3%	-15.8%	-47.1%	-47.0%	-47.1%	-50.9%	-54.9%	-53.8%	-52.7%	-47.9%
2018	367	8,690,275	0	4,048,406	(4,048,406)	-46.6%	-34.0%	-36.5%	-46.8%	-46.8%	-46.8%	-48.6%	-50.4%	-50.1%	-49.6%

PUBLIC SERVICE OF COLORADO -GAS UTILITY
RETIREMENTS, GROSS SALVAGE, AND COST OF REMOVAL 1999-2018
AS ADJUSTED

Transaction Year	Account	Retirements	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2-yr Net Salv. %	3-yr Net Salv. %	4-yr Net Salv. %	5-yr Net Salv. %	6-yr Net Salv. %	7-yr Net Salv. %	8-yr Net Salv. %	9-yr Net Salv. %	10-yr Net Salv. %
1999	368	118,313	0	0	0	0.0%									
2000	368	0	0	0	0	NA	0.0%								
2001	368	701,657	20,241	33,733	(13,492)	-1.9%	-1.9%	-1.6%							
2002	368	146,837	0	26,587	(26,587)	-18.1%	-4.7%	-4.7%	-4.1%						
2003	368	511,101	0	0	0	0.0%	-4.0%	-2.9%	-2.9%	-2.7%					
2004	368	23,037	0	0	0	0.0%	0.0%	-3.9%	-2.9%	-2.9%	-2.7%				
2005	368	0	0	0	0	NA	0.0%	0.0%	-3.9%	-2.9%	-2.9%	-2.7%			
2006	368	1,623,050	0	0	0	0.0%	0.0%	0.0%	0.0%	-1.2%	-1.3%	-1.3%	-1.3%		
2007	368	226,986	0	8,541	(8,541)	-3.8%	-0.5%	-0.5%	-0.5%	-0.4%	-1.4%	-1.5%	-1.5%	-1.5%	
2008	368	205,640	0	79,046	(79,046)	-38.4%	-20.2%	-4.3%	-4.3%	-4.2%	-3.4%	-4.2%	-3.7%	-3.7%	-3.6%
2009	368	774,522	0	54,738	(54,738)	-7.1%	-13.6%	-11.8%	-5.0%	-5.0%	-5.0%	-4.2%	-4.8%	-4.3%	-4.3%
2010	368	2,932,066	0	170,688	(170,688)	-5.8%	-6.1%	-7.8%	-7.6%	-5.4%	-5.4%	-5.4%	-5.0%	-5.3%	-4.9%
2011	368	1,593,473	0	31,857	(31,857)	-2.0%	-4.5%	-4.9%	-6.1%	-6.0%	-4.7%	-4.7%	-4.7%	-4.4%	-4.6%
2012	368	570,388	501	209,714	(209,213)	-36.7%	-11.1%	-8.1%	-7.9%	-9.0%	-8.8%	-7.0%	-7.0%	-7.0%	-6.5%
2013	368	4,351,990	0	59,359	(59,359)	-1.4%	-5.5%	-4.6%	-5.0%	-5.1%	-5.8%	-5.8%	-5.0%	-5.0%	-5.0%
2014	368	939,535	10,000	768,393	(758,393)	-80.7%	-15.5%	-17.5%	-14.2%	-11.8%	-11.5%	-12.0%	-11.8%	-10.4%	-10.4%
2015	368	86,401	943	861,015	(860,072)	-995.4%	-157.8%	-31.2%	-31.7%	-25.4%	-20.0%	-19.1%	-19.4%	-19.1%	-16.8%
2016	368	609,233	0	16,921	(16,921)	-2.8%	-126.1%	-100.0%	-28.3%	-29.0%	-23.7%	-19.0%	-18.2%	-18.6%	-18.3%
2017	368	36,906	0	37,498	(37,498)	-101.6%	-8.4%	-124.8%	-100.0%	-28.8%	-29.4%	-24.1%	-19.3%	-18.5%	-18.8%
2018	368	5,836,435	30,000	2,006,116	(1,976,116)	-33.9%	-34.3%	-31.3%	-44.0%	-48.6%	-31.3%	-31.5%	-28.2%	-24.3%	-23.5%
1999	369	22,511	0	0	0	0.0%									
2000	369	230,724	0	10,999	(10,999)	-4.8%	-4.3%								
2001	369	71,141	0	2,682	(2,682)	-3.8%	-4.5%	-4.2%							
2002	369	56,710	0	4,283	(4,283)	-7.6%	-5.4%	-5.0%	-4.7%						
2003	369	60,720	0	2,343	(2,343)	-3.9%	-5.6%	-4.9%	-4.8%	-4.6%					
2004	369	0	0	0	0	NA	-3.9%	-5.6%	-4.9%	-4.8%	-4.6%				
2005	369	48,541	0	5,265	(5,265)	-10.8%	-10.8%	-7.0%	-7.2%	-6.1%	-5.5%	-5.2%			
2006	369	144,304	0	0	0	0.0%	-2.7%	-2.7%	-3.0%	-3.8%	-3.8%	-4.2%	-4.0%		
2007	369	2,593	0	2,576	(2,576)	-99.4%	-1.8%	-4.0%	-4.0%	-4.0%	-4.6%	-4.5%	-4.6%	-4.4%	
2008	369	403,021	0	5,315	(5,315)	-1.3%	-1.9%	-1.4%	-2.2%	-2.2%	-2.4%	-2.8%	-2.9%	-3.3%	-3.2%
2009	369	65,508	0	36,960	(36,960)	-56.4%	-9.0%	-9.5%	-7.3%	-7.5%	-7.5%	-7.2%	-7.3%	-7.0%	-6.5%
2010	369	105,736	0	11,317	(11,317)	-10.7%	-28.2%	-9.3%	-9.7%	-7.8%	-8.0%	-8.0%	-7.7%	-7.7%	-7.4%
2011	369	60,536	0	81,143	(81,143)	-134.0%	-55.6%	-55.8%	-21.2%	-21.5%	-17.6%	-17.2%	-17.2%	-16.3%	-15.7%
2012	369	40,400	0	20,630	(20,630)	-51.1%	-100.8%	-54.7%	-55.1%	-23.0%	-23.3%	-19.2%	-18.7%	-18.7%	-17.8%
2013	369	3,994	0	46,625	(46,625)	-1167.4%	-151.5%	-141.4%	-75.8%	-71.2%	-29.7%	-30.0%	-24.8%	-24.0%	-24.0%
2014	369	624,038	2,860	108,786	(105,926)	-17.0%	-24.3%	-25.9%	-34.9%	-31.8%	-33.6%	-23.6%	-23.8%	-21.4%	-21.1%
2015	369	111,033	0	323,776	(323,776)	-291.6%	-58.5%	-64.4%	-63.8%	-68.8%	-62.3%	-61.9%	-44.7%	-44.8%	-40.6%
2016	369	164,471	0	18,501	(18,501)	-11.2%	-124.2%	-49.8%	-54.8%	-54.6%	-59.4%	-54.8%	-54.8%	-41.2%	-41.3%
2017	369	162,160	0	85,896	(85,896)	-53.0%	-32.0%	-97.8%	-50.3%	-54.5%	-54.4%	-58.5%	-54.5%	-54.6%	-42.3%
2018	369	281,767	17,123	(497)	17,619	6.3%	-15.4%	-14.3%	-57.1%	-38.4%	-41.8%	-42.1%	-45.9%	-43.5%	-44.0%

