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May 31, 2022

VIA ELECTRONIC FILING

Mr. Adam J. Teitzman Commission Clerk Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, Florida 32399-0850

Re: In re: Petition by Florida City Gas for Base Rate Increase Docket No. 20220069-GU

Dear Mr. Teitzman:

Enclosed for filing on behalf of Florida City Gas ("FCG") in the above-referenced docket is FCG's Petition for Base Rate Increase, together with supporting testimonies, exhibits, and Minimum Filing Requirements. This filing includes the following documents:

- 1. Petition for Base Rate Increase
- 2. Direct Testimony of Kurt S. Howard and Exhibit KSH-1
- 3. Direct Testimony of Mark Campbell and Exhibits MC-1 through MC-6
- 4. Direct Testimony of Liz Fuentes and Exhibits LF-1 through LF-6
- 5. Direct Testimony of Tara DuBose and Exhibits TBD-1 through TBD-6
- 6. Direct Testimony of Jennifer Nelson and Exhibits JEN-1 through JEN-10
- 7. Direct Testimony of Ned Allis and Exhibits NWA-1 (2022 Depreciation Study) through NWA-5
- 8. Minimum Filing Requirements, Schedule A
- 9. Minimum Filing Requirements, Schedule B
- 10. Minimum Filing Requirements, Schedule C

- 11. Minimum Filing Requirements, Schedule D
- 12. Minimum Filing Requirements, Schedule E
- 13. Minimum Filing Requirements, Schedule G
- 14. Minimum Filing Requirements, Schedule H
- 15. Minimum Filing Requirements, Schedule I

FCG is not seeking interim rate relief and, therefore, is not providing Minimum Filing Requirements, Schedule F. Each of the above-referenced documents are being separately filed in this docket.

Please note that certain Minimum Filing Requirements contain confidential information and data, which has been redacted and will be provided with a Request for Confidential Classification filed under separate cover.

If you or your staff have any question regarding this filing, please contact me at (561) 691-7144.

Respectfully submitted,

Christopher T. Wright

Authorized House Counsel No. 1007055

Enclosed: [Document 7 of 15]

CERTIFICATE OF SERVICE

20220069-GU

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished by electronic mail this 31st day of May 2022 to the following parties:

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s/ Christopher T. Wright

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Attorney for Florida City Gas

1	BEFORE THE
2	FLORIDA PUBLIC SERVICE COMMISSION
3	DOCKET NO. 20220069-GU
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8	FLORIDA CITY GAS
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10	DIRECT TESTIMONY OF NED W. ALLIS
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16	Topics: 2022 Depreciation Study
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23	Filed: May 31, 2022

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1		I. INTRODUCTION
2		
3	Q.	Please state your name and business address.
4	A.	My name is Ned W. Allis. My business address is 207 Senate Avenue, Camp
5		Hill, PA 17011.
6	Q.	By whom are you employed and what is your position?
7	A.	I am Vice President of Gannett Fleming Valuation and Rate Consultants, LLC
8		("Gannett Fleming"). Gannett Fleming, a subsidiary of infrastructure firm
9		Gannett Fleming, Inc., provides depreciation consulting services to utility
10		companies in the United States and Canada.
11	Q.	Please describe your duties and responsibilities in that position.
12	A.	As Vice President, I am responsible for conducting depreciation, valuation and
13		original cost studies, determining service life and salvage estimates, conducting
14		field reviews, presenting recommended depreciation rates to clients, and
15		supporting such rates before state and federal regulatory agencies.
16	Q.	Please describe your educational background and professional experience.
17	A.	I have a Bachelor of Science degree in Mathematics from Lafayette College in
18		Easton, PA. I joined Gannett Fleming in October 2006 as an analyst. My
19		responsibilities included assembling data required for depreciation studies,
20		conducting statistical analyses of service life and net salvage data, calculating

annual and accrued depreciation, and assisting in preparing reports and

testimony setting forth and defending the results of the studies. I also developed

and maintained Gannett Fleming's proprietary depreciation software. In March

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of 2013, I was promoted to the position of Supervisor, Depreciation Studies. In March of 2017, I was promoted to Project Manager, Depreciation and Technical Development. In January 2019, I was promoted to my current position of Vice President.

I am a past president of the Society of Depreciation Professionals (the "Society"). The Society has established national standards for depreciation professionals. The Society administers an examination to become certified in this field. I passed the certification exam in September 2011 and was recertified in March 2017 and January 2022. I am also an instructor for depreciation training sponsored by the Society.

I have submitted testimony on depreciation related topics to the Florida Public Service Commission ("FPSC" or "Commission"), the Federal Energy Regulatory Commission ("FERC"), and before the regulatory commissions of the states of New York, Connecticut, Rhode Island, California, the District of Columbia, New Jersey, Kansas, Massachusetts, California, Maryland, New Hampshire, Washington and Nevada. I have also assisted other witnesses in the preparation of direct and rebuttal testimony in several other states and two Canadian provinces. Exhibit NWA-2 provides a list of depreciation cases in which I have submitted testimony.

1	Q.	Have you received any additional education relating to utility plant
2		depreciation?
3	A.	Yes. I have completed the following courses conducted by the Society:
4		"Depreciation Basics," "Life and Net Salvage Analysis" and "Preparing and
5		Defending a Depreciation Study."
6	Q.	Are you sponsoring or co-sponsoring any exhibits in this case?
7	A.	Yes. I am sponsoring the following exhibits:
8		• NWA-1 – 2022 Depreciation Study
9		• NWA-2 – List of Cases in which Ned W. Allis has Submitted Testimony
10		• NWA-3 – Schedules 1A and 1B
11		NWA-4 – Summary of Depreciation Based on Current Service Life and
12		Net Salvage Estimates
13		• NWA-5 – Summary of Depreciation Based on Proposed Service Life and
14		Current Net Salvage Estimates
15		I am co-sponsoring a portion of the following exhibit where it incorporates
16		information from my testimony or exhibits:
17		• LF-5(B) – Proposed Depreciation Company Adjustment for Base vs.
18		Clause for 2023 using the RSAM Adjusted Depreciation Rates, filed with
19		the direct testimony of FCG witness Fuentes.
20	Q.	Are you sponsoring any Minimum Filing Requirements in this case?
21	A.	No.
22	Q.	What is the purpose of your testimony?

23

A.

I am sponsoring the results of a new depreciation study (the "2022 Depreciation

Study" or "Study"), filed on behalf of Pivotal Utility Holdings, Inc. d/b/a

Florida City Gas ("FCG" or the "Company") with the FPSC on May 31, 2022.

The 2022 Depreciation Study is reflected as Exhibit NWA-1 to my testimony.

The Study covers depreciable gas properties in service as of December 31,

2021, and actual and projected plant and reserve balances through the end of

Q. Please summarize your testimony.

My testimony will explain the methods and procedures of the 2022 Depreciation Study and will set forth the annual depreciation rates that result from the application of this Study, if accepted for use by the Commission. The Study includes comparison schedules showing current and proposed depreciation parameters, including average service lives, net salvage percentages, depreciation rates, depreciation accruals, and a comparison of the forecasted theoretical reserve to the forecasted book reserve as of December 31, 2022. I also provide additional detail on each section of the Study in my testimony.

A.

The overall result of the 2022 Depreciation Study is a net increase in FCG's depreciation rates over the currently approved rates, which increases FCG's total depreciation expense as of December 31, 2022 by approximately \$0.9 million. As I detail later in my testimony, this increase is primarily due to plant and reserve activity since the last depreciation study. The service lives recommended in the 2022 Depreciation Study reduce depreciation expense,

1		which is somewhat offset by more negative net sarvage estimates.
2		
3		II. 2022 DEPRECIATION STUDY
4		
5	Q.	Please define the concept of depreciation.
6	A.	The FERC Uniform System of Accounts defines depreciation as:
7 8 9 10 11 12 13 14 15 16		Depreciation, as applied to depreciable gas plant, means the loss in service value not restored by current maintenance, incurred in connection with the consumption or prospective retirement of gas plant in the course of service from causes which are known to be in current operation and against which the utility is not protected by insurance. Among the causes to be given consideration are wear and tear, decay, action of the elements, inadequacy, obsolescence, changes in the art, changes in demand and requirements of public authorities, and, in the case of natural gas companies, the exhaustion of natural resources. ¹
18	Q.	In preparing the 2022 Depreciation Study, did you follow generally
19		accepted practices in the field of depreciation?
20	A.	Yes. The methods, procedures and techniques used in the Study are accepted
21		practices in the field of depreciation and are detailed in my testimony and the
22		study report provided as Exhibit NWA-1.
23	Q.	Please describe the contents of the 2022 Depreciation Study.
24	A.	The Study is presented in ten parts:
25		• Part I, Introduction, presents the scope and basis for the 2022
26		Depreciation Study;
27		Part II, Estimation of Survivor Curves, explains the process of

 $^{^{\}rm 1}$ 18 C.F.R. 201 (FERC Uniform System of Accounts), Definition 12B.

1	estimating survivor curves and the retirement rate method of life
2	analysis;
3	• Part III, Service Life Considerations, discusses factors and the
4	informed judgment involved with the estimation of service life;
5	• Part IV, Net Salvage Considerations, discusses factors and the
6	informed judgment involved with the estimation of net salvage;
7	• Part V, Calculation of Annual and Accrued Depreciation, explains
8	the method, procedure and technique used in the calculation of
9	annual depreciation expense and the theoretical reserve;
10	• Part VI, Results of Study, sets forth the service life estimates, net
11	salvage estimates, annual depreciation rates and accruals, and
12	theoretical reserves for each depreciable group. This section also
13	includes a description of the detailed tabulations supporting the
14	2022 Depreciation Study;
15	• Part VII, Service Life Statistics, sets forth the survivor curve
16	estimates and original life tables for each plant account and
17	subaccount;
18	• Part VIII, Net Salvage Statistics, sets forth the net salvage analysis
19	for each plant account and subaccount;
20	• Part IX, Detailed Depreciation Calculations, sets forth the
21	calculation of average remaining life for each property group; and
22	• Part X, Detail of Service Life and Net Salvage Estimates, provides
23	a description of each depreciable category of plant and provides a

discussion of the considerations that inform the service life and net salvage estimates for each plant account.

Q. Please identify the depreciation method that you used.

A. I used the straight line method of depreciation, remaining life technique, and the average service life (or average service life – broad group) procedure. The annual depreciation accruals presented in my study are based on a method of depreciation accounting that seeks to distribute the unrecovered cost of fixed capital assets over the estimated remaining useful life of each unit, or group of assets, in a systematic and rational manner.

A.

In compliance with the FPSC depreciation rule prescribed in Rule 25-7.045, Florida Administrative Code ("F.A.C."), depreciation rates are also presented using the whole life technique in Exhibit NWA-3. Theoretical reserves, which will be discussed in more detail later in my testimony, were calculated using the prospective method of calculating theoretical reserves and compared with the actual book reserves. This comparison is provided in Table 3 of the depreciation study.

Q. Would you please explain the difference between the whole life technique and the remaining life technique?

Yes. When using the whole life technique, the cost of an asset (original cost less net salvage) is allocated over the service life of the asset. For a group of assets, the costs of the assets in the group are allocated over the average service life of the group. However, if the service life or net salvage estimates change,

or if activity such as retirements or cost of removal do not occur precisely as forecast, the whole life technique will not recover the full cost of the assets over their service lives without an adjustment to depreciation expense. Note that, mathematically, if the book reserve is equal to the theoretical reserve then the remaining life depreciation rates would equal the whole life depreciation rates.

The remaining life technique accounts for the fact that estimates can (and will) change over time. For this technique, the remaining undepreciated cost (that is, the original cost less net salvage less the book accumulated depreciation) is allocated over the remaining life of the asset. For a group of assets, the remaining undepreciated costs are allocated over the average remaining life. Thus, when using the remaining life technique there is an automatic adjustment, or self-correcting mechanism, that will increase or decrease depreciation expense to account for any imbalances between the book and theoretical reserves.

- 16 Q. Is the remaining life technique the predominant depreciation technique used in the utility industry?
- 18 A. Yes. Almost all U.S. jurisdictions, including the FERC, use the remaining life 19 technique.
- Q. Did you review prior Commission orders on FCG's depreciation accrual rates?
- 22 A. Yes. I reviewed the previous depreciation study ("2017 Depreciation Study")
 23 for FCG, as well as related testimony, filed in Docket No. 20170179-GU and

the depreciation rates and parameters that were approved in that case by Order

2 No. PSC-2018-0190-FOF-GU.

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A.

3 Q. Is the 2022 Depreciation Study consistent with prior Commission orders?

A. Yes. The use of the straight line method, average service life procedure and remaining life technique is consistent with FCG's 2017 Depreciation Study and prior Commission orders. The methods used for the estimation of service lives and net salvage are also generally consistent with FCG's 2017 Depreciation Study and prior Commission orders.

9 Q. What are your recommended annual depreciation accrual rates for FCG?

10 A. My recommended annual depreciation accrual rates are the remaining life rates
11 set forth in Table 1 of Exhibit NWA-1 beginning on page VI-2. These rates
12 were developed using the same methods used in the Company's 2017
13 Depreciation Study and follow the FPSC depreciation rule previously
14 discussed.

Q. Were any accounts not included in the 2022 Depreciation Study?

Yes. General plant amortizable and other intangible accounts, which are accounts for which amortization (or vintage year) accounting is used, were not included in the study. No changes are proposed to the current amortization periods and rates for these accounts. Additionally, the Liquefied Natural Gas ("LNG") plant expected to be placed in service in March of 2023 was not included in the study. No changes are proposed to the depreciation rates and parameters approved by Order No. PSC-2018-0190-FOF-GU in Docket No. 20170179-GU for the LNG assets.

1 Q. How did you determine the recommended annual depreciation accrual 2 rates?

I did this in two phases. In the first phase, I estimated the service life and net salvage characteristics for each depreciable group - that is, each plant account or subaccount identified as having similar characteristics. In the second phase, I calculated the composite remaining lives and annual depreciation accrual rates based on the service life and net salvage estimates determined in the first phase. The next two sections of my testimony will explain each of these phases of the Study.

A.

III. SERVICE LIVES AND NET SALVAGE

A.

Q. Please describe the first phase of the 2022 Depreciation Study, in which you estimated the service life and net salvage characteristics for each depreciable group.

The first phase of the study, which resulted in the estimation of service life and net salvage parameters, consisted of compiling historic data from records related to FCG's plant; analyzing these data to obtain historic trends of survivor and net salvage characteristics; obtaining supplementary information from management and operating personnel concerning accounting and operating practices and plans; and interpreting the above data and the estimates used by other gas utilities to form judgments of average service life and net salvage characteristics.

1	Q.	Did you physically observe any of FCG's plant and equipment in
2		preparation of the 2022 Depreciation Study?

A. Yes. For the 2022 Depreciation Study, I held meetings with operating personnel and made field visits to various FCG properties to observe representative portions of plant. The meetings and field reviews were conducted to become familiar with Company-specific operations and obtain an understanding of the function of the plant and information with respect to the reasons for past retirements and the expected future causes of retirements. This knowledge, as well as information from other discussions with management, was incorporated in the interpretation and extrapolation of the statistical analyses.

12 Q. What facilities have you observed?

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- 13 A. In connection with the preparation of the 2022 Depreciation Study, I visited the 14 following facilities and observed operations and maintenance practices at each 15 location:
 - Port St. Lucie City Gate Station;
- Vero Beach Regulator Station; and
- Vero North City Gate Station.
- I also conducted meetings with FCG personnel during the preparation of the Study.