PUBLIC SERVICE OF COLORADO -GAS UTILITY
RETIREMENTS, GROSS SALVAGE, AND COST OF REMOVAL 1999-2018
AS ADJUSTED

Transaction Year	Account	Retirements	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2-yr Net Salv. %	3-yr Net Salv. %	4-yr Net Salv. %	5-yr Net Salv. %	6-yr Net Salv. %	7-yr Net Salv. %	8-yr Net Salv. %	9-yr Net Salv. %	10-yr Net Salv. %
1999	370	1,900	0	0	0	0.0%									
2000	370	0	0	0	0	NA	0.0%								
2001	370	0	0	0	0	NA	NA	0.0%							
2002	370	0	0	0	0	NA	NA	NA	0.0%						
2003	370	0	0	0	0	NA	NA	NA	NA	0.0%					
2004	370	4,338	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%				
2005	370	15,558	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
2006	370	234,321	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
2007	370	0	0	0	0	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
2008	370	0	0	0	0	NA	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2009	370	0	0	0	0	NA	NA	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2010	370	0	0	0	0	NA	NA	NA	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2011	370	0	0	0	0	NA	NA	NA	NA	NA	0.0%	0.0%	0.0%	0.0%	0.0%
2012	370	0	0	0	0	NA	NA	NA	NA	NA	NA	0.0%	0.0%	0.0%	0.0%
2013	370	24,120	0	2,154	(2,154)	-8.9%	-8.9%	-8.9%	-8.9%	-8.9%	-8.9%	-8.9%	-0.8%	-0.8%	-0.8%
2014	370	12,960	0	0	0	0.0%	-5.8%	-5.8%	-5.8%	-5.8%	-5.8%	-5.8%	-5.8%	-0.8%	-0.8%
2015	370	0	0	0	0	NA	0.0%	-5.8%	-5.8%	-5.8%	-5.8%	-5.8%	-5.8%	-5.8%	-0.8%
2016	370	11,466	0	553	(553)	-4.8%	-4.8%	-2.3%	-5.6%	-5.6%	-5.6%	-5.6%	-5.6%	-5.6%	-5.6%
2017	370	0	0	0	0	NA	-4.8%	-4.8%	-2.3%	-5.6%	-5.6%	-5.6%	-5.6%	-5.6%	-5.6%
2018	370	1,103	0	0	0	0.0%	0.0%	-4.4%	-4.4%	-2.2%	-5.5%	-5.5%	-5.5%	-5.5%	-5.5%
1999	3742	0	0	0	0	NA									
2000	3742	0	0	0	0	NA	NA								
2001	3742	0	0	0	0	NA	NA	NA							
2002	3742	433	0	0	0	0.0%	0.0%	0.0%	0.0%						
2003	3742	0	0	0	0	NA	0.0%	0.0%	0.0%	0.0%					
2004	3742	0	0	0	0	NA	NA	0.0%	0.0%	0.0%	0.0%				
2005	3742	0	0	0	0	NA	NA	NA	0.0%	0.0%	0.0%	0.0%			
2006	3742	0	0	0	0	NA	NA	NA	NA	0.0%	0.0%	0.0%	0.0%		
2007	3742	0	0	0	0	NA	NA	NA	NA	NA	0.0%	0.0%	0.0%	0.0%	
2008	3742	0	0	0	0	NA	NA	NA	NA	NA	NA	0.0%	0.0%	0.0%	0.0%
2009	3742	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	0.0%	0.0%	0.0%
2010	3742	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	0.0%	0.0%
2011	3742	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0%
2012	3742	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2013	3742	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2014	3742	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2015	3742	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2016	3742	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2017	3742	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2018	3742	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