1		A. Service Lives
2		
3	Q.	What is the process for the estimation of service lives in the 2022
4		Depreciation Study?
5	A.	The process for the estimation of service lives was based on informed judgment
6		that incorporated a number of factors, including the statistical analyses of
7		historical data, general knowledge of the property studied, and information
8		obtained from field trips and management meetings. The method of estimation
9		for depreciable groups depended on the type of property studied for each
10		account. "Mass property" refers to assets such as gas mains, services and
11		meters that are continually added and replaced. "Life Span property" refers to
12		assets such as gas storage facilities for which all assets at a facility are expected
13		to retire concurrently. Each of FCG's depreciable groups are mass property
14		groups and the estimation of service lives for these types of assets are described
15		in the following section.
16		
17		1. Mass Property
18		
19	Q.	What historical data did you analyze for the purpose of estimating service
20		life characteristics for mass property?
21	A.	I analyzed the Company's accounting entries that recorded plant transactions
22		during the period 2005 through 2020. The transactions included additions,
23		retirements, transfers, and the related balances. The Company records also

included surviving dollar value by year installed for each plant account as of December 31, 2020.

Q. What methods are generally used to analyze service life data?

A. There are two methods widely used in a typical depreciation study to estimate a survivor curve for a group of plant assets: the simulated plant balance method and the retirement rate method.

The simulated plant balance method is used for property groups for which the retirements of property by age are not known and, therefore, it requires that continuous records of vintage plant additions and year-end plant balances are available. The method suggests probable survivor curves for a property group by successively applying a number of alternative survivor curves to the group's historical additions in order to simulate the group's surviving balance over a selected period of time. The survivor curve that produces simulated balances conforming most closely to the book balance may then be considered to be the survivor curve the subject group has experienced.

The retirement rate method is an actuarial method of deriving survivor curves using the average rates at which property of each age group is retired. It is the preferred method when sufficient data are available. The method relates to property groups for which aged accounting experience is available or for which aged accounting experience is developed by statistically aging unaged amounts. FCG maintains aged accounting data (meaning that the vintage year is recorded

1		for each addition, retirement, or transfer), and thus the data at FCG are kept in
2		a manner that enabled the use of the retirement rate method.
3		
4		The application of the retirement rate method is illustrated through the use of
5		an example in Part II of the 2022 Depreciation Study. The retirement rate
6		method was used for the mass property accounts in the study (i.e., depreciable
7		distribution and general plant accounts).
8	Q.	Did you use statistical survivor characteristics to estimate average service
9		lives of the property?
10	A.	Yes. I used Iowa-type survivor curves.
11	Q.	What is an "Iowa-type survivor curve," and how did you use such curves
12		to estimate the service life characteristics for each property group?
13	A.	Iowa-type curves are a widely used group of generalized survivor curves that
14		contain the range of survivor characteristics usually experienced by utilities and
15		other industrial companies. The Iowa curves were developed at the Iowa State
16		College Engineering Experiment Station through an extensive process of
17		observing and classifying the ages at which various types of property used by
18		utilities and other industrial companies had been retired.
19		
20		Iowa-type curves are used to smooth and extrapolate original survivor curves
21		determined by the retirement rate method. Iowa curves were used in the 2022
22		Depreciation Study to describe the forecasted rates of retirement based on the
23		observed rates of retirement and expectations regarding future retirements.

1		Iowa-type curves have been accepted by every state commission and the FERC.
2		
3		The estimated survivor curve designations for each depreciable property group
4		indicate the average service life, the family within the Iowa system to which the
5		property group belongs, and the relative height of the mode. For example, an
6		Iowa 40-R2 designation indicates an average service life of forty years; a right-
7		moded, or R-type curve (the mode occurs after average life for right-moded
8		curves); and a moderate height, two, for the mode (possible modes for R-type
9		curves range from 1 to 5). ² The Iowa curves are discussed in more detail in Part
10		II of Exhibit NWA-1.
11	Q.	How are Iowa-type survivor curves compared to the historical data for the
12		purpose of forecasting service lives?
13	A.	For each depreciable property group, original life tables are developed from the
14		Company's historical records of aged additions, transfers, and retirements.
15		Original life tables can be developed using the full experience of historical data.
16		Original life tables can also be developed using different ranges of years of
17		activity, such as the most recent 10 years of experience. The range of
18		transaction years used to develop a life table is referred to as an "experience

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"placement band."

Once life tables have been developed using the retirement rate method, specific

² There are also half-mode curves (e.g., R1.5) that are the average of the full mode curves.

Iowa curves can be compared both visually and mathematically to the life tables. For visual curve matching, Iowa survivor curves are plotted on the same graph as an original life table, and the points of the curves are visually compared to the life table to assess how closely the Iowa curve matches the historical data. For mathematical curve matching, Iowa curves are compared to an original life table mathematically using an algorithm that compares the differences between an Iowa curve and the original life table.

For both visual and mathematical curve matching, not all of the historical data points should be given the same consideration, as different data points on a life table will have different significance based on both the level of exposures (i.e., the amount of assets that has survived to a given age) and the level of retirements. For example, data points for later ages in an original life table may be based on the experience of a small number of units of property. Due to a smaller sample size, these data points would not provide as meaningful information compared to earlier ages. Additionally, the middle portion of the curve is where the largest portion of retirements occurs. This portion of the curve therefore typically provides the best indications of the survivor characteristics of the property studied.

- Q. Can you provide an example of the process of fitting Iowa curves to an original life table?
- 22 A. Yes. Accounts 376.10 and 376.20 Mains provide a good example of this 23 process. These accounts were analyzed together and the life table for the overall

experience and placement band is shown on Exhibit NWA-1, pages VII-8 and VII-9. The original life table develops the percent of plant that has survived to each age for the experience and placement bands. The representative data points from this life table are depicted graphically on Exhibit NWA-1, page VII-7.

Also shown on page VII-7 is the 65-R4 survivor curve. As can be seen in the chart, this curve is a visually good match of the historical data, as the smooth line depicting the 65-R4 survivor curve is close to the historical data points for most ages. The 65-R4 is a good mathematical fit of the available historical data through age 57.5. The degree of mathematical fit can be measured by the residual measure,³ which is a normalized sum of squares difference between the original life table and a given Iowa curve. The residual measure for the 65-R4 survivor curve and the representative data points from the original life table is 1.73, which is considered to be a very good fit.⁴ Therefore, the statistical analysis for this account, using both visual and mathematical techniques, indicates that the 65-R4 survivor curve provides a good representation of the historical mortality characteristics for the account.

[.]

³ The residual measure is the square root of the total sum of the squares of differences between points on the original and smooth curves divided by the number of points.

⁴ The smaller the residual measure, the more closely the Iowa curve mathematically matches the original life table.

- Q. Is the statistical analysis of historical data based on the retirement rate method the only consideration in estimating service life?
 - A. No. The estimation of service life is a forecast of the future experience of property currently in service, and therefore informed judgment that incorporates a number of factors must be used in the process of estimating service life. The statistical analysis can provide a good indication of what has occurred for the Company's assets in the past, but other factors can affect the service lives of the assets going forward. Further, the historical data often does not provide a definitive indication of service life. For these reasons other factors must be considered when estimating future service life characteristics.

Q. Would you provide an example of types of factors considered in the process of estimating service life?

Yes. An example is Accounts 376.10 and 376.20 Mains. I have explained previously that the 65-R4 survivor curve is a good fit of the historical data for mains. However, other factors were also considered for this account.

A.

In addition to the statistical analysis, I have had discussions with engineering and operations personnel with knowledge of the assets and Company plans in both this study and previous studies. Through these discussions I have obtained more detail about the Company's mains replacement programs, which includes the Safety, Access and Facility Enhancement ("SAFE") program to relocate mains and associated facilities located in or associated with rear lot easements to the street front. Based on these discussions and observations and my

1		experience in the industry, I concluded that the results from the statistical
2		analysis provide a reasonable indication of the future service life expectations
3		for this account.
4	Q.	Was the process for estimating service lives for other accounts similar to
5		Account 376?
6	A.	Yes. A similar process for estimating service life was used for other mass
7		property accounts. The estimated survivor curves for each account can be found
8		in Part VII of the 2022 Depreciation Study. A narrative description of

considerations for each estimate can be found in Part X of the study.

B. Net Salvage

A.

13 Q. Would you please explain the concept of "net salvage"?

Net salvage is the salvage value received for the asset upon retirement less the cost to retire the asset. When the cost to retire exceeds the salvage value, the result is negative net salvage. Net salvage is a component of the service value of capital assets that is recovered through depreciation rates. The service value of an asset is its original cost less its net salvage. Thus, net salvage is considered to be a component of the cost of an asset that is recovered through depreciation.

Inasmuch as depreciation expense is the loss in service value of an asset during a defined period (e.g., one year), it must include a ratable portion of both the original cost and the net salvage. That is, the net salvage related to an asset should be incorporated in the cost of service during the same period as its original cost, so that customers receiving service from the asset pay rates that include a portion of both elements of the asset's service value, the original cost and the net salvage value.

A.

For example, the full recovery of the service value of a \$1,000 regulator may include not only the \$1,000 of original cost, but also, on average, \$300 to remove the regulator at the end of its life less \$150 in salvage value. In this example, the net salvage component is negative \$150 (\$150 - \$300), and the net salvage percentage is negative 15% ((\$150 - \$300)/\$1,000).

11 Q. Please describe the process you used to estimate net salvage percentages.

A. The net salvage estimate for each plant account is based on informed judgment that incorporates the analysis of historical net salvage data. I reviewed net salvage data from 2004 through 2020. Cost of removal and salvage were expressed as a percent of the original cost of the plant retired, both on an annual basis and a three-year moving average basis. The most recent five-year average was also calculated.

Q. Were there other considerations used in developing your final estimatesfor net salvage?

Yes. In addition to the statistical analyses of historical data, I considered the information provided to me by the Company's operating personnel, general knowledge and experience of the industry practices, and trends in the industry in general.

1	Q.	How do the net salvage estimates in the 2022 Depreciation Study compare
2		to the 2017 Depreciation Study?

- A. For many accounts, the estimates are similar to FCG's 2017 Depreciation

 Study, although the negative net salvage estimates for mains and services

 accounts are higher in the 2022 Depreciation Study. These estimates reflect a

 general trend to higher cost of removal for certain accounts, a trend that is

 reflected in the Company's historical net salvage data.
- Q. In addition to a trend to higher cost of removal being reflected in thehistorical data, what are the reasons for this trend?
- 10 A. Costs have increased for a number of reasons, including permitting costs, work
 11 requirements, environmental regulations, safety requirements, traffic control
 12 and labor and contractor costs. Discussions with management and observations
 13 in the field confirm that there are significant costs to retire assets and that these
 14 costs have been increasing.
- 15 Q. Is the trend to higher cost of removal consistent with the experience of other utilities in the industry?
- 17 A. Yes. My firm conducts depreciation studies for utilities across the country. The
 18 trend towards increasing cost of removal is consistent with the experience of
 19 many others in the industry. The reasons that FCG's costs have increased are
 20 also experienced by other utilities. The net salvage estimates for FCG are also
 21 generally in line with those of Peoples Gas System in Docket No. 2020005122 GU.

1 IV. REMAINING LIVES AND DEPRECIATION RATES

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- 3 Q. Please describe the second phase of the 2022 Depreciation Study, in which
- 4 you calculated composite remaining lives and annual depreciation accrual
- 5 rates.
- 6 A. After I estimated the service life and determined net salvage characteristics to
- 7 use for each depreciable property group, I calculated the annual depreciation
- 8 accrual rates for each group based on the straight line remaining life method,
- 9 using remaining lives weighted consistent with the average life procedure. The
- study used actual plant and reserve balances as of December 31, 2021 and
- estimated activity through 2022 to develop depreciation rates based on plant
- and reserve balances as of December 31, 2022.
- 13 Q. Please describe the straight line remaining life method of depreciation.
- 14 A. The straight line remaining life method (also referred to as the straight line
- method and remaining life technique) of depreciation allocates the original cost
- of the property, less accumulated depreciation, less future net salvage, in equal
- amounts to each year of remaining service life.
- 18 Q. Please describe the average service life procedure for calculating
- 19 remaining life accrual rates.
- 20 A. The average service life procedure defines the group for which the remaining
- 21 life annual accrual is determined. When using this procedure, the annual
- accrual rate is determined for the entire group or account based on its average
- 23 remaining life, and this rate is applied to the surviving balance of the group's

cost. The average remaining life for the group is determined by first calculating
the average remaining life for each vintage of plant within the group. The
average remaining life for each vintage is derived from the area under the
survivor curve between the attained age of the vintage and the maximum age.
Then, the average remaining life for the group is determined by calculating the
dollar-weighted average of the calculated remaining lives for each vintage. The
annual depreciation accruals for the group are calculated by dividing the
remaining depreciation accruals (original cost less accumulated depreciation
less net salvage) by the average remaining life for the group.

- 10 Q. Have you used the same method to calculate the average remaining life as
 11 used in the Company's 2017 Depreciation Study?
- 12 A. Yes. The same method of calculating average remaining lives is used in the 13 2022 Depreciation Study as was used in the 2017 Depreciation Study and the 14 Company's current approved depreciation rates.
- 15 Q. Please use an example to illustrate the development of the annual depreciation accrual rate for a particular group of property in the 2022

 17 Depreciation Study.
- A. For purposes of illustrating this process I will use Account 376.2, Mains Plastic. The survivor curve estimate for this account is the 65-R4, and the net
 salvage estimate is for negative 60 percent net salvage. A discussion of these
 estimates can be found on Exhibit NWA-1, pages X-3 and X-4.

23 The calculation of the annual depreciation related to the original cost of

Account 376.2, Mains - Plastic, as of December 31, 2022, is presented on Exhibit NWA-1, page VI-5. The calculation is based on the 65-R4 survivor curve, negative 60 percent net salvage, the attained age, and the book reserve. The calculated annual depreciation accrual and rate are based on the estimated 65-R4 survivor curve and negative 60 percent net salvage, the original cost, book reserve, future accruals, and composite remaining life for the account. The calculation of the composite remaining life as of December 31, 2022 is provided in the tabulations presented on Exhibit NWA-1, pages IX-5 and IX-6. The tabulation sets forth the installation year, the original cost, the average service life, the whole life annual depreciation rate and accruals, the remaining life and theoretical future accruals factor and amounts. The average service life weighted composite remaining life of 54.39 years is equal to the total theoretical future accruals divided by the total whole life depreciation accruals.

14 Q. Did you use this same methodology for the general plant accounts?

A.

15 A. Yes. This methodology was used for the general plant accounts that are
16 depreciated. However, most of the general plant accounts are amortized in
17 accordance with the current amortization periods that have been approved by
18 the FPSC.

19 Q. What are the overall results of the 2022 Depreciation Study?

The Study results in an increase in service lives for several accounts when compared to the current estimates. This is partially offset by more negative net salvage estimates for certain accounts. The Study results in an increase in depreciation expense of approximately \$0.9 million as of December 31, 2022.

1	The factors resulting in this change in depreciation expense are discussed in
2	more detail in the next section.

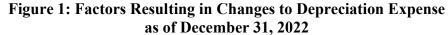
V. FACTORS AFFECTING DEPRECIATION EXPENSE

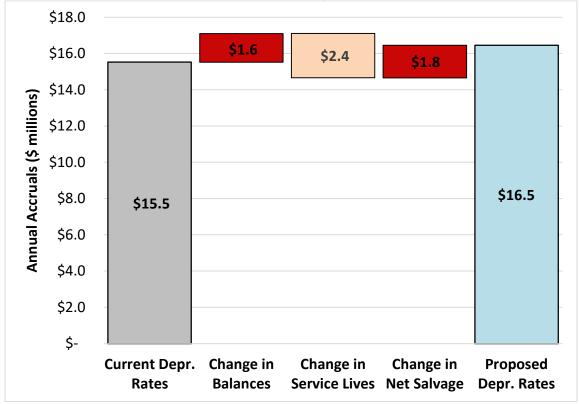
A.