PUBLIC SERVICE OF COLORADO -GAS UTILITY
RETIREMENTS, GROSS SALVAGE, AND COST OF REMOVAL 1999-2018
AS ADJUSTED

Transaction Year	Account	Retirements	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2-yr Net Salv. %	3-yr Net Salv. %	4-yr Net Salv. %	5-yr Net Salv. %	6-yr Net Salv. %	7-yr Net Salv. %	8-yr Net Salv. %	9-yr Net Salv. %	10-yr Net Salv. %
1999	375	3,920	0	0	0	0.0%									
2000	375	0	0	0	0	NA	0.0%								
2001	375	0	0	0	0	NA	NA	0.0%							
2002	375	2,427	0	4	(4)	-0.2%	-0.2%	-0.2%	-0.1%						
2003	375	2,758	0	0	0	0.0%	-0.1%	-0.1%	-0.1%	0.0%					
2004	375	0	0	0	0	NA	0.0%	-0.1%	-0.1%	-0.1%	0.0%				
2005	375	0	0	0	0	NA	NA	0.0%	-0.1%	-0.1%	-0.1%	0.0%			
2006	375	1,250	0	0	0	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.1%	-0.1%	0.0%		
2007	375	0	0	0	0	NA	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.1%	-0.1%	0.0%	
2008	375	3,322	0	752	(752)	-22.6%	-22.6%	-16.5%	-16.5%	-16.5%	-10.3%	-7.8%	-7.8%	-7.8%	-5.5%
2009	375	0	0	0	0	NA	-22.6%	-22.6%	-16.5%	-16.5%	-16.5%	-10.3%	-7.8%	-7.8%	-7.8%
2010	375	0	0	1,602	(1,602)	NA	NA	-70.9%	-70.9%	-51.5%	-51.5%	-51.5%	-32.1%	-24.2%	-24.2%
2011	375	0	0	0	0	NA	NA	NA	-70.9%	-70.9%	-51.5%	-51.5%	-51.5%	-32.1%	-24.2%
2012	375	0	0	798	(798)	NA	NA	NA	NA	-94.9%	-94.9%	-68.9%	-68.9%	-68.9%	-43.0%
2013	375	75,525	0	10,180	(10,180)	-13.5%	-14.5%	-14.5%	-16.7%	-16.7%	-16.9%	-16.9%	-16.6%	-16.6%	-16.6%
2014	375	4,419	0	1,711	(1,711)	-38.7%	-14.9%	-15.9%	-15.9%	-17.9%	-17.9%	-18.1%	-18.1%	-17.8%	-17.8%
2015	375	270	0	18,749	(18,749)	-6944.1%	-436.3%	-38.2%	-39.2%	-39.2%	-41.2%	-41.2%	-40.5%	-40.5%	-39.9%
2016	375	2,988	0	0	0	0.0%	-575.5%	-266.5%	-36.8%	-37.8%	-37.8%	-39.7%	-39.7%	-39.1%	-39.1%
2017	375	22,868	0	7,940	(7,940)	-34.7%	-30.7%	-102.2%	-93.0%	-36.4%	-37.1%	-37.1%	-38.6%	-38.6%	-38.1%
2018	375	4,385	0	18,951	(18,951)	-432.1%	-98.7%	-88.9%	-149.6%	-135.6%	-52.1%	-52.8%	-52.8%	-54.3%	-54.3%
1999	376 Total	720,187	0	0	0	0.0%									
2000	376 Total	634,509	0	114,403	(114,403)	-18.0%	-8.4%								
2001	376 Total	1,200,678	294,927	293,031	1,896	0.2%	-6.1%	-4.4%							
2002	376 Total	1,264,729	20,082	357,994	(337,913)	-26.7%	-13.6%	-14.5%	-11.8%						
2003	376 Total	353,241	0	178,501	(178,501)	-50.5%	-31.9%	-18.3%	-18.2%	-15.1%					
2004	376 Total	1,538,050	20,489	307,492	(287,003)	-18.7%	-24.6%	-25.5%	-18.4%	-18.4%	-16.0%				
2005	376 Total	1,648,579	0	676,134	(676,134)	-41.0%	-30.2%	-32.3%	-30.8%	-24.6%	-24.0%	-21.6%			
2006	376 Total	1,835,157	960	531,419	(530,459)	-28.9%	-34.6%	-29.7%	-31.1%	-30.3%	-25.6%	-25.0%	-23.1%		
2007	376 Total	1,713,473	0	487,181	(487,181)	-28.4%	-28.7%	-32.6%	-29.4%	-30.5%	-29.9%	-26.1%	-25.6%	-23.9%	
2008	376 Total	3,830,404	0	514,912	(514,912)	-13.4%	-18.1%	-20.8%	-24.5%	-23.6%	-24.5%	-24.7%	-22.5%	-22.3%	-21.2%
2009	376 Total	1,085,649	0	345,609	(345,608)	-31.8%	-17.5%	-20.3%	-22.2%	-25.3%	-24.4%	-25.2%	-25.3%	-23.2%	-23.0%
2010	376 Total	1,022,768	(0)	1,563,967	(1,563,967)	-152.9%	-90.6%	-40.8%	-38.0%	-36.3%	-37.0%	-34.8%	-35.2%	-34.4%	-31.8%
2011	376 Total	1,920,986	0	2,029,434	(2,029,434)	-105.6%	-122.1%	-97.8%	-56.7%	-51.6%	-48.0%	-47.1%	-44.1%	-44.2%	-42.9%
2012	376 Total	838,430	0	465,319	(465,319)	-55.5%	-90.4%	-107.3%	-90.5%	-56.6%	-51.9%	-48.5%	-47.6%	-44.7%	-44.8%
2013	376 Total	2,546,153	30,000	1,872,308	(1,842,308)	-72.4%	-68.2%	-81.7%	-93.2%	-84.3%	-60.1%	-55.9%	-52.6%	-51.4%	-48.6%
2014	376 Total	3,023,752	0	1,985,961	(1,985,961)	-65.7%	-68.7%	-67.0%	-75.9%	-84.3%	-78.9%	-61.3%	-57.8%	-54.8%	-53.6%
2015	376 Total	1,573,544	16,063	1,809,603	(1,793,540)	-114.0%	-82.2%	-78.7%	-76.3%	-82.0%	-88.6%	-83.5%	-66.5%	-62.8%	-59.6%
2016	376 Total	464,432	8,403	7,459,223	(7,450,820)	-1604.3%	-453.6%	-221.9%	-171.8%	-160.3%	-150.2%	-150.4%	-140.1%	-110.3%	-102.5%
2017	376 Total	4,917,279	74,896	7,304,962	(7,230,067)	-147.0%	-272.8%	-236.9%	-185.0%	-162.1%	-155.4%	-149.2%	-149.4%	-142.1%	-118.8%
2018	376 Total	5,621,058	0	9,757,995	(9,757,995)	-173.6%	-161.2%	-222.1%	-208.6%	-180.9%	-165.7%	-160.8%	-155.7%	-155.6%	-149.8%
			0												