Q. What are the major factors that affect the depreciation expense resulting from application of the 2022 Depreciation Study?

The changes in annual depreciation rates and expense are shown in Table 2 of the 2022 Depreciation Study and result in a moderate increase in depreciation expense of approximately \$0.9 million as of December 31, 2022. The overall increase is primarily the result of changes in plant and reserve balances since the 2017 Depreciation Study. Overall, the recommended service lives and net salvage result in a net decrease in depreciation expense, with the longer service life estimates partially offset by higher negative net salvage estimates for certain accounts. Figure 1 below provides an illustration of the main factors that result in the increase in expense of \$0.9 million.⁵

⁵ The calculations supporting Figure 1 have been provided in Exhibits NWA-4 and NWA-5.





Changes in Balances: Updating the depreciation calculations to December 31, 2022 using FCG's current service life and net salvage estimates results in a net increase in depreciation expense of approximately \$1.6 million. That is, if no changes to estimates were made and the calculations were updated to the most current balances, then the result would be an increase in depreciation expense. This is the result of changes in plant and reserve activity since the 2017 Depreciation Study.

<u>Changes in Service Lives:</u> The recommended service lives in the 2022 Depreciation Study produce a net decrease in depreciation expense of approximately \$2.4 million.

Changes in Net Salvage: The recommended net salvage estimates result in a

net increase in depreciation expense of approximately \$1.8 million. As discussed previously, the net salvage estimates are supported by the historical net salvage data and reflect a trend of increasing cost of removal for certain accounts.

VI. THEORETICAL RESERVE IMBALANCE

A.

A.

Q. What is the book reserve?

The book reserve, also referred to as the "book accumulated depreciation" or the "accumulated provision for depreciation," is a running total of historical depreciation activity. It is equal to the historical depreciation accruals, less retirements and cost of removal, plus historical gross salvage. The book reserve also represents a reduction to the original cost of plant when calculating rate base.

Q. What is the theoretical reserve?

The theoretical reserve is an estimate of the accumulated depreciation based on the current plant balances and depreciation parameters (service life and net salvage estimates) at a specific point in time. It is equal to the portion of the depreciable cost of plant that will not be allocated to expense through future whole life depreciation accruals based on the current forecasts of service life and net salvage. The theoretical reserve is also referred to as the "Calculated Accrued Depreciation" or "CAD."

Q. What is a theoretical reserve imbalance?

A. A theoretical reserve imbalance ("TRI" or "imbalance") is calculated as the difference between a company's book accumulated depreciation, or book reserve, and the calculated accrued depreciation, or theoretical reserve. I should note that in prior proceedings in both Florida and other jurisdictions, different terms have been used for the theoretical reserve imbalance, including "theoretical reserve variance," "reserve excess," "reserve surplus" or "reserve deficit" and "theoretical excess depreciation reserve." For this testimony I will use the term "theoretical reserve imbalance," which is consistent with the terminology used in the National Association of Regulatory Utility Commissioners' ("NARUC") publication, *Public Utility Depreciation Practices*.

13 Q. Is the theoretical reserve the "correct" reserve?

A. No. The terms "correct" or "incorrect" and the precision or exactness that they imply have no application in this context; rather, the theoretical reserve is an estimate at a given point in time based on the current plant balances and current life and net salvage estimates. It can provide a benchmark of a company's reserve position, but it should not be thought of as the "correct" reserve amount.

- In Wolf and Fitch's *Depreciation Systems*, this point is explained as follows on page 86:
- The CAD is not a precise measurement. It is based on a model that only approximates the complex chain of events that occur in an actual property group and depends upon

1	forecasts of future life and salvage.	Thus, it serves as a
2	guide to, not a prescription for,	adjustments to the
3	accumulated provision for depreciation	on. (emphasis added.)

4 Q. How is the TRI addressed in the 2022 Depreciation Study?

- The 2022 Depreciation Study uses the remaining life technique. When using remaining life technique, there is an automatic adjustment, or self-correcting mechanism, that will increase or decrease depreciation expense to account for any imbalances between the book and theoretical reserves. This is the most common approach to addressing theoretical reserve imbalances.
- 10 Q. What is the theoretical reserve imbalance, based on the estimates from the
 11 2022 Depreciation Study and plant and reserve balances as of December
 12 31, 2022?

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- A. The 2022 Depreciation Study estimates a negative theoretical reserve imbalance of approximately \$3.2 million. That is, the book reserve is approximately \$3.2 million less than the estimated theoretical reserve. The \$3.2 million amount represents less than 2% of the calculated theoretical reserve of approximately \$201 million as of December 31, 2022. Given that the 2022 Depreciation Study is the forecast of events that will occur over many decades, a difference of less than 2% between the book and theoretical reserves should be considered a minor difference.
- Q. In addition to the calculations performed for the 2022 Depreciation Study, have you performed any additional depreciation calculations for FCG?
- A. Yes. At the request of FCG, I calculated the depreciation expense and theoretical reserves for FCG plant, with the exception of the LNG Facility,

- based on the parameters from the Peoples Gas System's most recent base rate
- 2 case settlement approved by the Commission in Order No. PSC-2020-0485-
- 3 FOF-GU, Docket Nos. 20200051-GU, 20200178-GU, and 20200166-GU. The
- 4 results of these calculations are provided on pages 3 and 4 of Exhibit LF-5(B)
- 5 attached to FCG witness Fuentes's testimony.
- 6 Q. Does this conclude your direct testimony?
- 7 A. Yes.

Docket No. 20220069-GU 2022 Depreciation Study Exhibit NWA-1, Page 1 of 179

FLORIDA CITY GAS

2022 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF DECEMBER 31, 2022

Prepared by:



Docket No. 20220069-GU 2022 Depreciation Study Exhibit NWA-1, Page 2 of 179

FLORIDA CITY GAS Juno Beach, Florida

DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION
ACCRUALS RELATED TO GAS PLANT
AS OF DECEMBER 31, 2022

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC

Camp Hill, Pennsylvania



Docket No. 20220069-GU 2022 Depreciation Study Exhibit NWA-1, Page 3 of 179

Gannett Fleming Valuation and Rate Consultants, LLC

Corporate Headquarters 207 Senate Avenue Camp Hill, PA 17011 P 717.763.7211 | F 717.763.8150

gannettfleming.com

May 20, 2022

Florida City Gas 700 Universe Boulevard Juno Beach, FL 33408

Attention: Keith Ferguson, Controller

Ladies and Gentlemen:

Pursuant to your request, we have conducted a depreciation study related to the gas plant of Florida City Gas as of December 31, 2022. The attached report presents a description of the methods used in the estimation of depreciation, the summary of annual and accrued depreciation, the statistical support for the service life and net salvage estimates, and the detailed tabulations of annual and accrued depreciation.

Respectfully submitted,

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC

NED W. ALLIS Vice President

NWA:mle

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FLORIDA CITY GAS

DEPRECIATION STUDY

EXECUTIVE SUMMARY

Pursuant to Florida City Gas ("FCG" or the "Company") request, Gannett Fleming Valuation and Rate Consultants, LLC ("Gannett Fleming") conducted a depreciation study related to gas plant in service as of December 31, 2022. The purpose of this study was to determine the annual depreciation accrual rates and amounts for book and ratemaking purposes.

The depreciation rates are based on the straight line method using the average service life ("ASL") procedure and were applied on a remaining life basis. The calculations were based on attained ages, estimated service lives and forecasted net salvage characteristics for each depreciable group of assets.

The changes in annual depreciation rates result in an increase in annual depreciation expense of \$933,967 as of December 31, 2022 when compared with the current approved depreciation rates. The overall increase is primarily the result of changes in plant and reserve balances since the last depreciation study. For many accounts, recommendations for service lives and net salvage differ from the currently approved estimates. The change in estimates results in a net decrease in depreciation expense, with the longer service life estimates for several accounts partially offset by more negative net salvage estimates for certain accounts.

Gannett Fleming recommends the calculated remaining life annual depreciation accrual rates set forth herein apply specifically to gas plant in service as of December 31, 2022 as summarized by Table 1 of the study. Supporting analysis and calculations are provided within the study.



Florida City Gas December 31, 2022 The study results set forth an annual depreciation expense of \$16.5 million applied to depreciable plant balances as of December 31, 2022. The results are summarized at the functional level as follows (amounts are shown in millions of dollars):

SUMMARY OF ORIGINAL COST, ACCRUAL RATES AND AMOUNTS

		EXI	STING	PRO	POSED						
FUNCTION	ORIGINAL COST	ANNUAL DEPR. <u>RATE</u>	ANNUAL DEPR. ACCRUALS	ANNUAL DEPR. <u>RATE</u>	ANNUAL DEPR. <u>ACCRUALS</u>	INCREASE/ DECREASE					
DISTRIBUTION	\$529.3	2.70	\$14.3	2.93	\$15.5	\$1.2					
GENERAL	19.0	6.35	1.2	5.09	1.0	(0.2)					
TOTAL	548.3	2.83	15.5	3.00	16.5	0.9					



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PART I. INTRODUCTION

FLORIDA CITY GAS DEPRECIATION STUDY

PART I. INTRODUCTION

SCOPE

This report sets forth the results of the depreciation study for Florida City Gas ("FCG" or "Company") to determine the annual depreciation accrual rates and amounts for book purposes applicable to the original cost of gas plant as of December 31, 2022. The rates and amounts are based on the straight line remaining life method of depreciation. This report also describes the concepts, methods and judgments which underlie the recommended annual depreciation accrual rates related to gas plant in service as of December 31, 2022.

The service life and net salvage estimates resulting from the study were based on informed judgment which incorporated analyses of historical plant retirement data as recorded through 2020, a review of Company practice and outlook as they relate to changes in technology, plant operation and retirement, and consideration of current practice in the gas industry including knowledge of service lives and net salvage estimates used for other gas companies.

PLAN OF REPORT

Part I, Introduction, contains statements with respect to the plan of the report, and the basis of the study. Part II, Estimation of Survivor Curves, presents descriptions of the considerations and the methods used in the service life study. Part III, Service Life Considerations, presents the factors and judgment utilized in the service life study. Part IV, Net Salvage Considerations, presents the factors and judgment utilized for the net salvage study. Part V, Calculation of Annual and Accrued Depreciation, describes the procedures used in the calculation of group depreciation. Part VI, Results of Study,



Florida City Gas December 31, 2022

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presents summaries by depreciable group of annual depreciation accrual rates and

amounts as well as composite remaining lives. Part VII, Service Life Statistics, presents

the statistical analysis of service life estimates. Part VIII, Net Salvage Statistics, sets

forth the statistical indications of net salvage percents. Part IX, Detailed Depreciation

Calculations, presents the detailed tabulations of annual depreciation. Part X, Detail of

Production Plant, provides narrative descriptions related to the estimation of service

life and net salvage for each distribution and general plant account.

BASIS OF THE STUDY

Depreciation

Depreciation, in public utility regulation, is the loss in service value not restored

by current maintenance, incurred in connection with the consumption or prospective

retirement of utility plant in the course of service from causes which are known to be in

current operation and against which the utility is not protected by insurance. Among

causes to be given consideration are wear and tear, deterioration, action of the

elements, inadequacy, obsolescence, changes in the art, changes in demand, and the

requirements of public authorities.

Depreciation, as used in accounting, is a method of distributing fixed capital

costs, less net salvage, over a period of time by allocating annual amounts to expense.

Each annual amount of such depreciation expense is part of that year's total cost of

providing gas utility service. Normally, the period of time over which the fixed capital

cost is allocated to the cost of service is equal to the period of time over which an item

renders service, that is, the item's service life. The most prevalent method of allocation

GANNETT FLEMING

Florida City Gas December 31, 2022

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is to distribute an equal amount of cost to each year of service life. This method is known as the straight line method of depreciation.

The annual depreciation for accounts included in the study was calculated by the straight line method using the average service life procedure and the remaining life basis. The straight line method, average service life procedure is a commonly used depreciation calculation procedure that has been widely accepted in jurisdictions throughout North America.

Service Life and Net Salvage Estimates

The service life and net salvage estimates used in the depreciation calculations were based on informed judgment which incorporated the statistical analyses of the Company's historical data; a review of management's plans, policies and outlook; general knowledge of the property studied; and a general knowledge of the gas utility industry, including the service life and net salvage estimates from our studies of other gas utilities.

The use of survivor curves to reflect the expected dispersion of retirement provides a consistent method of estimating depreciation for gas plant. Iowa type survivor curves were used to depict the estimated survivor curves for the plant accounts not subject to amortization accounting. The procedure for estimating service lives consisted of compiling historical data for the plant accounts or depreciable groups, analyzing this history through the use of widely accepted techniques, and forecasting the survivor characteristics for each depreciable group on the basis of interpretations of the historical data analyses and the probable future. The combination of the historical experience and the estimated future yielded estimated survivor curves from which the average service lives were derived.



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PART II. ESTIMATION OF SURVIVOR CURVES



PART II. ESTIMATION OF SURVIVOR CURVES

The calculation of annual depreciation based on the straight line method requires the estimation of survivor curves and the selection of group depreciation procedures. The estimation of survivor curves is discussed below and the development of net salvage is discussed in later sections of this report.

SURVIVOR CURVES

The use of an average service life for a property group implies that the various units in the group have different lives. Thus, the average life may be obtained by determining the separate lives of each of the units or by constructing a survivor curve by plotting the number of units which survive at successive ages.

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



This study has incorporated the use of lowa curves developed from a retirement rate analysis of historical retirement history. A discussion of the concepts of survivor curves and of the development of survivor curves using the retirement rate method is presented below.

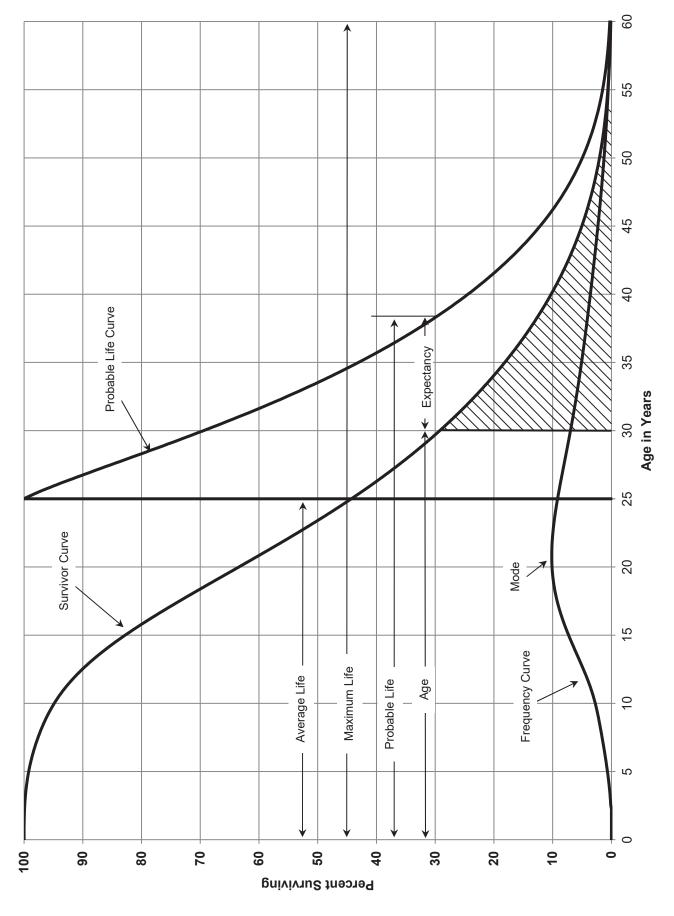
Iowa Type Curves

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

The lowa curves were developed at the lowa State College Engineering Experiment Station through an extensive process of observation and classification of the ages at which industrial property had been retired. A report of the study which resulted in the classification of property survivor characteristics into 18 type curves, which constitute three of the four families, was published in 1935 in the form of the Experiment Station's Bulletin 125.



FIGURE 1. TYPICAL SURVIVOR CURVE AND DERIVED CURVES



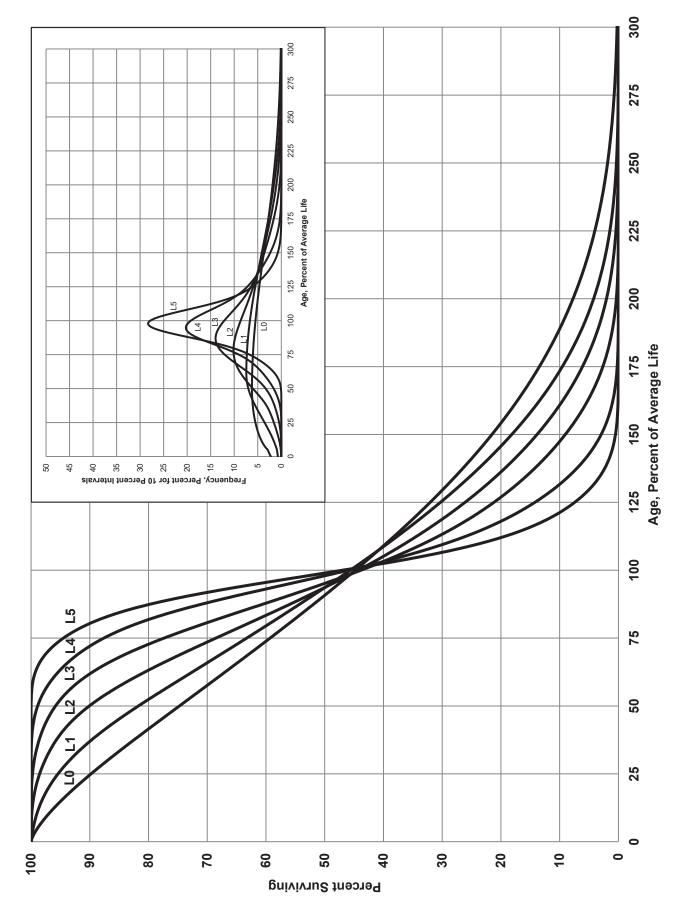
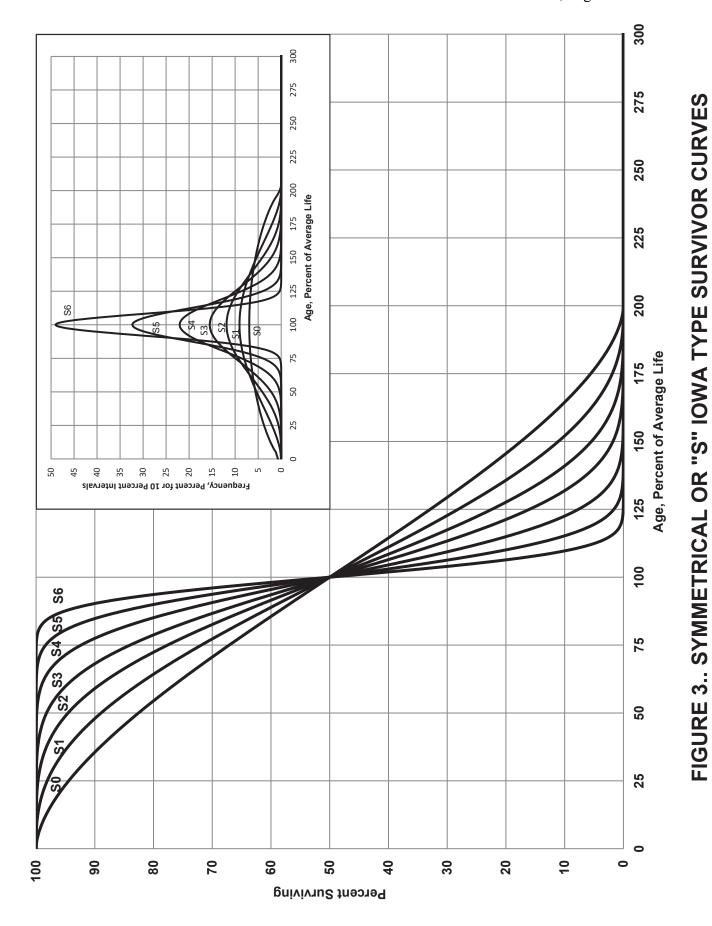


FIGURE 2.. LEFT MODAL OR "L" IOWA TYPE SURVIVOR CURVES





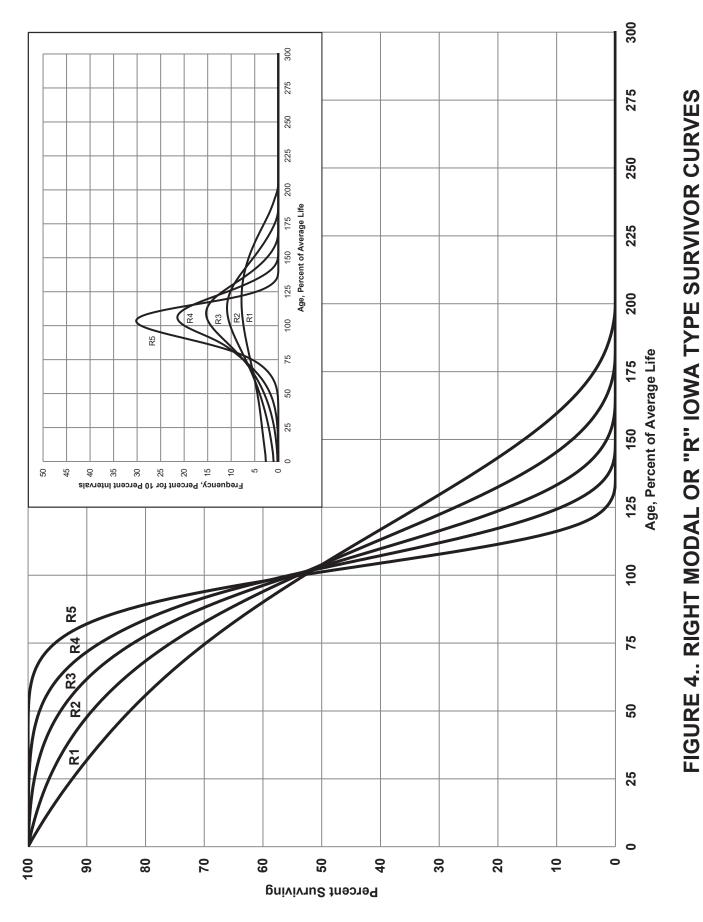
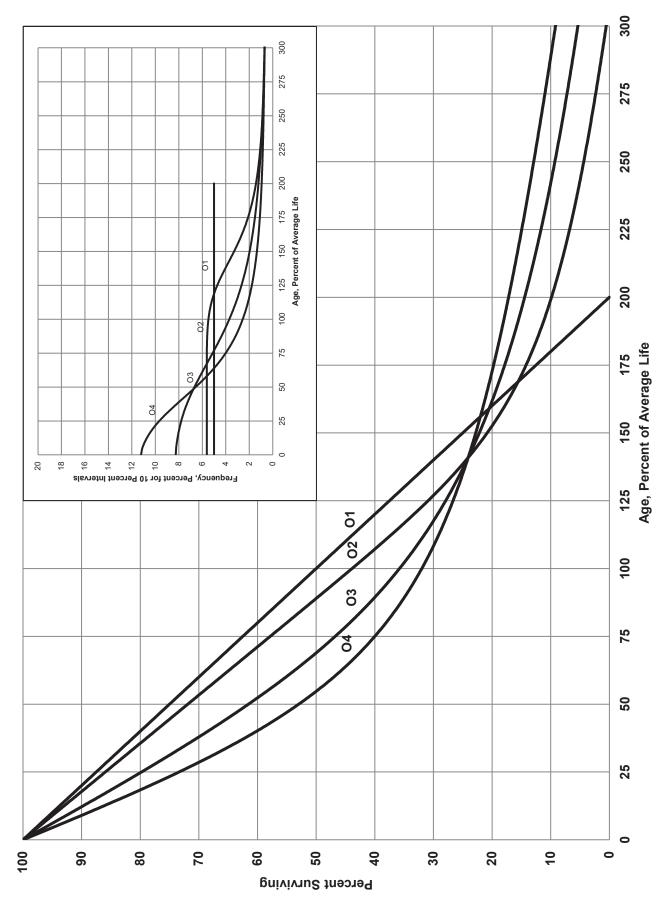




FIGURE 5. ORIGIN MODAL OR "O" IOWA TYPE SURVIVOR CURVES



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

Retirement Rate Method of Analysis

The retirement rate method is an actuarial method of deriving survivor curves using the average rates at which property of each age group is retired. The method relates to property groups for which aged accounting experience is available and is the method used to develop the original stub survivor curves in this study. The method (also known as the annual rate method) is illustrated through the use of an example in the following text and is also explained in several publications including "Statistical Analyses of Industrial Property Retirements," Engineering Valuation and Depreciation, and "Depreciation Systems."

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

⁴Wolf, Frank K. and W. Chester Fitch. <u>Depreciation Systems</u>. Iowa State University Press. 1994.



¹Marston, Anson, Robley Winfrey and Jean C. Hempstead. Engineering Valuation and Depreciation, 2nd Edition. New York, McGraw-Hill Book Company. 1953.

²Winfrey, Robley, <u>Statistical Analyses of Industrial Property Retirements</u>. lowa State College, Engineering Experiment Station, Bulletin 125. 1935.

³Marston, Anson, Robley Winfrey, and Jean C. Hempstead, Supra Note 1.

Schedules of Annual Transactions in Plant Records

The property group used to illustrate the retirement rate method is observed for the experience band 2013-2022 for which there were placements during the years 2008-2022. In order to illustrate the summation of the aged data by age interval, the data were compiled in the manner presented in Schedules 1 and 2 on pages II-11 and II-12. In Schedule 1, the year of installation (year placed) and the year of retirement are shown. The age interval during which a retirement occurred is determined from this information. In the example which follows, \$10,000 of the dollars invested in 2008 were retired in 2013. The \$10,000 retirement occurred during the age interval between 4½ and 5½ years on the basis that approximately one-half of the amount of property was installed prior to and subsequent to July 1 of each year. That is, on the average, property installed during a year is placed in service at the midpoint of the year for the purpose of the analysis. All retirements also are stated as occurring at the midpoint of a one-year age interval of time, except the first age interval which encompasses only one-half year.

The total retirements occurring in each age interval in a band are determined by summing the amounts for each transaction year-installation year combination for that age interval. For example, the total of \$143,000 retired for age interval $4\frac{1}{2}$ - $5\frac{1}{2}$ is the sum of the retirements entered on Schedule 1 immediately above the stair step line drawn on the table beginning with the 2013 retirements of 2008 installations and ending with the 2022 retirements of the 2017 installations. Thus, the total amount of 143 for age interval $4\frac{1}{2}$ - $5\frac{1}{2}$ equals the sum of:

$$10 + 12 + 13 + 11 + 13 + 13 + 15 + 17 + 19 + 20$$
.



SCHEDULE 1. RETIREMENTS FOR EACH YEAR 2013-2022 SUMMARIZED BY AGE INTERVAL

rience	Band	Experience Band 2013-2022	2)					_	Placement Band 2008-2022	2008-2022
				Retiren	nents, Tho	Retirements, Thousands of Dollars	Dollars					
					Durin	During Year					Total During	Age
Placed 20	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Age Interval	Interval
<u>.</u>	(2)	(3)	(4)	(2)	(9)	(7)	(8)	(6)	(10)	(11)	(12)	(13)
_	10	1	12	13	41	16	23	24	25	26	26	131/2-141/2
	11	12	13	15	16	18	20	21	22	19	44	121/2-131/2
2010 1		12	13	14	16	17	19	21	22	18	64	111/2-121/2
	8	တ	10	1	7	13	14	15	16	17	83	101/2-111/2
	6	10	7	12	13	4	16	17	19	20	93	91/2-101/2
	4	<u></u>	10	7	12	13	14	15	16	20	105	81/2-91/2
		2	7	12	13	14	15	16	18	20	113	71/2-81/2
			9	12	13	15	16	17	19	19	124	61/2-71/2
				9	13	15	16	17	19	19	131	51/2-61/2
					7	14	16	17	19	20	143	41/2-51/2
						_∞	18	20	22	23	146	31/2-41/2
							6	20	22	25	150	21/2-31/2
								7	23	25	151	11/2-21/2
									7	24	153	1/2-11/2
	İ									13	80	0-1/2
ιΩ	53	89	86	106	128	157	196	231	273	308	1,606	

SCHEDULE 2. OTHER TRANSACTIONS FOR EACH YEAR 2013-2022 SUMMARIZED BY AGE INTERVAL

Placement Band 2008-2022 Experience Band 2013-2022

		Age	(13)	131/2-141/2	121/2-131/2	111/2-121/2	101/2-111/2	91/2-101/2	81/2-91/2	71/2-81/2	61/2-71/2	51/2-61/2	41/2-51/2	31/2-41/2	21/2-31/2	11/2-21/2	1/2-11/2	0-1/2	
		Total During	(12)	1		1	09		(5)	9		1	ı	10	1	(121)		1	(20)
	Ī	2022	(11)	,	,	,	,	,	,	,		•				$(102)^{c}$			(102)
		2021	(10)	,	1	,	,	,		,			22 ^a						22
of Dollars		2020	(6)	,		,	$(2)_{p}$	6 _a		,	•	$(12)^{b}$	•	(19) ^b	•				(30)
onsands o		2019	(8)	_e 09	ı	ı	ı	,	,	ı	,	ı		,	,				09
Sales, Th	During Year	2018			ı	,	ı	,	,	,		ı							
Acquisitions, Transfers and Sales, Thousands of Dollars	During	2017	(9)		ı	,	ı	,	,	,	,	ı							
ons, Trans		2016	(5)		ı	,	ı	,	,	,		ı							
Acquisiti		2015	(4)		ı	,	ı	,	,	,									
		2014	(2) (3) (4)		ı	,	ı	,	,	,									
						,	1	,	,										
		Year	(1)	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total

^a Transfer Affecting Exposures at Beginning of Year

^b Transfer Affecting Exposures at End of Year

^c Sale with Continued Use

In Schedule 2, other transactions which affect the group are recorded in a similar manner. The entries illustrated include transfers and sales. The entries which are credits to the plant account are shown in parentheses. The items recorded on this schedule are not totaled with the retirements, but are used in developing the exposures at the beginning of each age interval.