PUBLIC SERVICE OF COLORADO -GAS UTILITY
RETIREMENTS, GROSS SALVAGE, AND COST OF REMOVAL 1999-2018
AS ADJUSTED

Transaction Year	Account	Retirements	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2-yr Net Salv. %	3-yr Net Salv. %	4-yr Net Salv. %	5-yr Net Salv. %	6-yr Net Salv. %	7-yr Net Salv. %	8-yr Net Salv. %	9-yr Net Salv. %	10-yr Net Salv. %
2002	376000	615,108	0.00	22,065	(22,065)	-3.6%									
2003	376000	1,302	0.00	175	(175)	-13.4%	-3.6%								
2004	376000	0	0.00	(3,864)	3,864	NA	283.3%	-3.0%							
2005	376000	5,837	0.00	501	(501)	-8.6%	57.6%	44.7%	-3.0%						
2006	376000	6,492	0.00	0	0	0.0%	-4.1%	27.3%	23.4%	-3.0%					
2007	376000	0	0.00	2,315	(2,315)	NA	-35.7%	-22.8%	8.5%	6.4%	-3.4%				
2008	376000	0	0.00	0	0	NA	NA	-35.7%	-22.8%	8.5%	6.4%	-3.4%			
2009	376000	0	0.00	0	0	NA	NA	NA	-35.7%	-22.8%	8.5%	6.4%	-3.4%		
2010	376000	814	0.00	13,290	(13,290)	-1632.5%	-1632.5%	-1632.5%	-1916.8%	-213.6%	-122.5%	-93.1%	-86.0%	-5.5%	
2011	376000	60,745	0.00	136,763	(136,763)	-225.1%	-243.8%	-243.8%	-243.8%	-247.5%	-223.9%	-206.9%	-201.7%	-198.4%	-24.8%
2012	376000	16,396	0.00	0	0	0.0%	-177.3%	-192.5%	-192.5%	-192.5%	-195.5%	-180.4%	-169.3%	-165.0%	-162.9%
2013	376000	4,714	0.00	57,499	(57,499)	-1219.8%	-272.4%	-237.3%	-251.1%	-251.1%	-251.1%	-253.9%	-235.4%	-221.4%	-217.4%
2014	376000	11,593	0.00	20,471	(20,471)	-176.6%	-478.1%	-238.4%	-229.8%	-241.9%	-241.9%	-241.9%	-244.4%	-228.6%	-216.6%
2015	376000	34,228	0.00	15,752	(15,752)	-46.0%	-79.1%	-185.5%	-140.0%	-180.5%	-189.7%	-189.7%	-189.7%	-191.5%	-182.3%
2016	376000	6,788	0.00	0	0	0.0%	-38.4%	-68.9%	-163.5%	-127.1%	-171.4%	-180.2%	-180.2%	-180.2%	-181.9%
2017	376000	0	0.00	0	0	NA	0.0%	-38.4%	-68.9%	-163.5%	-127.1%	-171.4%	-180.2%	-180.2%	-180.2%
2018	376000	0	0.00	0	0	NA	NA	0.0%	-38.4%	-68.9%	-163.5%	-127.1%	-171.4%	-180.2%	-180.2%
2002	376 Steel	451,445	0	270,883	(270,883)	-60.0%									
2003	376 Steel	272,115	0	161,096	(161,096)	-59.2%	-59.7%								
2004	376 Steel	1,300,769	1,560	226,444	(224,884)	-17.3%	-24.5%	-32.4%							
2005	376 Steel	1,112,027	0	580,830	(580,830)	-52.2%	-33.4%	-36.0%	-39.5%						
2006	376 Steel	1,392,322	720	479,046	(478,326)	-34.4%	-42.3%	-33.7%	-35.4%	-37.9%					
2007	376 Steel	1,509,040	0	402,131	(402,131)	-26.6%	-30.3%	-36.4%	-31.7%	-33.1%	-35.1%				
2008	376 Steel	3,384,017	0	395,383	(395,383)	-11.7%	-16.3%	-20.3%	-25.1%	-23.9%	-25.0%	-26.7%			
2009	376 Steel	747,405	0	240,211	(240,211)	-32.1%	-15.4%	-18.4%	-21.6%	-25.7%	-24.6%	-25.5%	-27.1%		
2010	376 Steel	614,615	0	1,253,581	(1,253,581)	-204.0%	-109.7%	-39.8%	-36.6%	-36.2%	-38.2%	-35.5%	-36.2%	-37.2%	
2011	376 Steel	1,593,968	0	1,650,669	(1,650,669)	-103.6%	-131.5%	-106.4%	-55.8%	-50.2%	-47.8%	-48.3%	-44.8%	-45.2%	-45.7%
2012	376 Steel	686,151	0	435,460	(435,460)	-63.5%	-91.5%	-115.4%	-98.3%	-56.6%	-51.3%	-48.9%	-49.2%	-45.9%	-46.2%
2013	376 Steel	1,243,439	30,000	1,650,180	(1,620,180)	-130.3%	-106.5%	-105.2%	-119.9%	-106.4%	-67.7%	-61.3%	-58.0%	-57.5%	-53.6%
2014	376 Steel	2,694,696	0	1,473,271	(1,473,271)	-54.7%	-78.6%	-76.3%	-83.3%	-94.2%	-88.0%	-64.5%	-59.9%	-57.3%	-57.0%
2015	376 Steel	1,098,374	16,063	1,489,246	(1,473,183)	-134.1%	-77.7%	-90.7%	-87.4%	-90.9%	-99.7%	-93.9%	-70.8%	-65.9%	-63.0%
2016	376 Steel	396,834	4,045	6,350,749	(6,346,704)	-1599.3%	-523.0%	-221.8%	-200.9%	-185.5%	-168.5%	-171.1%	-159.7%	-119.5%	-109.5%
2017	376 Steel	2,054,323	5,825	5,014,821	(5,008,995)	-243.8%	-463.3%	-361.4%	-229.0%	-212.6%	-200.1%	-184.4%	-185.5%	-175.2%	-137.1%
2018	376 Steel	4,646,441	0	7,517,904	(7,517,904)	-161.8%	-186.9%	-265.9%	-248.3%	-200.4%	-193.2%	-186.2%	-177.1%	-178.2%	-171.3%

PUBLIC SERVICE OF COLORADO -GAS UTILITY
RETIREMENTS, GROSS SALVAGE, AND COST OF REMOVAL 1999-2018
AS ADJUSTED

Transaction Year	Account	Retirements	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2-yr Net Salv. %	3-yr Net Salv. %	4-yr Net Salv. %	5-yr Net Salv. %	6-yr Net Salv. %	7-yr Net Salv. %	8-yr Net Salv. %	9-yr Net Salv. %	10-yr Net Salv. %
2002	376 Plastic	198,176	20,082	65,046	(44,965)	-22.7%									
2003	376 Plastic	79,824	0	17,230	(17,230)	-21.6%	-22.4%								
2004	376 Plastic	237,280	18,929	84,912	(65,983)	-27.8%	-26.2%	-24.9%							
2005	376 Plastic	530,715	0	94,803	(94,803)	-17.9%	-20.9%	-21.0%	-21.3%						
2006	376 Plastic	264,307	240	52,373	(52,133)	-19.7%	-18.5%	-20.6%	-20.7%	-21.0%					
2007	376 Plastic	376,469	0	82,735	(82,735)	-22.0%	-21.0%	-19.6%	-21.0%	-21.0%	-21.2%				
2008	376 Plastic	446,387	0	119,529	(119,529)	-26.8%	-24.6%	-23.4%	-21.6%	-22.4%	-22.3%	-22.4%			
2009	376 Plastic	338,244	0	105,397	(105,397)	-31.2%	-28.7%	-26.5%	-25.2%	-23.2%	-23.7%	-23.7%	-23.6%		
2010	376 Plastic	407,339	0	297,096	(297,096)	-72.9%	-54.0%	-43.8%	-38.6%	-35.8%	-31.8%	-31.4%	-31.1%	-30.6%	
2011	376 Plastic	266,273	0	242,002	(242,002)	-90.9%	-80.0%	-63.7%	-52.4%	-46.2%	-42.8%	-37.8%	-37.0%	-36.5%	-35.7%
2012	376 Plastic	135,883	0	29,859	(29,859)	-22.0%	-67.6%	-70.3%	-58.8%	-49.8%	-44.5%	-41.6%	-37.0%	-36.3%	-35.9%
2013	376 Plastic	1,298,001	0	164,628	(164,628)	-12.7%	-13.6%	-25.7%	-34.8%	-34.3%	-33.1%	-31.9%	-30.9%	-29.2%	-29.2%
2014	376 Plastic	317,463	0	492,218	(492,218)	-155.0%	-40.7%	-39.2%	-46.0%	-50.5%	-48.2%	-45.2%	-42.8%	-41.2%	-38.4%
2015	376 Plastic	440,942	0	304,605	(304,605)	-69.1%	-105.1%	-46.8%	-45.2%	-50.2%	-53.4%	-51.1%	-48.1%	-45.6%	-44.0%
2016	376 Plastic	60,810	4,358	1,108,474	(1,104,116)	-1815.7%	-280.8%	-232.0%	-97.6%	-93.0%	-92.8%	-90.0%	-83.9%	-77.0%	-72.0%
2017	376 Plastic	2,862,956	69,071	2,290,142	(2,221,071)	-77.6%	-113.7%	-107.9%	-111.9%	-86.1%	-84.4%	-84.7%	-83.9%	-81.0%	-77.3%
2018	376 Plastic	974,617	0	2,240,091	(2,240,091)	-229.8%	-116.2%	-142.8%	-135.3%	-136.6%	-109.6%	-107.6%	-106.9%	-104.9%	-101.4%
1999	377	0	0	0	0	NA									
2000	377	0	0	0	0	NA	NA								
2001	377	9,099	0	0	0	0.0%	0.0%	0.0%							
2002	377	140,337	0	0	0	0.0%	0.0%	0.0%	0.0%						
2003	377	0	0	0	0	NA	0.0%	0.0%	0.0%	0.0%					
2004	377	0	0	0	0	NA	NA	0.0%	0.0%	0.0%	0.0%				
2005	377	80,145	15,200	(2,854)	18,054	22.5%	22.5%	22.5%	8.2%	7.9%	7.9%	7.9%			
2006	377	73,391	23,566	10,974	12,591	17.2%	20.0%	20.0%	20.0%	10.4%	10.1%	10.1%	10.1%		
2007	377	0	0	0	0	NA	17.2%	20.0%	20.0%	20.0%	10.4%	10.1%	10.1%	10.1%	
2008	377	0	0	0	0	NA	NA	17.2%	20.0%	20.0%	20.0%	10.4%	10.1%	10.1%	10.1%
2009	377	0	0	0	0	NA	NA	NA	17.2%	20.0%	20.0%	20.0%	10.4%	10.1%	10.1%
2010	377	38,027	0	0	0	0.0%	0.0%	0.0%	0.0%	11.3%	16.0%	16.0%	16.0%	9.2%	9.0%
2011	377	41,051	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%	8.3%	13.2%	13.2%	13.2%	8.2%
2012	377	0	0	140,464	(140,464)	NA	-342.2%	-177.6%	-177.6%	-177.6%	-177.6%	-83.9%	-47.2%	-47.2%	-47.2%
2013	377	382,920	0	21,831	(21,831)	-5.7%	-42.4%	-38.3%	-35.1%	-35.1%	-35.1%	-35.1%	-28.0%	-21.4%	-21.4%
2014	377	0	0	0	0	NA	-5.7%	-42.4%	-38.3%	-35.1%	-35.1%	-35.1%	-35.1%	-28.0%	-21.4%
2015	377	0	0	0	0	NA	NA	-5.7%	-42.4%	-38.3%	-35.1%	-35.1%	-35.1%	-35.1%	-28.0%
2016	377	0	0	0	0	NA	NA	NA	-5.7%	-42.4%	-38.3%	-35.1%	-35.1%	-35.1%	-35.1%
2017	377	0	0	0	0	NA	NA	NA	NA	-5.7%	-42.4%	-38.3%	-35.1%	-35.1%	-35.1%
2018	377	35,878	0	5,026	(5,026)	-14.0%	-14.0%	-14.0%	-14.0%	-14.0%	-6.4%	-40.0%	-36.4%	-33.6%	-33.6%

PUBLIC SERVICE OF COLORADO -GAS UTILITY
RETIREMENTS, GROSS SALVAGE, AND COST OF REMOVAL 1999-2018
AS ADJUSTED

Transaction Year	Account	Retirements	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2-yr Net Salv. %	3-yr Net Salv. %	4-yr Net Salv. %	5-yr Net Salv. %	6-yr Net Salv. %	7-yr Net Salv. %	8-yr Net Salv. %	9-yr Net Salv. %	10-yr Net Salv. %
1999	378	14,435	0	0	0	0.0%									
2000	378	3,535	0	5,780	(5,780)	-163.5%	-32.2%								
2001	378	10,318	0	1,669	(1,669)	-16.2%	-53.8%	-26.3%							
2002	378	70,585	0	8,600	(8,600)	-12.2%	-12.7%	-19.0%	-16.2%						
2003	378	47,088	0	7,671	(7,671)	-16.3%	-13.8%	-14.0%	-18.0%	-16.3%					
2004	378	7,824	0	0	0	0.0%	-14.0%	-13.0%	-13.2%	-17.0%	-15.4%				
2005	378	29,364	0	0	0	0.0%	0.0%	-9.1%	-10.5%	-10.9%	-14.1%	-13.0%			
2006	378	22,579	0	1,464	(1,464)	-6.5%	-2.8%	-2.4%	-8.5%	-10.0%	-10.3%	-13.2%	-12.2%		
2007	378	26,128	0	44,213	(44,213)	-169.2%	-93.8%	-58.5%	-53.2%	-40.1%	-30.4%	-29.7%	-31.9%	-29.9%	
2008	378	29,839	0	13,118	(13,118)	-44.0%	-102.4%	-74.9%	-54.5%	-50.8%	-40.8%	-32.2%	-31.5%	-33.4%	-31.5%
2009	378	2,789	0	0	0	0.0%	-40.2%	-97.6%	-72.3%	-53.1%	-49.6%	-40.1%	-31.8%	-31.1%	-33.0%
2010	378	17,637	0	2,952	(2,952)	-16.7%	-14.5%	-32.0%	-78.9%	-62.4%	-48.1%	-45.3%	-37.9%	-30.7%	-30.2%
2011	378	25,240	0	22,577	(22,577)	-89.4%	-59.5%	-55.9%	-51.2%	-81.5%	-67.9%	-54.9%	-52.2%	-44.1%	-36.0%
2012	378	12,894	0	13,034	(13,034)	-101.1%	-93.4%	-69.1%	-65.9%	-58.5%	-83.7%	-71.0%	-58.5%	-55.9%	-47.4%
2013	378	65,298	26,512	38,733	(12,221)	-18.7%	-32.3%	-46.2%	-41.9%	-41.0%	-41.6%	-60.1%	-54.1%	-47.3%	-45.7%
2014	378	92,361	4,249	201,611	(197,362)	-213.7%	-132.9%	-130.5%	-125.2%	-116.3%	-114.8%	-106.2%	-112.2%	-104.1%	-94.7%
2015	378	56,788	0	48,364	(48,364)	-85.2%	-164.8%	-120.3%	-119.2%	-116.2%	-109.7%	-108.6%	-102.2%	-107.6%	-101.1%
2016	378	99,539	0	0	0	0.0%	-30.9%	-98.8%	-82.2%	-82.9%	-83.4%	-80.2%	-79.6%	-76.9%	-82.6%
2017	378	442,310	0	191,006	(191,006)	-43.2%	-35.3%	-40.0%	-63.2%	-59.4%	-60.1%	-61.0%	-60.0%	-59.8%	-59.3%
2018	378	361,440	0	137,448	(137,448)	-38.0%	-40.9%	-36.4%	-39.2%	-54.6%	-52.5%	-53.0%	-53.8%	-53.3%	-53.1%
1999	379	79,996	0	0	0	0.0%									
2000	379	323	0	0	0	0.0%	0.0%								
2001	379	16,070	0	0	0	0.0%	0.0%	0.0%							
2002	379	6,460	0	1,279	(1,279)	-19.8%	-5.7%	-5.6%	-1.2%						
2003	379	5,609	0	0	0	0.0%	-10.6%	-4.5%	-4.5%	-1.2%					
2004	379	7,303	0	4,482	(4,482)	-61.4%	-34.7%	-29.7%	-16.3%	-16.1%	-5.0%				
2005	379	801	0	13,469	(13,469)	-1681.6%	-221.5%	-130.9%	-95.3%	-53.1%	-52.6%	-16.5%			
2006	379	58,452	0	6,710	(6,710)	-11.5%	-34.1%	-37.1%	-34.2%	-33.0%	-27.4%	-27.3%	-14.8%		
2007	379	3,979	0	6,867	(6,867)	-172.6%	-21.7%	-42.8%	-44.7%	-41.4%	-39.7%	-33.2%	-33.1%	-18.3%	
2008	379	81	0	0	0	0.0%	-169.1%	-21.7%	-42.7%	-44.6%	-41.4%	-39.7%	-33.2%	-33.1%	-18.3%
2009	379	0	0	0	0	NA	0.0%	-169.1%	-21.7%	-42.7%	-44.6%	-41.4%	-39.7%	-33.2%	-33.1%
2010	379	7,634	0	31	(31)	-0.4%	-0.4%	-0.4%	-59.0%	-19.4%	-38.2%	-40.3%	-37.6%	-36.4%	-30.9%
2011	379	6,975	0	3,643	(3,643)	-52.2%	-25.1%	-25.1%	-25.0%	-56.5%	-22.4%	-39.4%	-41.3%	-38.8%	-37.5%
2012	379	503	0	9,681	(9,681)	-1924.7%	-178.2%	-88.4%	-88.4%	-87.9%	-105.5%	-34.7%	-51.5%	-52.4%	-49.1%
2013	379	0	0	0	0	NA	-1924.7%	-178.2%	-88.4%	-88.4%	-87.9%	-105.5%	-34.7%	-51.5%	-52.4%
2014	379	87,894	13,342	152,641	(139,299)	-158.5%	-158.5%	-168.5%	-160.0%	-148.2%	-148.2%	-148.1%	-149.0%	-100.4%	-108.0%
2015	379	129,054	0	57,615	(57,615)	-44.6%	-90.8%	-90.8%	-95.0%	-93.7%	-90.6%	-90.6%	-90.6%	-92.0%	-76.0%
2016	379	1,385	0	(0)	0	0.0%	-44.2%	-90.2%	-90.2%	-94.4%	-93.1%	-90.1%	-90.1%	-90.0%	-91.4%
2017	379	9,701	0	115,706	(115,706)	-1192.7%	-1043.8%	-123.7%	-137.1%	-137.1%	-141.0%	-138.4%	-134.1%	-134.1%	-134.0%
2018	379	8,611	0	70,933	(70,933)	-823.8%	-1019.3%	-947.6%	-164.2%	-162.1%	-162.1%	-165.8%	-162.6%	-157.7%	-157.7%