Schedule of Plant Exposed to Retirement

The development of the amount of plant exposed to retirement at the beginning of each age interval is illustrated in Schedule 3 on page II-14. The surviving plant at the beginning of each year from 2013 through 2022 is recorded by year in the portion of the table headed "Annual Survivors at the Beginning of the Year." The last amount entered in each column is the amount of new plant added to the group during the year. The amounts entered in Schedule 3 for each successive year following the beginning balance or addition are obtained by adding or subtracting the net entries shown on Schedules 1 and 2. For the purpose of determining the plant exposed to retirement, transfers-in are considered as being exposed to retirement in this group at the beginning of the year in which they occurred, and the sales and transfers-out are considered to be removed from the plant exposed to retirement at the beginning of the following year. Thus, the amounts of plant shown at the beginning of each year are the amounts of plant from each placement year considered to be exposed to retirement at the beginning of each successive transaction year. For example, the exposures for the installation year 2018 are calculated in the following manner:

Exposures at age 0 =	= amount of addition	= \$750,000
Exposures at age ½ =	= \$750,000 - \$ 8,000	= \$742,000
Exposures at age 1½ =	= \$742,000 - \$18,000	= \$724,000
Exposures at age 2½ =	= \$724,000 - \$20,000 - \$19,000	= \$685,000
Exposures at age 3½ =	= \$685,000 - \$22,000	= \$663,000



SCHEDULE 3. PLANT EXPOSED TO RETIREMENT JANUARY 1 OF EACH YEAR 2013-2022 SUMMARIZED BY AGE INTERVAL

1 2008-2022	Age	Interval	(13)	131/2-141/2	12½-13½	111/2-121/2	101/2-111/2	91/2-101/2	81/2-91/2	71/2-81/2	61/2-71/2	51/2-61/2	41/2-51/2	31/2-41/2	21/2-31/2	11/2-21/2	1/2-11/2	0-1/2	
Placement Band 2008-2022	Total at Beginning of	Age Interval	(12)	167	323	531	823	1,097	1,503	1,952	2,463	3,057	3,789	4,332	4,955	5,719	6,579	7,490	44,780
_		2022	(11)	167	131	162	226	261	316	356	412	482	609	663	799	926	1,069	1,220ª	7,799
		2021	(10)	192	153	184	242	280	332	374	431	501	628	685	821	949	1,080a		6,852
		2020	(6)	216	174	205	262	297	347	390	448	530	623	724	841	960a			6,017
	ollars of the Yea	2019	(8)	239	194	224	276	307	361	405	464	546	639	742	850a				5,247
	sands of D	2018	(7)	195	212	241	289	321	374	419	479	561	653	750a					4,494
	Exposures, Thousands of Dollars	2017	(9)	209	228	257	300	334	386	432	492	574	660a						3,872
	Expos Annual Surv	2016	(5)	222	243	271	311	346	397	444	504	580^{a}							3,318
		2015	(4)	234	256	284	321	357	407	455	510^{a}								2,824
013-2022		2014	(3)	245	268	296	330	367	416	460a									2,382
Experience Band 2013-2022		2013	(2)	255	279	307	338	376	420a										1,975
Experie	Year	Placed	(1)	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total

^aAdditions during the year

For the entire experience band 2013-2022, the total exposures at the beginning of an age interval are obtained by summing diagonally in a manner similar to the summing of the retirements during an age interval (Schedule 1). For example, the figure of 3,789, shown as the total exposures at the beginning of age interval $4\frac{1}{2}-5\frac{1}{2}$, is obtained by summing:

Original Life Table

The original life table, illustrated in Schedule 4 on page II-16, is developed from the totals shown on the schedules of retirements and exposures, Schedules 1 and 3, respectively. The exposures at the beginning of the age interval are obtained from the corresponding age interval of the exposure schedule, and the retirements during the age interval are obtained from the corresponding age interval of the retirement schedule. The retirement ratio is the result of dividing the retirements during the age interval by the exposures at the beginning of the age interval. The percent surviving at the beginning of each age interval is derived from survivor ratios, each of which equals one minus the retirement ratio. The percent surviving is developed by starting with 100% at age zero and successively multiplying the percent surviving at the beginning of each interval by the survivor ratio, i.e., one minus the retirement ratio for that age interval. The calculations necessary to determine the percent surviving at age 5½ are as follows:

Percent surviving at age 4½ 88.15 Exposures at age 4½ = 3.789,000Retirements from age $4\frac{1}{2}$ to $5\frac{1}{2}$ 143,000 Retirement Ratio = $143,000 \div 3,789,000 = 0.0377$ 0.0377 = 0.9623Survivor Ratio = 1.000 -Percent surviving at age 5½ $(88.15) \times (0.9623) =$ 84.83

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



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

Experience Band 2013-2022

Placement Band 2008-2022

(Exposure and Retirement Amounts are in Thousands of Dollars)

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

II-16



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

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

Column 4 = Column 3 Divided by Column 2.

Column 5 = 1.0000 Minus Column 4.

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

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

Smoothing the Original Survivor Curve

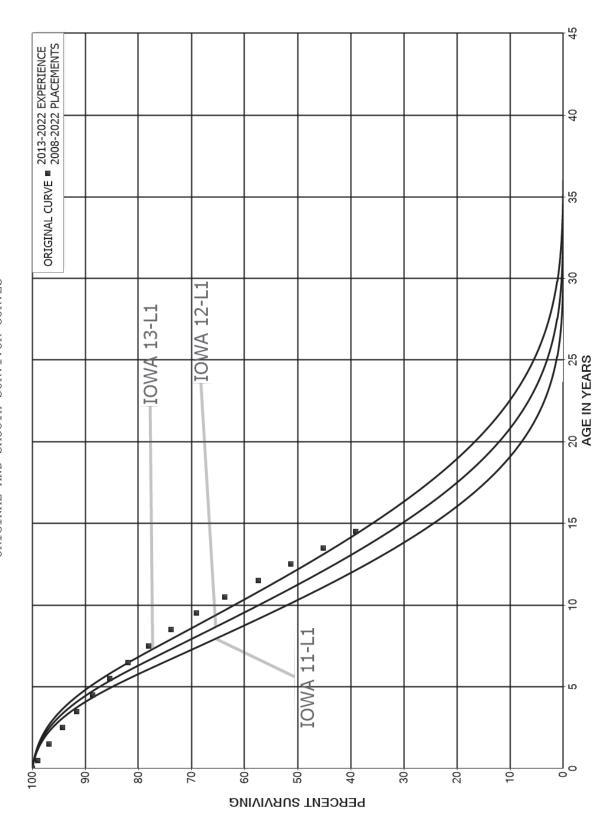
The smoothing of the original survivor curve eliminates any irregularities and serves as the basis for the preliminary extrapolation to zero percent surviving of the original stub curve. Even if the original survivor curve is complete from 100% to zero percent, it is desirable to eliminate any irregularities,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

The lowa type curves are used in this study to smooth those original stub curves which are expressed as percents surviving at ages in years. Each original survivor curve was compared to the lowa curves using visual and mathematical matching in order to determine the better fitting smooth curves. In Figures 6, 7, and 8, the original curve developed in Schedule 4 is compared with the L, S, and R lowa type curves which most nearly fit the original survivor curve. In Figure 6, the L1 curve with an average life between 12 and 13 years appears to be the best fit. In Figure 7, the S0 type curve with a 12-year average life appears to be the best fit and appears to be better than the L1 fitting. In Figure 8, the R1 type curve with a 12-year average life appears to be the best fit and appears to be better than either the L1 or the S0.

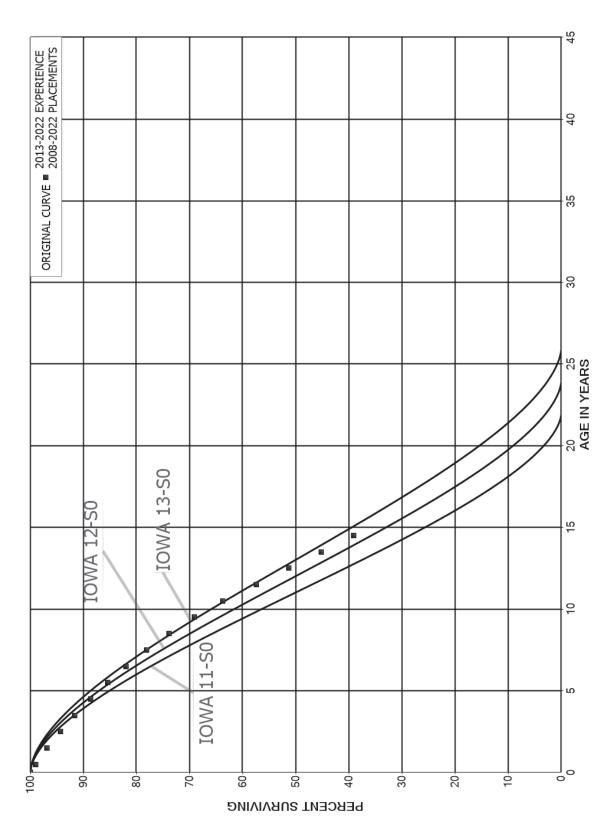
In Figure 9, the three fittings, 12-L1, 12-S0 and 12-R1 are drawn for comparison purposes. It is probable that the 12-R1 lowa curve would be selected as the most representative of the plotted survivor characteristics of the group.



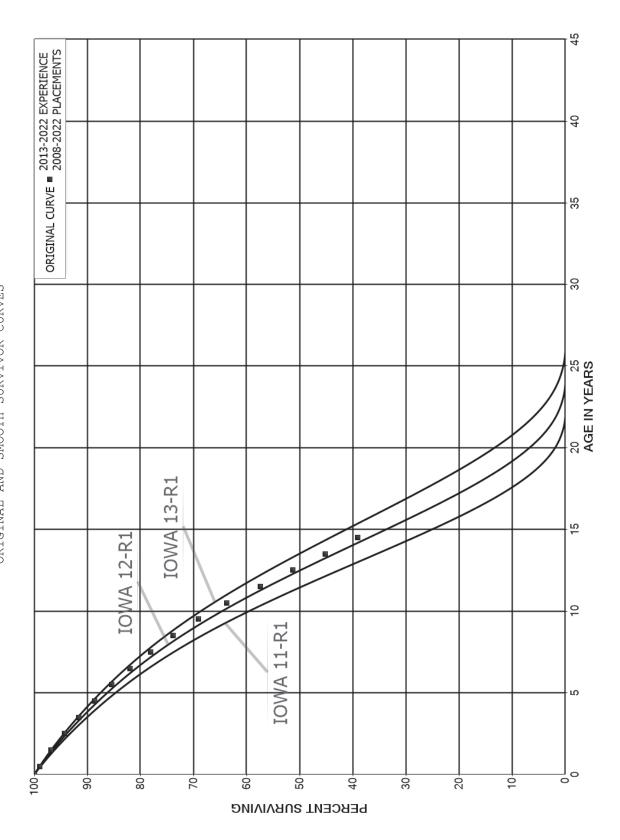
L1 IOWA TYPE CURVE 6. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN ORIGINAL AND SMOOTH SURVIVOR CURVES FIGURE



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



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



IOWA TYPE CURVE R1 AND 80 L1, 9. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN ORIGINAL AND SMOOTH SURVIVOR CURVES FIGURE

2013-2022 EXPERIENCE 2008-2022 PLACEMENTS 9 ORIGINAL CURVE ■ 35 30 20 25 AGE IN YEARS 5 9 2 IOWA ٦° 70 90 8 20 30 20 9 РЕКСЕИТ ЅИВУІУІИĠ

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PART III.	SERVICE LIFE	CONSIDER	ATIONS
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PART III. SERVICE LIFE CONSIDERATIONS

FIELD TRIPS

In order to be familiar with the operation of the Company and observe

representative portions of the plant, a field trip was conducted for the study. A general

understanding of the function of the plant and information with respect to the reasons for

past retirements and the expected future causes of retirements are obtained during field

trips. This knowledge and information were incorporated in the interpretation and

extrapolation of the statistical analyses.

The following is a list of the locations visited during the most recent field trips.

February 17, 2022

Port St. Lucie City Gate Station

Vero Beach Regulator Station

Vero North City Gate Station

During the field trips and throughout the conduct of this depreciation study,

meetings were held with representative Company personnel from various FCG business

units. Information attained through conversation and discussions were incorporated into

the life and net salvage analyses of this report.

SERVICE LIFE ANALYSIS

The service life estimates were based on judgment which considered a number

of factors. The primary factors were the statistical analyses of data; current Company

policies and outlook as determined during conversations with management; and the

survivor curve estimates from previous studies of this company and other gas utility

companies. Survivor curves were estimated using the retirement rate method. A list of

GANNETT FLEMING

Florida City Gas December 31, 2022 accounts for which the survivor curve provided an indication of service life are set forth in the table below.

ACCO	<u>UNT</u>	SURVIVOR CURVE
DISTRIBU 375 376.1 376.2 378 379 380.1 380.2 381 381.1 382 382.1 383 384 385 387	Mains - Plastic Measuring and Regulating Station Equipment - General Measuring and Regulating Station Equipment - City Gate	35-R4 65-R4 65-R4 35-S3 35-S3 50-R2.5 50-R2.5 20-S2.5 20-S2.5 35-R3 20-R1.5 40-R2.5 40-R2.5 35-S3 35-R3
GENERAI 390 392 392.1 392.2 392.3 394.1 396	PLANT Structures and Improvements Transportation Equipment Transportation Equipment - Autos and Light Trucks Transportation Equipment - Service Trucks Transportation Equipment - Heavy Trucks Natural Gas Vehicle Equipment Power Operated Equipment	30-S0.5 10-L2.5 9-S2 10-L3 13-L3 20-S4 15-L2.5

The statistical support for the service life estimates is presented in the section beginning on page VII-2. A narrative discussion of the considerations for each service life estimate for distribution and general plant accounts is provided in the section beginning on page X-3.



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PART IV. NET SALVAGE CONSIDERATIONS

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PART IV. NET SALVAGE CONSIDERATIONS

NET SALVAGE ANALYSIS

The estimates of net salvage by account were based in part on the analyses of historical data compiled for the years 2004 through 2020. Cost of removal and salvage were expressed as percents of the original cost of plant retired, both on annual and three-year moving average bases. The most recent five-year average also was calculated for consideration. The net salvage estimates by account are expressed as a percent of the original cost of plant retired.

Net Salvage Considerations

The estimates of future net salvage are expressed as percentages of surviving plant in service, i.e., all future retirements. In cases in which removal costs are expected to exceed salvage receipts, a negative net salvage percentage is estimated. The net salvage estimates were based on judgment which incorporated analyses of historical cost of removal and salvage data, knowledge of the property studied, expectations with respect to future removal requirements and markets for retired equipment and materials.

For distribution and general plant accounts, net salvage was estimated based on the considerations described above. The statistical support for the net salvage estimates is presented in the section beginning on page VIII-2. A narrative discussion of the considerations for each net salvage estimate for distribution and general plant accounts is provided in the section beginning on page X-3.

Florida City Gas December 31, 2022

ACCOUNT	NET SALVAGE <u>ESTIMATE</u>
DISTRIBUTION PLANT 375 Structures and Improvements 376.1 Mains - Steel 376.2 Mains - Plastic 378 Measuring and Regulating Station Equipment - General 379 Measuring and Regulating Station Equipment - City Gate 380.1 Services - Steel 380.2 Services - Plastic 381 Meters 381.1 Meters - ERT 382 Meter Installations 382.1 Meter Installations - ERT 383 House Regulators 384 House Regulator Installations 385 Industrial Measuring and Regulating Station Equipment 387 Other Equipment	0 (75) (60) (5) (5) (100) (60) 0 (5) 0 (5) 0
GENERAL PLANT 390 Structures and Improvements 392 Transportation Equipment 392.1 Transportation Equipment - Autos and Light Trucks 392.2 Transportation Equipment - Service Trucks 392.3 Transportation Equipment - Heavy Trucks 394.1 Natural Gas Vehicle Equipment 396 Power Operated Equipment	0 10 10 10 10 0



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PART V. CALCULATION OF ANNUAL AND ACCRUED DEPRECIATION

PART V. CALCULATION OF ANNUAL AND ACCRUED DEPRECIATION

GROUP DEPRECIATION PROCEDURES

A group procedure for depreciation is appropriate when considering more than a single item of property. Normally the items within a group do not have identical service lives but have lives that are dispersed over a range of time. There are two primary group procedures, namely, average service life and equal life group. In the average service life procedure, the rate of annual depreciation is based on the average life or average remaining life of the group, and this rate is applied to the surviving balances of the group's cost. A characteristic of this procedure is that the cost of plant retired prior to average life is not fully recouped at the time of retirement, whereas the cost of plant retired subsequent to average life is more than fully recouped. Over the entire life cycle, the portion of cost not recouped prior to average life is balanced by the cost recouped subsequent to average life.

Single Unit of Property

The calculation of straight line depreciation for a single unit of property is straightforward. For example, if a \$1,000 unit of property attains an age of four years and has a life expectancy of six years, the annual accrual over the total life is:

$$\frac{\$1,000}{(4+6)}$$
 = \\$100 per year.

The accrued depreciation is:

$$$1,000\left(1-\frac{6}{10}\right)=$400.$$



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Remaining Life Annual Accruals

For the purpose of calculating remaining life accruals as of December 31, 2022, the composite remaining life for each depreciable group is calculated based on the original cost and attained age of each vintage of plant in service. Explanations of remaining life accruals and calculated accrued depreciation follow. The annual depreciation rates and accruals for each depreciation group are set forth in Table 1 beginning on page VI-5. The detailed calculations of the composite remaining life for each depreciable group as of December 31, 2022 are set forth in Part IX of the study beginning on page IX-2.

Average Service Life Procedure

In the average service life procedure, the remaining life annual accrual for a property group is determined by dividing future book accruals (original cost less book reserve less net salvage) by the average (or composite) remaining life. The average remaining life for a property group is the weighted average of the average remaining lives for each vintage. The average remaining life for each vintage is a direct weighted average derived from the estimated future survivor curve in accordance with the average service life procedure.

The calculated accrued depreciation for each depreciable property group represents that portion of the depreciable cost of the group which would not be allocated to expense through future depreciation accruals if current forecasts of life characteristics are used as the basis for such accruals. The accrued depreciation calculation consists of applying an appropriate ratio to the surviving original cost of each vintage of each account based upon the attained age and service life. The straight line



Florida City Gas December 31, 2022

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accrued depreciation ratios are calculated as follows for the average service life procedure:

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



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PART VI. RESULTS OF STUDY

PART VI. RESULTS OF STUDY

QUALIFICATION OF RESULTS

The calculated annual and accrued depreciation are the principal results of the study. Continued surveillance and periodic revisions are normally required to maintain continued use of appropriate annual depreciation accrual rates. An assumption that accrual rates can remain unchanged over a long period of time implies a disregard for the inherent variability in service lives and net salvage and for the change of the composition of property in service. The annual accrual rates were calculated in accordance with the straight line remaining life method of depreciation, using the average service life procedure based on estimates which reflect considerations of current historical evidence and expected future conditions.

The annual depreciation accrual rates are applicable specifically to the gas plant in service as of December 31, 2022. For most plant accounts, the application of such rates to future balances that reflect additions subsequent to December 31, 2022 is reasonable for a period of three to five years.

DESCRIPTION OF DETAILED TABULATIONS

Table 1 presents a summary of the results of the study as applied to the original cost of gas plant as of December 31, 2022 and can be found on page VI-5 of this report. The depreciation rates presented in Table 1 are the remaining life depreciation rates recommended in the study. Table 2, on page VI-6, presents a comparison as of December 31, 2022 of the recommended remaining life depreciation rates to the current approved depreciation rates. Table 3, on pages VI-7 and VI-8, presents a comparison of the book reserve and theoretical reserve based on the recommended service life and net salvage estimates for gas plant in service as of December 31, 2022.



Florida City Gas December 31, 2022 The service life estimates were based on judgment that incorporated statistical analyses of retirement data, discussions with management and consideration of the property studied. The results of the statistical analysis of service life are presented in the section beginning on page VII-2. For each depreciable group analyzed by the retirement rate method, a chart is provided depicting the original and estimated survivor curves followed by a tabular presentation of the original life table(s) plotted on the chart. The survivor curves estimated for the depreciable groups are shown as dark smooth curves on the charts. Each smooth survivor curve is denoted by a numeral followed by the curve type designation. The numeral used is the average life derived from the entire curve from 100 percent to zero percent surviving. The titles of the chart indicate the group, the symbol used to plot the points of the original life table, and the experience and placement bands of the life tables which where plotted. The experience band indicates the range of years for which retirements were used to develop the stub survivor curve. The placements indicate, for the related experience band, the range of years of installations which appear in the experience.

The analyses of net salvage data are presented in Part VIII of the report. The tabulations present annual cost of removal and salvage data, three-year moving averages and the most recent five-year average. Data are shown in dollars and as percentages of original costs retired.

Tables detailing the calculations of the composite (or average) remaining life for each property group as of December 31, 2022 are presented in account sequence starting on page IX-2 of the supporting documents. The tables indicate the estimated survivor curve and net salvage percent for the account and set forth, for each installation year, the original cost, the average service life, the whole life annual rate and

Florida City Gas December 31, 2022

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accrual, the remaining life, and the calculated future accrual factor and amount. The composite remaining life for each property group is equal to the total calculated future accrual amount divided by the total whole life annual accrual amount. The composite remaining lives are used in Table 1 for the calculation of remaining life depreciation accruals for each property group.

In addition to the statistical support presented in Parts VII and VIII for the service life and net salvage estimates, a narrative description of the development of the service life and net salvage estimates for each depreciable group has been provided in Part X. Part X provides narrative descriptions of the related to the estimation of service life and net salvage for each distribution and general plant account.

FLORIDA CITY GAS

TABLE 1. SUMMARY OF PROBABLE RETREMENT DATE, ESTIMATED SURVIVOR CURVE, NET SALVAGE PERCENT, ORIGINAL COST, BOOK DEPRECIATION RESERVE
AND CALCULATED ANNUAL DEPRECIATION ACCRUALS AS OF DECEMBER 31, 2022

	AND PROBABLE	CALCULATED AI	NNUAL DEPRECI	AND CALCULATED ANNUAL DEPRECIATION ACCRUALS AS OF DECEMBER 31, 2022 II PORTINIAL COST ROOK	CEMBER 31, 2022 BOOK		CALCIII ATED	Ē	FISOMPOSITE
OLDBECADIE COALIB	RETIREMENT	SURVIVOR	SALVAGE	AS OF	DEPRECIATION	FUTURE	ANNUAL ACCRUAL	RUAL	REMAINING
DEFRECIABLE GROUP	(2)	(3)	(4)	(5)	(6)	(7)=(100%-(4))x(5)-(6)	(8)=(7)/(10)	(9)=(8)/(5)	(10)
GAS PLANT									
DISTRIBUTION PLANT									
		35-R4	0	209,627.12	19,014	190,613	600'9	2.87	31.72
376.10 MAINS - STEEL 376.20 MAINS - PLASTIC		65-R4 65-R4	(75)	149,385,024.68	76,811,351	184,612,442 253,619,300	3,973,578 4,662,977	2.66	46.46
		35-53	(2)	2,715,949.96	370,403	2,481,344	79,260	2.94	31.11
		35-83	(5)	19,606,557.02	5,568,998	15,017,887	594,062	3.03	25.28
380.10 SERVICES - STEEL 380.20 SERVICES - PLASTIC		50-R2.5	(00L)	15,577,540.35	13,940,822	139,409,990	3.449.035	3.32	40.42
		20-82.5	0	21,907,440.91	6,597,386	15,310,055	1,216,049	5.55	12.59
		20-82.5	o (1,791,692.69	380,269	1,411,423	95,495	5.33	14.78
382.00 METERINSTALLATIONS 382.10 METERINSTALLATIONS - ERT		35-K3 20-R1.5	(a) 0	5,818,610.99	1,660,136	4,449,406	30.127	3.28 5.64	23.28 11.86
		40-R2.5	(2)	7,565,636.28	1,885,273	6,058,645	196,454	2.60	30.84
		35-S3	00	3,725,562.98	2,269,526	1,456,037	78,750 94,181	2.53	15.46
387.00 OTHER EQUIPMENT		35-R3	0	1,961,518.55	398,885	1,562,634	54,849	2.80	28.49
TOTAL DISTRIBUTION PLANT				529,328,282.93	191,409,904	645,164,179	15,488,552	2.93	
GENERAL PLANT									
CTIATATI CORRECTION OF THE POLICE OF CO.		0	c	0770	071	00000	0000	c	7000
392.00 TRANSPORTATION EQUIPMENT		30-50.5 10-L2.5	9 9	303,331.77	102.172	1,459,663	57.133	18.84	2.99
		9-82	10	1,723,037.49	1,098,401	452,333	117,185	6.80	3.86
392.20 TRANSPORTATION EQUIPMENT - SERVICE TRUCKS		10-L3	9 9	5,236,068.56	2,572,619	2,139,843	353,693	6.75	6.05
		13-L3 20-S4	2 o	1,564,203.37	941,298	343,284 622,906	46,141	2.95	13.50
396.00 POWER OPERATED EQUIPMENT		15-L2.5	10	269,769.53	93,191	149,601	16,156	5.99	9.26
TOTAL GENERAL PLANT				19,000,463.18	6,831,142	11,338,437	967,918	5.09	
TOTAL DEPRECIABLE PLANT				548,328,746.11	198,241,045	656,502,616	16,456,470	3.00	
NONDEPRECIABLE PLANT AND ACCOUNTS NOT STUDIED									
302.00 FRANCHISE AND CONSENTS				241,489.92	97,976				
				11,395,601.52	1,730,483				
303.20 SOFTWARE AS A SERVICE - 20 YEARS 374 OO TAND AND LAND RIGHTS				5,969,168.10	728,746				
				72,440.56					
3/4.30 RIGHT-OF-WAY 387.98 UNREGULATED MISC ASSETS				11,132.18 4,694.38	(3,139)				
				2,225,560.72					
				761,398.32	295,150				
391.12 COMPUTER HARDWARE 391.50 INDIVIDIAL FOLIPMENT				258,582.04	140,799				
				992,183.11	210,024				
				224,541.67	(170,170)				
TOTAL NONDEPRECIABLE PLANT AND ACCOUNTS NOT STUDIED				25,046,738.19	3,762,990				

TOTAL GAS PLANT

573,375,484.30

FLORIDA CITY GAS
TABLE 2. COMPARISON OF REMAINING LIFE ANNUAL DEPRECIATION RATES AND ACCRUALS FOR GAS PLANT IN SERVICE AS OF DECEI

				AUTHORIZ	AUTHORIZ ED IN DOCKET NO. 20170179-GU). 20170179-GU				PROPOSED ESTIMATES			
	ORIGINAL COST AS OF	BOOK	PROBABLE RETIREMENT	SIRVIVOR	SALVAGE	CALCULATED ANNIAL ACCRIBA	Q	PROBABLE RETIREMENT	SIIRVIVOR	SALVAGE	CALCULATED ANNI IAI ACCRITAT	ED	INCREASE/
DEPRECIABLE GROUP	DECEMBER 31, 2022	RESERVE	DATE	CURVE	PERCENT	AMOUNT	RATE	DATE	CURVE	PERCENT	AMOUNT	RATE	(DECREASE)
(1)	(2)	(3)	(4)	(2)	(9)	(7)	(8)	(6)	(10)	(11)	(12)	(13)	(14)=(12)-(7)
GAS PLANT													
DISTRIBUTION PLANT													
	209,627.12	19,014		32-R5	0	6,498	3.10		35-R4	0	600'9	2.87	(489)
376.10 MAINS STEEL	149,385,024.68	76,811,351		55-53	(20)	3,734,626	2.50		65-R4	(75)	3,973,578	2.66	238,962
	2 715 040 06	370.403		30-53	(40)	4,815,396	3.53		35-K4	(60)	4,002,977	2.42	(152,419)
	19 606 557 02	5 568 998		35.54	(2)	529 377	8.6		35.53	(2)	594 062	3.03	64.685
	15,577,540,35	13.940,822		45-S6	(100)	420,594	2.70		50-R2.5	(100)	766,100	4.92	345,506
	103,791,091.73	26,655,757		54-R2.5	(45)	2,636,294	2.54		50-R2.5	(09)	3,449,035	3.32	812,741
	21,907,440.91	6,597,386		20-R1.5	(2)	1,336,354	6.10		20-S2.5	0	1,216,049	5.55	(120,305)
381.10 METERS-ERT	1,791,692.69	380,269		20-R1.5	(2)	109,293	6.10		20-82.5	0	95,495	5.33	(13,798)
	5,818,610.99	1,660,136		34-53	(20)	207,724	3.57		35-R3	(2)	191,126	3.28	(16,598)
	533,909.26	176,606		20-R1.5	0	16,551	3.10		20-R1.5	0	30,127	5.64	13,576
	7,565,636,28	1,885,273		30-83	(2)	226,969	3.00		40-R2.5	(2)	196,454	2.60	(30,515)
384.00 HOUSE REGULATOR INSTALLATIONS	2,122,289.08	109,448		30-S3	0 0	67,913	3.20		40-R2.5	0 0	78,750	3.71	10,837
	1,961,518.55	398,885		30-S5		58,846	3.00		35-R3	0 0	54,849	2.80	(3,997)
TOTAL DISTRIBUTION PLANT	529,328,282.93	191,409,904				14,316,631	2.70				15,488,552	2.93	1,171,921
GENERAL PLANT													
				į									;
390.00 STRUCTURES AND MAPROVEMENTS 390.00 TRANSPORTATION EQUIPMENT 392.10 TRANSPORTATION EQUIPMENT AITED AND HIGHTTRUCKS 392.10 TRANSPORTATION EQUIPMENT	9,127,408,46 303,331,77 1 723,037,49	1,667,746 102,172 1,098 40.1		40-R1 12-L2.5 8-1.3	0 2 5	228,185 25,480 189,534	2.50 8.40		30-S0.5 10-L2.5 9-S2	0 6 5	326,605 57,133 117,185	3.58 18.84 6.80	98,420 31,653 (72,349)
392.20 TRANSPORTATION EQUIPMENT - SERVICE TRUCKS	5,236,068.56	2,572,619		8-13	1 21 :	633,564	12.10		10-L3	2 0 :	353,693	6.75	(279,871)
392.30 I KANSPOK BATION EQUIPMENT - HEAVY IRUCKS 394.10 NATURAL GAS VEHICLE EQUIPMENT	1,564,203.37	355,716 941,298		13-L3 20-S4	2 0	73,518	4.30		13-L3 20-S4	20	51,005	2.95	(27,377)
396.00 POWER OPERATED EQUIPMENT	269,769.53	93,191		15-SQ	9	17,535	6.50		15-L2.5	10	16,156	5.99	(1,379)
TOTAL GENERAL PLANT	19,000,463.18	6,831,142			-	1,205,872	6.35			ı	967,918	5.09	(237,954)
TOTAL DEPRECIABLE PLANT	548,328,746.11	198,241,045				15,522,503	2.83				16,456,470	3.00	933,967
GENERAL STATE OF THE PROPERTY													
NONDET NECKABLE TEAN I AND ACCOUNTS NOT STORIED													
302.00 FRANCHISE AND CONSENTS	241,489.92	97,976											
	11,395,601.52	1,730,483											
	5,969,168.10	728,746											
374.00 LAND AND LAND RIGHTS 374.10 LAND	1,277,707.69	13,416											
	11,132,18												
	4,694.38	(3,139)											
389.00 LAND	2,225,560.72												
	761,398.32	295,150											
	258,582.04	140,799											
391.30 INDIVIDUAL EQUIPMENT	913,347.74	210 024											
	702,382.32	272,389											
398.00 MISCELLANEOUS EQUIPMENT	224,541.67	(170,170)											
TOTAL NONDEPRECIABLE PLANT AND ACCOUNTS NOT STUDIED	25,046,738.19	3,762,990											