PUBLIC SERVICE OF COLORADO -GAS UTILITY
RETIREMENTS, GROSS SALVAGE, AND COST OF REMOVAL 1999-2018
AS ADJUSTED

Transaction Year	Account	Retirements	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2-yr Net Salv. %	3-yr Net Salv. %	4-yr Net Salv. %	5-yr Net Salv. %	6-yr Net Salv. %	7-yr Net Salv. %	8-yr Net Salv. %	9-yr Net Salv. %	10-yr Net Salv. %
1999	380 Total	1,402,425	0	1,042,993	(1,042,993)	-74.4%									
2000	380 Total	0	0	1,042,993	(1,042,993)	NA	-148.7%								
2001	380 Total	12,839	0	1,065,178	(1,065,178)	-8296.2%	-16419.7%	-222.7%							
2002	380 Total	1,105,810	0	1,169,522	(1,169,522)	-105.8%	-199.8%	-293.0%	-171.4%						
2003	380 Total	1,045,499	0	1,050,696	(1,050,696)	-100.5%	-103.2%	-151.8%	-200.0%	-150.6%					
2004	380 Total	756,165	0	1,481,998	(1,481,998)	-196.0%	-140.6%	-127.3%	-163.2%	-199.0%	-158.5%				
2005	380 Total	610,730	240	2,020,838	(2,020,598)	-330.8%	-256.2%	-188.7%	-162.7%	-192.2%	-221.8%	-179.9%			
2006	380 Total	489,035	0	2,147,871	(2,147,871)	-439.2%	-379.0%	-304.5%	-231.0%	-196.4%	-222.3%	-248.2%	-203.3%		
2007	380 Total	85,414	0	294,878	(294,878)	-345.2%	-425.2%	-376.6%	-306.2%	-234.2%	-199.5%	-224.8%	-250.2%	-205.5%	
2008	380 Total	414,388	0	2,237,199	(2,237,199)	-539.9%	-506.6%	-473.3%	-418.9%	-347.3%	-271.5%	-230.8%	-253.7%	-276.8%	-228.9%
2009	380 Total	801,791	0	1,888,087	(1,888,087)	-235.5%	-339.2%	-339.6%	-366.8%	-357.7%	-318.9%	-264.6%	-231.5%	-251.0%	-270.6%
2010	380 Total	745,727	0	1,621,092	(1,621,092)	-217.4%	-226.8%	-292.9%	-295.1%	-322.9%	-324.4%	-299.5%	-257.5%	-229.8%	-246.8%
2011	380 Total	942,143	(0)	2,633,157	(2,633,157)	-279.5%	-252.0%	-246.7%	-288.5%	-290.2%	-311.1%	-314.1%	-295.6%	-261.0%	-236.5%
2012	380 Total	1,177,784	287,236	2,258,630	(1,971,395)	-167.4%	-217.2%	-217.3%	-221.2%	-253.6%	-255.5%	-274.8%	-281.3%	-270.6%	-245.4%
2013	380 Total	1,633,871	1,423,161	3,576,759	(2,153,598)	-131.8%	-146.7%	-180.0%	-186.2%	-193.7%	-218.8%	-220.6%	-237.6%	-245.9%	-241.0%
2014	380 Total	1,994,421	0	4,040,753	(4,040,753)	-202.6%	-170.7%	-169.9%	-187.9%	-191.3%	-196.1%	-214.6%	-216.0%	-229.2%	-236.2%
2015	380 Total	1,647,660	488,837	4,835,224	(4,346,387)	-263.8%	-230.3%	-199.8%	-193.9%	-204.8%	-205.9%	-208.6%	-223.3%	-224.4%	-234.9%
2016	380 Total	6,518,399	1,713,277	3,160,989	(1,447,712)	-22.2%	-71.0%	-96.8%	-101.6%	-107.6%	-119.3%	-124.2%	-130.0%	-140.7%	-141.8%
2017	380 Total	2,752,625	12,470	3,767,723	(3,755,253)	-136.4%	-56.1%	-87.5%	-105.2%	-108.2%	-112.7%	-122.1%	-126.2%	-131.0%	-140.1%
2018	380 Total	769,448	0	6,577,436	(6,577,436)	-854.8%	-293.4%	-117.3%	-138.0%	-147.4%	-145.7%	-147.3%	-154.4%	-157.0%	-160.3%
2002	380 Steel	3,627	0	560,881	(560,881)	-15464.9%									
2003	380 Steel	21,345	0	111,496	(111,496)	-522.4%	-2692.6%								
2004	380 Steel	95,351	0	202,108	(202,108)	-212.0%	-268.7%	-726.8%							
2005	380 Steel	3,235	240	5,139	(4,899)	-151.4%	-210.0%	-265.6%	-711.7%						
2006	380 Steel	17,762	0	51,650	(51,650)	-290.8%	-269.3%	-222.3%	-268.8%	-658.8%					
2007	380 Steel	817,726	0	2,572,097	(2,572,097)	-314.5%	-314.0%	-313.4%	-303.1%	-308.0%	-365.3%				
2009	380 Steel	216,442	0	1,176,267	(1,176,267)	-543.5%	-362.5%	-361.2%	-360.6%	-348.3%	-351.5%	-398.1%			
2009	380 Steel	263,843	0	1,218,499	(1,218,499)	-461.8%	-498.6%	-382.7%	-381.4%	-380.8%	-369.5%	-371.7%	-409.8%		
2010	380 Steel	139,399	0	599,170	(599,170)	-429.8%	-450.8%	-483.1%	-387.2%	-386.0%	-385.5%	-374.9%	-376.9%	-411.5%	
2011	380 Steel	178,163	0	1,030,169	(1,030,169)	-578.2%	-513.1%	-489.8%	-504.4%	-408.3%	-407.0%	-406.5%	-395.8%	-397.3%	-428.4%
2012	380 Steel	173,063	141,730	867,857	(726,127)	-419.6%	-500.0%	-480.1%	-473.7%	-489.3%	-409.4%	-408.2%	-407.8%	-398.0%	-399.3%
2013	380 Steel	226,387	20,062	479,606	(459,544)	-203.0%	-296.8%	-383.6%	-392.6%	-411.2%	-435.1%	-386.2%	-385.4%	-385.0%	-377.2%
2014	380 Steel	246,208	0	1,650,132	(1,650,132)	-670.2%	-446.4%	-439.2%	-469.3%	-463.6%	-463.2%	-475.2%	-417.1%	-416.1%	-415.8%
2015	380 Steel	232,330	158,889	1,735,985	(1,577,096)	-678.8%	-674.4%	-523.0%	-502.6%	-515.4%	-505.4%	-497.5%	-503.5%	-441.5%	-440.4%
2016	380 Steel	2,741,760	773,004	1,853,284	(1,080,280)	-39.4%	-89.4%	-133.8%	-138.3%	-151.8%	-171.8%	-180.9%	-198.5%	-215.4%	-230.9%
2017	380 Steel	1,183,752	0	1,859,560	(1,859,560)	-157.1%	-74.9%	-108.6%	-140.0%	-143.1%	-153.1%	-168.3%	-175.4%	-189.4%	-203.1%
2018	380 Steel	265,046	0	1,986,272	(1,986,272)	-749.4%	-265.4%	-117.6%	-147.0%	-174.6%	-175.9%	-184.3%	-197.6%	-203.6%	-215.7%