TOTAL GAS PLANT

TABLE 3. COMPARISON OF THEORETICAL RESERVE AND BOOK DEPRECIATION RESERVE FOR GAS PLANT AS OF DECEMBER 31, 2022

IABLE 3. COMPTANISON OF THEORETICAL RESERVE AND BOON DEFRECIATION RESERVE FOR GAS PLANT AS OF DECEMBER 31, 2022	ND BOOK DEPRECIALION RESI	ERVE FOR GAS PLANT AS U	F DECEMBER 31, 2022	
DEPRECIABLE GROUP	ORIGINAL COST AS OF DECEMBER 31, 2022	BOOK DEPRECIATION RESERVE	THEORETICAL RESERVE	THEORETICAL RESERVE IMBALANCE
(1)	(2)	(3)	(4)	(5)=(3)-(4)
GAS PLANT				
DISTRIBUTION PLANT				
375.00 STRUCTURES AND IMPROVEMENTS	209,627.12	19,014	19,464	(450)
	149,385,024.68	76,811,351	74,396,035	2,415,316
	192,615,831.33	54,566,030	50,061,504	4,504,526
378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL 379.00 MEASTIPING AND BEGINATING STATION FOLLIPMENT - CITY GATE	2,715,949.96	370,403	314,532	55,871
	15,577,540.35	13,940,822	17,151,460	(3,210,638)
380.20 SERVICES - PLASTIC	103,791,091.73	26,655,757	31,830,858	(5,175,101)
	21,907,440.91	6,597,386	8,116,795	(1,519,409)
	1,791,692.69	380,269	467,847	(87,578)
	5,818,610.99	1,660,136	2,042,473	(382,337)
	533,909.26	176,606	217,279	(40,673)
383.00 HOUSE REGULATORS 384.00 HOUSE REGULATORS	7,505,636.28	1,885,273	1,818,730	00,543 (656 639)
	3,725,562.98	2,269,526	2,078,709	190,817
387.00 OTHER EQUIPMENT	1,961,518.55	398,885	363,486	35,399
TOTAL DISTRIBUTION PLANT	529,328,282.93	191,409,904	195,345,957	(3,936,053)
GENERAL PLANT	1			
390.00 STRUCTURES AND IMPROVEMENTS	9,127,408.46	1,667,746	2,186,504	(518,758)
392.00 TRANSPORTATION EQUIPMENT	303,331.77	102,172	191,392	(89,220)
	1,723,037.49	1,098,401	885,421	212,980
392.20 TRANSPORTATION EQUIPMENT - SERVICE TRUCKS 303.30 TRANSPORTATION EQUIPMENT - HEAVY TRIPKS	5,236,068.56	2,572,619	1,859,638	712,981
	1.564.203.37	941.298	508,366	432.932
	269,769.53	93,191	92,825	366
TOTAL GENERAL PLANT	19,000,463.18	6,831,142	6,061,305	769,837
TOTAL DEPRECIABLE PLANT	548,328,746.11	198,241,045	201,407,262	(3,166,217)

TABLE 3. COMPARISON OF THEORETICAL RESERVE AND BOOK DEPRECIATION RESERVE FOR GAS PLANT AS OF DECEMBER 31, 2022

N AND THE PERSON NAMED IN	DEPRECIABLE GROUP	ORIGINAL COST AS OF DECEMBER 31, 2022	BOOK DEPRECIATION RESERVE	THEORETICAL RESERVE	THEORETICAL RESERVE IMBALANCE
-122-020	(1)	(2)	(3)	(4)	(5)=(3)-(4)
0 00000	NONDEPRECIABLE PLANT AND ACCOUNTS NOT STUDIED	1			
	302.00 FRANCHISE AND CONSENTS 303.00 MISCELLANFOLIS INTANGIBLE PLANT	241,489.92	97,976		
	303.02 COMPUTER SOFTWARE	11,395,601.52	1,730,483		
		5,969,168.10	728,746		
20	374.00 LAND AND LAND RIGHTS	1,277,707.69	13,416		
	374.10 LAND 374.30 RIGHT-OF-WAY	72,440.56			
		4,694.38	(3,139)		
	389.00 LAND	2,225,560.72			
	389.20 LAND RIGHTS	96,507.92			
	391.00 OFFICE FURNITURE	761,398.32	295,150		
	391.12 COMPUTER HARDWARE	258,582.04	140,799		
	391.50 INDIVIDUAL EQUIPMENT	813,347.74	447,431		
	394.00 TOOLS, SHOP AND GARAGE EQUIPMENT	992,183.11	210,024		
	397.00 COMMUNICATION EQUIPMENT	702,382.32	272,389		
···	398.00 MISCELLANEOUS EQUIPMENT	224,541.67	(170,170)		
	TOTAL NONDEPRECIABLE PLANT AND ACCOUNTS NOT STUDIED	25,046,738.19	3,762,990		
	TOTAL GAS PLANT	573,375,484.30	202,004,035		

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PART VII. SERVICE LIFE STATISTICS

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2005-2016, 2018-2020 EXPERIENCE 1965-2020 PLACEMENTS ORIGINAL CURVE ■ 2005-2020 EXPERIENCE 1965-2020 PLACEMENTS 100 8 ORIGINAL AND SMOOTH SURVIVOR CURVES AGE IN YEARS **IOWA 35-R4** 20 اه 9 7 10-9 8 9 20 30 20 РЕВСЕИТ ЗИВУІУІИС

ACCOUNT 375.00 STRUCTURES AND IMPROVEMENTS FLORIDA CITY GAS

ACCOUNT 375.00 STRUCTURES AND IMPROVEMENTS

PLACEMENT E	BAND 1965-2020		EXPER	RIENCE BAN	D 2005-2020
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0 0.5 1.5 2.5 3.5 4.5 5.5 6.5 7.5	309,943 255,737 255,658 255,156 256,088 253,638 324,482 411,742 393,994 386,256	7,738 8,862	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0196 0.0229	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 0.9804 0.9771	100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 98.04
9.5 10.5 11.5 12.5 13.5 14.5 15.5 16.5 17.5	377,394 385,381 406,862 510,394 520,411 527,649 535,460 535,554 458,216 346,512	181,426 6,812	0.0000 0.0000 0.4459 0.0000 0.0000 0.0000 0.0000 0.0149 0.0000	1.0000 1.0000 0.5541 1.0000 1.0000 1.0000 1.0000 0.9851 1.0000	95.79 95.79 95.79 53.07 53.07 53.07 53.07 53.07 53.07
19.5 20.5 21.5 22.5 23.5 24.5 25.5 26.5 27.5 28.5	347,730 347,184 344,962 348,392 39,427 47,235 35,348 34,364 152,063 140,156	546 4,725 94 1,792 2,525 2,503 11,907	0.0016 0.0136 0.0003 0.0051 0.0000 0.0535 0.0000 0.0728 0.0783 0.0000	0.9984 0.9864 0.9997 0.9949 1.0000 0.9465 1.0000 0.9272 0.9217 1.0000	52.28 52.20 51.49 51.48 51.21 51.21 48.48 48.48 44.95 41.43
29.5 30.5 31.5 32.5 33.5 34.5 35.5 36.5 37.5	140,966 153,599 148,137 142,403 22,201 22,697 22,791 1,400 1,400	655 5,734 120,202 35 12,633	0.0000 0.0043 0.0387 0.8441 0.0000 0.0015 0.5543 0.0000 0.0000	1.0000 0.9957 0.9613 0.1559 1.0000 0.9985 0.4457 1.0000 1.0000	41.43 41.25 39.65 6.18 6.18 6.17 2.75 2.75

ACCOUNT 375.00 STRUCTURES AND IMPROVEMENTS

PLACEMENT 1	BAND 1965-2020		EXPER	RIENCE BAN	D 2005-2020
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5 40.5 41.5 42.5 43.5 44.5	4,597 4,100 3,972 3,972 3,972 3,972	496 129 3,196	0.1080 0.0314 0.0000 0.0000 0.0000 0.8048	0.8920 0.9686 1.0000 1.0000 0.1952	2.75 2.45 2.38 2.38 2.38 2.38 2.38



ACCOUNT 375.00 STRUCTURES AND IMPROVEMENTS

PLACEMENT	BAND 1965-2020		EXPERI	ENCE BAND	2005-2016, 2018-2020
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0 0.5 1.5 2.5 3.5 4.5 5.5 6.5 7.5 8.5	299,080 253,286 248,967 254,719 256,088 253,638 324,482 411,742 391,323 374,659	5,067 3,700	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0129 0.0099	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 0.9871 0.9901	100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 98.71
9.5 10.5 11.5 12.5 13.5 14.5 15.5 16.5 17.5	377,394 385,381 225,436 510,394 520,411 527,284 534,153 535,554 458,216 346,116	6,812	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0149 0.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 0.9851 1.0000	97.73 97.73 97.73 97.73 97.73 97.73 97.73 97.73 97.73
19.5 20.5 21.5 22.5 23.5 24.5 25.5 26.5 27.5 28.5	345,669 347,184 344,962 348,392 39,427 47,235 35,348 34,364 147,256 140,156	546 4,725 94 1,792 2,525 2,503 11,907	0.0016 0.0136 0.0003 0.0051 0.0000 0.0535 0.0000 0.0728 0.0809 0.0000	0.9984 0.9864 0.9997 0.9949 1.0000 0.9465 1.0000 0.9272 0.9191 1.0000	96.28 96.13 94.82 94.79 94.30 94.30 89.26 89.26 82.76 76.07
29.5 30.5 31.5 32.5 33.5 34.5 35.5 36.5 37.5 38.5	140,966 153,599 148,137 142,403 22,201 22,697 22,791 1,400 1,400	655 5,734 120,202 35 12,633	0.0000 0.0043 0.0387 0.8441 0.0000 0.0015 0.5543 0.0000 0.0000	1.0000 0.9957 0.9613 0.1559 1.0000 0.9985 0.4457 1.0000 1.0000	76.07 76.07 75.75 72.81 11.35 11.35 11.35 5.05

ACCOUNT 375.00 STRUCTURES AND IMPROVEMENTS

PLACEMENT	BAND 1965-2020		EXPERI	ENCE BAND	2005-2016,
					2018-2020
AGE AT	EXPOSURES AT	RETIREMENTS			PCT SURV
BEGIN OF	BEGINNING OF	DURING AGE	RETMT	SURV	BEGIN OF
INTERVAL	AGE INTERVAL	INTERVAL	RATIO	RATIO	INTERVAL
39.5	4,597	496	0.1080	0.8920	5.05
40.5	4,100	129	0.0314	0.9686	4.51
41.5	3,196		0.0000	1.0000	4.36
42.5	3 , 972		0.0000	1.0000	4.36
43.5	3 , 972		0.0000	1.0000	4.36
44.5	3 , 972	3,196	0.8048	0.1952	4.36
45.5					0.85



120 ORIGINAL CURVE = 2005-2020 EXPERIENCE 1963-2020 PLACEMENTS 100 **IOWA 65-R4** 8 AGE IN YEARS 4 20 _|0 7 30-10-9 8 20 РЕКСЕИТ ЅИВУІУІИĠ

FLORIDA CITY GAS ACCOUNTS 376.10 AND 376.20 MAINS ORIGINAL AND SMOOTH SURVIVOR CURVES

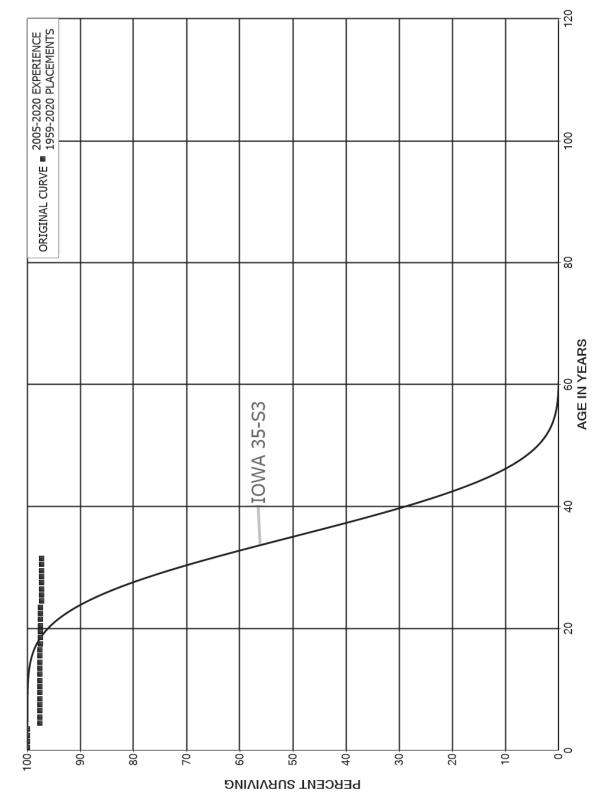
ACCOUNTS 376.10 AND 376.20 MAINS

PLACEMENT	BAND 1963-2020		EXPEF	RIENCE BAN	D 2005-2020
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0 0.5 1.5 2.5 3.5 4.5 5.5 6.5 7.5	182,100,094 167,159,326 145,583,570 132,882,453 126,453,375 108,102,840 98,788,283 90,877,940 89,163,013 87,120,827	13,427 6,166 16,666 52,469 140,557 376,076 59,599 295,619 120,217 6,014	0.0001 0.0000 0.0001 0.0004 0.0011 0.0035 0.0006 0.0033 0.0013	0.9999 1.0000 0.9999 0.9996 0.9989 0.9965 0.9994 0.9967 0.9987	100.00 99.99 99.99 99.98 99.94 99.83 99.48 99.42 99.10 98.96
9.5 10.5 11.5 12.5 13.5 14.5 15.5 16.5 17.5 18.5	87,068,578 92,821,109 90,350,833 88,055,105 86,443,669 84,286,874 71,588,647 72,667,172 71,987,522 68,122,188	40,869 232,313 112,458 13,228 70,148 14,905 56,452 18,775 48,915 11,689	0.0005 0.0025 0.0012 0.0002 0.0008 0.0002 0.0008 0.0003 0.0007 0.0002	0.9995 0.9975 0.9988 0.9998 0.9992 0.9998 0.9997 0.9993 0.9998	98.96 98.91 98.66 98.54 98.52 98.44 98.43 98.35 98.32 98.26
19.5 20.5 21.5 22.5 23.5 24.5 25.5 26.5 27.5 28.5	62,255,137 60,225,245 57,263,130 55,358,773 55,713,552 49,831,835 46,181,505 37,401,552 34,669,346 30,902,574	189,842 74,405 20,887 20,889 35,532 28,581 50,388 44,262 82,179 81,864	0.0030 0.0012 0.0004 0.0004 0.0006 0.0006 0.0011 0.0012 0.0024 0.0026	0.9970 0.9988 0.9996 0.9994 0.9994 0.9989 0.9988 0.9976 0.9974	98.24 97.94 97.82 97.78 97.75 97.68 97.63 97.52 97.41
29.5 30.5 31.5 32.5 33.5 34.5 35.5 36.5 37.5 38.5	29,449,779 28,359,834 27,083,101 26,226,725 23,947,123 24,072,564 23,954,388 23,025,481 21,316,238 19,747,635	126,403 75,606 74,795 47,335 7,937 20,109 53,988 143,233 35,323 89,697	0.0043 0.0027 0.0028 0.0018 0.0003 0.0008 0.0023 0.0062 0.0017 0.0045	0.9957 0.9973 0.9972 0.9982 0.9997 0.9992 0.9977 0.9938 0.9983 0.9955	96.92 96.50 96.25 95.98 95.81 95.77 95.69 95.48 94.88

ACCOUNTS 376.10 AND 376.20 MAINS

PLACEMENT	BAND 1963-2020		EXPER	RIENCE BAN	D 2005-2020
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5 40.5 41.5 42.5 43.5 44.5 45.5 46.5 47.5 48.5	19,281,528 18,374,161 19,459,100 18,101,638 16,845,503 15,785,802 14,468,938 12,393,321 11,184,811 9,872,899	54,534 158,607 140,193 28,943 140,835 63,699 90,817 54,550 43,158 59,813	0.0028 0.0086 0.0072 0.0016 0.0084 0.0040 0.0063 0.0044 0.0039 0.0061	0.9972 0.9914 0.9928 0.9984 0.9916 0.9960 0.9937 0.9956 0.9961 0.9939	94.30 94.03 93.22 92.55 92.40 91.63 91.26 90.68 90.29 89.94
49.5 50.5 51.5 52.5 53.5 54.5 55.5 56.5 57.5	9,000,676 7,872,944 6,578,997 5,814,114 4,791,363 3,794,521 2,225,671 1,872,534	46,509 367,536 156,024 296,377 153,030 61,817 74,034 57,183	0.0052 0.0467 0.0237 0.0510 0.0319 0.0163 0.0333 0.0305	0.9948 0.9533 0.9763 0.9490 0.9681 0.9837 0.9667 0.9695	89.39 88.93 84.78 82.77 78.55 76.04 74.80 72.31 70.10

ACCOUNTS 378.00 AND 379.00 MEASURING AND REGULATING STATION EQUIPMENT ORIGINAL AND SMOOTH SURVIVOR CURVES FLORIDA CITY GAS



ACCOUNTS 378.00 AND 379.00 MEASURING AND REGULATING STATION EQUIPMENT

PLACEMENT H	BAND 1959-2020		EXPER	RIENCE BAN	D 2005-2020
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0 0.5 1.5 2.5 3.5 4.5 5.5 6.5 7.5	11,629,778 10,511,224 6,350,959 6,677,394 6,787,565 3,271,814 3,228,270 2,980,246 4,266,750 4,328,537	162,134 176	0.0000 0.0000 0.0000 0.0000 0.0239 0.0000 0.0001 0.0000 0.0000	1.0000 1.0000 1.0000 0.9761 1.0000 0.9999 1.0000 1.0000	100.00 100.00 100.00 100.00 100.00 97.61 97.61 97.61 97.61
9.5 10.5 11.5 12.5 13.5 14.5 15.5 16.5 17.5	4,355,325 5,090,780 5,290,219 5,336,627 5,555,992 5,712,642 5,712,237 5,085,077 4,762,798 4,509,807	424 3,845	0.0000 0.0000 0.0000 0.0000 0.0000 0.0001 0.0000 0.0008 0.0000	1.0000 1.0000 1.0000 1.0000 0.9999 1.0000 0.9992 1.0000 1.0000	97.61 97.61 97.61 97.61 97.61 97.60 97.60 97.52 97.52
19.5 20.5 21.5 22.5 23.5 24.5 25.5 26.5 27.5 28.5	4,423,269 4,113,068 3,773,079 3,176,285 1,902,199 1,838,300 1,641,163 903,055 477,097 521,821	2,578 2,583	0.0006 0.0000 0.0000 0.0000 0.0014 0.0000 0.0000 0.0000 0.0000	0.9994 1.0000 1.0000 0.9986 1.0000 1.0000 1.0000 1.0000	97.52 97.47 97.47 97.47 97.47 97.34 97.34 97.34 97.34
29.5 30.5 31.5 32.5 33.5 34.5 35.5 36.5 37.5 38.5	306,044 180,464 191,162 211,675 231,219 249,558 289,888 289,708 291,263 297,738	468	0.0000 0.0000 0.0000 0.0000 0.0000 0.0016 0.0000 0.0000	1.0000 1.0000 1.0000 1.0000 1.0000 0.9984 1.0000 1.0000	97.34 97.34 97.34 97.34 97.34 97.34 97.34 97.18 97.18

ACCOUNTS 378.00 AND 379.00 MEASURING AND REGULATING STATION EQUIPMENT ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1959-2020 EXPERIENCE BAND 2005-2020 AGE AT EXPOSURES AT RETIREMENTS PCT SURV BEGIN OF BEGINNING OF DURING AGE RETMT SURV BEGIN OF INTERVAL AGE INTERVAL INTERVAL RATIO RATIO INTERVAL 39.5 287,667 0.0006 0.9994 97.18 40.5 285,655 0.0000 1.0000 97.12 41.5 286,116 0.0000 1.0000 97.12 42.5 97.12 289,835 0.0000 1.0000 43.5 291,366 543 0.0019 0.9981 97.12 44.5 166,203 217 0.0013 0.9987 96.94 45.5 184,574 0.0000 1.0000 96.81 46.5 153,504 0.0000 1.0000 96.81 47.5 143,329 492 0.0034 0.9966 96.81 48.5 123,032 0.0000 96.48 1.0000 49.5 102,125 0.9997 96.48 33 0.0003 50.5 83,787 533 0.0064 0.9936 96.45 51.5 42,924 284 0.0066 0.9934 95.84 52.5 42,636 0.0000 1.0000 95.20 53.5 41,081 427 95.20 0.0104 0.9896 54.5 34,156 2,039 0.0597 0.9403 94.21 55.5 27,758 0.0000 1.0000 88.59 56.5 27,758 0.0000 1.0000 88.59

0.0000

0.0000

0.0000

0.0105

226

1.0000

1.0000

1.0000

0.9895

88.59

88.59

88.59

88.59

87.66

57.5

58.5

59.5

60.5

61.5

27,297

23,577

21,726

21,643

160 ORIGINAL CURVE - 2005-2020 EXPERIENCE 1961-2020 PLACEMENTS 140 120 100 AGE IN YEARS IOWA 50-R2.5 9 4 20 اه 7 30-10-9 8 20 РЕВСЕИТ ЗИВУІУІИС

ANNETT FLEMING

ACCOUNTS 380.10 AND 380.20 SERVICES ORIGINAL AND SMOOTH SURVIVOR CURVES

FLORIDA CITY GAS

ACCOUNTS 380.10 AND 380.20 SERVICES

PLACEMENT	BAND 1961-2020		EXPEF	RIENCE BAN	D 2005-2020
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0 0.5 1.5 2.5 3.5 4.5 5.5 6.5 7.5	64,326,464 52,418,510 51,887,553 47,111,127 41,552,445 33,797,564 32,399,704 30,808,915 30,587,184 29,429,960	459 160,797 85,236 37,796 139,967 28,699 15,634 36,260 78,334 84,841	0.0000 0.0031 0.0016 0.0008 0.0034 0.0008 0.0005 0.0012 0.0026 0.0029	1.0000 0.9969 0.9984 0.9992 0.9966 0.9992 0.9995 0.9988 0.9974	100.00 100.00 99.69 99.53 99.45 99.11 99.03 98.98 98.87 98.61
9.5	30,303,568	38,704	0.0013	0.9987	98.33
10.5	30,507,051	107,848	0.0035	0.9965	98.20
11.5	29,203,040	31,173	0.0011	0.9989	97.86
12.5	28,596,584	85,513	0.0030	0.9970	97.75
13.5	27,770,058	249,277	0.0090	0.9910	97.46
14.5	27,277,949	54,232	0.0020	0.9980	96.58
15.5	27,209,083	34,721	0.0013	0.9987	96.39
16.5	27,920,233	31,739	0.0011	0.9989	96.27
17.5	26,781,462	39,414	0.0015	0.9985	96.16
18.5	25,915,520	64,783	0.0025	0.9975	96.02
19.5	25,234,411	92,549	0.0037	0.9963	95.78
20.5	22,929,801	94,753	0.0041	0.9959	95.43
21.5	22,315,532	121,779	0.0055	0.9945	95.03
22.5	20,939,627	151,629	0.0072	0.9928	94.51
23.5	20,593,453	135,306	0.0066	0.9934	93.83
24.5	18,455,380	153,797	0.0083	0.9917	93.21
25.5	17,223,500	248,687	0.0144	0.9856	92.44
26.5	15,370,796	266,620	0.0173	0.9827	91.10
27.5	13,943,430	119,526	0.0086	0.9914	89.52
28.5	12,516,488	96,745	0.0077	0.9923	88.75
29.5	11,900,226	105,550	0.0089	0.9911	88.07
30.5	11,362,274	48,484	0.0043	0.9957	87.29
31.5	10,858,807	53,189	0.0049	0.9951	86.91
32.5	10,216,786	92,067	0.0090	0.9910	86.49
33.5	9,671,140	67,219	0.0070	0.9930	85.71
34.5	8,943,637	57,474	0.0064	0.9936	85.11
35.5	8,486,611	38,309	0.0045	0.9955	84.57
36.5	7,856,546	48,894	0.0062	0.9938	84.18
37.5	7,313,699	80,101	0.0110	0.9890	83.66
38.5	6,553,074	45,678	0.0070	0.9930	82.74

ACCOUNTS 380.10 AND 380.20 SERVICES

PLACEMENT BAND 1961-2020 EXPERIENCE BA					D 2005-2020
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5 40.5 41.5 42.5 43.5 44.5 45.5 46.5 47.5 48.5	5,872,467 5,296,284 4,721,678 4,251,549 3,801,639 3,208,280 2,668,720 2,073,249 1,647,965 1,139,190	60,448 103,826 46,268 38,671 24,030 20,109 13,955 12,023 12,263 7,739	0.0103 0.0196 0.0098 0.0091 0.0063 0.0063 0.0052 0.0058 0.0074 0.0068	0.9897 0.9804 0.9902 0.9909 0.9937 0.9937 0.9948 0.9942 0.9926 0.9932	82.17 81.32 79.73 78.95 78.23 77.73 77.25 76.84 76.40 75.83
49.5 50.5 51.5 52.5 53.5 54.5 55.5 56.5 57.5	797,249 733,891 468,063 335,121 181,382 37,759 14,747 12,318	6,772 4,787 2,395 1,249 679 224 9	0.0085 0.0065 0.0051 0.0037 0.0037 0.0059 0.0006 0.0039	0.9915 0.9935 0.9949 0.9963 0.9963 0.9941 0.9994	75.31 74.67 74.19 73.81 73.53 73.26 72.82 72.78 72.50

8 2005-2009, 2011-2017 EXPERIENCE 1959-2017 PLACEMENTS ORIGINAL CURVE - 1959-2020 EXPERIENCE 2005-2009 EXPERIENCE 1959-2009 PLACEMENTS 2 8 20 AGE IN YEARS IOWA 20-92.5 20 9 اه 7 9 8 9 20 40 30 20 9 РЕВСЕИТ SURVIVING

FLORIDA CITY GAS ACCOUNTS 381.00 AND 381.10 METERS ORIGINAL AND SMOOTH SURVIVOR CURVES

ACCOUNTS 381.00 AND 381.10 METERS

PLACEMENT I	BAND 1959-2020		EXPEF	RIENCE BAN	D 2005-2020
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0 0.5 1.5 2.5 3.5 4.5 5.5 6.5 7.5	24,484,208 20,914,342 19,374,705 17,954,236 16,962,194 16,125,348 16,880,148 14,197,681 14,322,292 11,875,916	110,545 1,575,770 441,977 532,909 653,433 599,987 573,595 767,430 1,290,988 518,595	0.0045 0.0753 0.0228 0.0297 0.0385 0.0372 0.0340 0.0541 0.0901 0.0437	0.9955 0.9247 0.9772 0.9703 0.9615 0.9628 0.9660 0.9459 0.9099	100.00 99.55 92.05 89.95 87.28 83.92 80.79 78.05 73.83 67.17
9.5 10.5 11.5 12.5 13.5 14.5 15.5 16.5 17.5	11,305,912 9,193,128 7,913,295 7,300,202 6,859,569 6,287,274 5,498,568 4,669,968 3,542,266 2,604,681	533,210 190,020 601,339 246,314 745,249 869,743 713,765 789,254 520,858 481,802	0.0472 0.0207 0.0760 0.0337 0.1086 0.1383 0.1298 0.1690 0.1470 0.1850	0.9528 0.9793 0.9240 0.9663 0.8914 0.8617 0.8702 0.8310 0.8530 0.8150	64.24 61.21 59.95 55.39 53.52 47.71 41.11 35.77 29.73 25.36
19.5 20.5 21.5 22.5 23.5 24.5 25.5 26.5 27.5 28.5	2,075,263 1,285,235 1,074,067 1,299,097 1,008,441 782,451 590,962 292,395 223,013 49,336	357,309 52,302 63,757 258,673 416,289 187,464 189,682 7,841 5,950 14,322	0.1722 0.0407 0.0594 0.1991 0.4128 0.2396 0.3210 0.0268 0.0267 0.2903	0.8278 0.9593 0.9406 0.8009 0.5872 0.7604 0.6790 0.9732 0.9733 0.7097	20.66 17.11 16.41 15.44 12.36 7.26 5.52 3.75 3.65 3.55
29.5 30.5 31.5 32.5 33.5 34.5 35.5 36.5 37.5 38.5	19,331 14,100 12,646 12,646 5,696 3,759 3,759 3,759 3,759 3,759	2,664 1,454	0.1378 0.1031 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	0.8622 0.8969 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	2.52 2.17 1.95 1.95 1.95 1.95 1.95 1.95 1.95

ACCOUNTS 381.00 AND 381.10 METERS

PLACEMENT	BAND 1959-2020		EXPER	IENCE BAN	D 2005-2020
BEGIN OF	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5 40.5 41.5 42.5 43.5 44.5					1.95
45.5 46.5 47.5 48.5	3,751 3,751 1,897 1,897	1,853 569	0.0000		
49.5 50.5 51.5 52.5 53.5 54.5 55.5 56.5 57.5 58.5	1,329 1,329 1,329 1,329 1,329 1,329 514 514 514	815	0.0000 0.0000 0.0000 0.0000 0.0000 0.6132 0.0000 0.0000 0.0000		
59.5 60.5 61.5	514 514		0.0000		

ACCOUNTS 381.00 AND 381.10 METERS

PLACEMENT	BAND 1959-2017		EXPERI	ENCE BAND	2005-2009, 2011-2017
AGE AT BEGIN OF	EXPOSURES AT BEGINNING OF	RETIREMENTS DURING AGE	RETMT	SURV	PCT SURV BEGIN OF
INTERVAL	AGE INTERVAL	INTERVAL	RATIO	RATIO	INTERVAL
0.0 0.5 1.5 2.5 3.5 4.5 5.5 6.5 7.5	14,177,978 14,149