PUBLIC SERVICE OF COLORADO -GAS UTILITY
RETIREMENTS, GROSS SALVAGE, AND COST OF REMOVAL 1999-2018
AS ADJUSTED

Transaction Year	Account	Retirements	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2-yr Net Salv. %	3-yr Net Salv. %	4-yr Net Salv. %	5-yr Net Salv. %	6-yr Net Salv. %	7-yr Net Salv. %	8-yr Net Salv. %	9-yr Net Salv. %	10-yr Net Salv. %
2002	380 Plastic	940,124	0	482,113	(482,113)	-51.3%									
2003	380 Plastic	537,799	0	445,117	(445,117)	-82.8%	-62.7%								
2004	380 Plastic	242,775	0	241,270	(241,270)	-99.4%	-87.9%	-67.9%							
2005	380 Plastic	826,002	0	1,394	(1,394)	-0.2%	-22.7%	-42.8%	-45.9%						
2006	380 Plastic	0	0	(1,435)	1,435	387897.3%	0.0%	-22.6%	-42.7%	-45.9%					
2007	380 Plastic	598,729	0	551,155	(551,155)	-92.1%	-91.8%	-38.7%	-47.5%	-56.1%	-54.7%				
2008	380 Plastic	197,946	0	1,060,932	(1,060,932)	-536.0%	-202.4%	-202.2%	-99.3%	-99.3%	-95.6%	-83.2%			
2009	380 Plastic	537,948	0	669,588	(669,588)	-124.5%	-235.2%	-171.0%	-170.9%	-105.6%	-105.0%	-100.9%	-88.9%		
2010	380 Plastic	606,328	0	1,021,922	(1,021,922)	-168.5%	-147.8%	-205.1%	-170.2%	-170.1%	-119.4%	-117.8%	-112.5%	-99.7%	
2011	380 Plastic	763,981	0	1,602,988	(1,602,988)	-209.8%	-191.6%	-172.6%	-206.8%	-181.4%	-181.3%	-139.0%	-136.4%	-129.7%	-115.7%
2012	380 Plastic	1,004,721	145,506	1,390,774	(1,245,268)	-123.9%	-161.0%	-163.0%	-155.8%	-180.0%	-165.8%	-165.8%	-135.6%	-133.8%	-128.6%
2013	380 Plastic	1,407,484	1,403,099	3,097,153	(1,694,054)	-120.4%	-121.9%	-143.0%	-147.1%	-144.3%	-161.4%	-153.3%	-153.3%	-132.0%	-130.7%
2014	380 Plastic	1,748,213	0	2,390,621	(2,390,621)	-136.7%	-129.4%	-128.1%	-140.8%	-143.8%	-142.1%	-154.6%	-149.1%	-149.1%	-133.1%
2015	380 Plastic	1,415,331	329,948	3,099,239	(2,769,291)	-195.7%	-163.1%	-149.9%	-145.3%	-153.0%	-154.4%	-152.2%	-162.1%	-157.1%	-157.0%
2016	380 Plastic	3,776,639	940,273	1,307,705	(367,432)	-9.7%	-60.4%	-79.6%	-86.5%	-90.5%	-99.5%	-103.4%	-104.4%	-111.9%	-110.9%
2017	380 Plastic	1,568,873	12,470	1,908,163	(1,895,693)	-120.8%	-42.3%	-74.4%	-87.2%	-91.9%	-94.9%	-102.4%	-105.7%	-106.4%	-113.0%
2018	380 Plastic	504,403	0	4,591,164	(4,591,164)	-910.2%	-312.9%	-117.2%	-132.5%	-133.3%	-131.5%	-130.9%	-135.8%	-137.4%	-136.9%
1999	381-382	513,661	0	0	0	0.0%									
2000	381-382	93,311	0	0	0	0.0%	0.0%								
2001	381-382	0	0	0	0	NA	0.0%	0.0%							
2002	381-382	259,943	2,272	0	2,272	0.9%	0.9%	0.6%	0.3%						
2003	381-382	3,395,748	0	0	0	0.0%	0.1%	0.1%	0.1%	0.1%					
2004	381-382	3,275,738	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%				
2005	381-382	321	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
2006	381-382	3,795,304	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
2007	381-382	1,803,309	4,484	951,365	(946,881)	-52.5%	-16.9%	-16.9%	-10.7%	-7.7%	-7.5%	-7.5%	-7.5%	-7.2%	
2008	381-382	2,107,181	42,113	966,800	(924,687)	-43.9%	-47.9%	-24.3%	-24.3%	-17.0%	-13.0%	-12.8%	-12.8%	-12.7%	-12.3%
2009	381-382	1,275,263	0	144,280	(144,280)	-11.3%	-31.6%	-38.9%	-22.4%	-22.4%	-16.4%	-12.9%	-12.7%	-12.7%	-12.6%
2010	381-382	2,315,694	0	162,718	(162,718)	-7.0%	-8.5%	-21.6%	-29.0%	-19.3%	-19.3%	-14.9%	-12.1%	-11.9%	-11.9%
2011	381-382	2,574,816	0	176,342	(176,342)	-6.8%	-6.9%	-7.8%	-17.0%	-23.4%	-17.0%	-17.0%	-13.7%	-11.5%	-11.3%
2012	381-382	3,507,875	0	213,804	(213,804)	-6.1%	-6.4%	-6.6%	-7.2%	-13.8%	-18.9%	-14.8%	-14.8%	-12.4%	-10.7%
2013	381-382	3,760,775	99,165	1,235,819	(1,136,654)	-30.2%	-18.6%	-15.5%	-13.9%	-13.6%	-17.7%	-21.4%	-17.5%	-17.5%	-15.2%
2014	381-382	3,870,356	83,602	502,615	(419,013)	-10.8%	-20.4%	-15.9%	-14.2%	-13.2%	-13.0%	-16.4%	-19.4%	-16.5%	-16.5%
2015	381-382	3,994,001	102,182	548,729	(446,547)	-11.2%	-11.0%	-17.2%	-14.6%	-13.5%	-12.8%	-12.7%	-15.5%	-18.1%	-15.8%
2016	381-382	1,702,396	34,866	0	34,866	2.0%	-7.2%	-8.7%	-14.8%	-13.0%	-12.1%	-11.6%	-11.6%	-14.3%	-16.9%
2017	381-382	14,879,613	0	245,035	(245,035)	-1.6%	-1.3%	-3.2%	-4.4%	-7.8%	-7.6%	-7.6%	-7.6%	-7.7%	-9.6%
2018	381-382	2,333,316	103,888	585,921	(482,033)	-20.7%	-4.2%	-3.7%	-5.0%	-5.8%	-8.8%	-8.5%	-8.4%	-8.3%	-8.4%

PUBLIC SERVICE OF COLORADO -GAS UTILITY
RETIREMENTS, GROSS SALVAGE, AND COST OF REMOVAL 1999-2018
AS ADJUSTED

Transaction Year	Account	Retirements	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2-yr Net Salv. %	3-yr Net Salv. %	4-yr Net Salv. %	5-yr Net Salv. %	6-yr Net Salv. %	7-yr Net Salv. %	8-yr Net Salv. %	9-yr Net Salv. %	10-yr Net Salv. %
1999	381 AMR	0	0	0	0	NA									
2000	381 AMR	0	0	0	0	NA	NA								
2001	381 AMR	0	0	0	0	NA	NA	NA							
2002	381 AMR	0	0	0	0	NA	NA	NA	NA						
2003	381 AMR	0	0	0	0	NA	NA	NA	NA	NA					
2004	381 AMR	918,654	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%				
2005	381 AMR	0	0	0	0	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
2006	381 AMR	866,939	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
2007	381 AMR	1,755,491	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
2008	381 AMR	2,166,393	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2009	381 AMR	1,293,781	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2010	381 AMR	2,295,023	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2011	381 AMR	1,751,884	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2012	381 AMR	1,467,735	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2013	381 AMR	1,465,602	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2014	381 AMR	1,465,195	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2015	381 AMR	2,261,010	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2016	381 AMR	0	0	0	0	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2017	381 AMR	0	0	0	0	NA	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2018	381 AMR	0	0	0	0	NA	NA	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
					0										
1999	383	0	0	0	0	NA									
2000	383	0	0	0	0	NA	NA								
2001	383	0	0	0	0	NA	NA	NA							
2002	383	0	0	0	0	NA	NA	NA	NA						
2003	383	86,526	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%					
2004	383	0	0	0	0	NA	0.0%	0.0%	0.0%	0.0%	0.0%				
2005	383	0	0	0	0	NA	NA	0.0%	0.0%	0.0%	0.0%	0.0%			
2006	383	0	0	0	0	NA	NA	NA	0.0%	0.0%	0.0%	0.0%	0.0%		
2007	383	0	0	0	0	NA	NA	NA	NA	0.0%	0.0%	0.0%	0.0%	0.0%	
2008	383	0	0	0	0	NA	NA	NA	NA	NA	0.0%	0.0%	0.0%	0.0%	0.0%
2009	383	0	0	0	0	NA	NA	NA	NA	NA	NA	0.0%	0.0%	0.0%	0.0%
2010	383	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	0.0%	0.0%	0.0%
2011	383	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	0.0%	0.0%
2012	383	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0%
2013	383	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2014	383	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2015	383	1,790	0	240	(240)	-13.4%	-13.4%	-13.4%	-13.4%	-13.4%	-13.4%	-13.4%	-13.4%	-13.4%	-13.4%
2016	383	0	0	0	0	NA	-13.4%	-13.4%	-13.4%	-13.4%	-13.4%	-13.4%	-13.4%	-13.4%	-13.4%
2017	383	0	0	0	0	NA	NA	-13.4%	-13.4%	-13.4%	-13.4%	-13.4%	-13.4%	-13.4%	-13.4%
2018	383	0	0	0	0	NA	NA	NA	-13.4%	-13.4%	-13.4%	-13.4%	-13.4%	-13.4%	-13.4%

PUBLIC SERVICE OF COLORADO -GAS UTILITY
RETIREMENTS, GROSS SALVAGE, AND COST OF REMOVAL 1999-2018
AS ADJUSTED

Transaction Year	Account	Retirements	Gross Salvage	Cost of Removal	Net Salvage	Net Salv. %	2-yr Net Salv. %	3-yr Net Salv. %	4-yr Net Salv. %	5-yr Net Salv. %	6-yr Net Salv. %	7-yr Net Salv. %	8-yr Net Salv. %	9-yr Net Salv. %	10-yr Net Salv. %
1999	387	0	0	0	0	NA									
2000	387	0	0	0	0	NA	NA								
2001	387	0	0	0	0	NA	NA	NA							
2002	387	0	0	0	0	NA	NA	NA	NA						
2003	387	0	0	0	0	NA	NA	NA	NA	NA					
2004	387	0	0	0	0	NA	NA	NA	NA	NA	NA				
2005	387	0	0	0	0	NA	NA	NA	NA	NA	NA	NA			
2006	387	46,273	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
2007	387	0	0	0	0	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
2008	387	0	0	0	0	NA	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2009	387	0	0	0	0	NA	NA	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2010	387	0	0	0	0	NA	NA	NA	NA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2011	387	0	0	0	0	NA	NA	NA	NA	NA	0.0%	0.0%	0.0%	0.0%	0.0%
2012	387	0	0	0	0	NA	NA	NA	NA	NA	NA	0.0%	0.0%	0.0%	0.0%
2013	387	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	0.0%	0.0%	0.0%
2014	387	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	0.0%	0.0%
2015	387	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0%
2016	387	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2017	387	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2018	387	0	0	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA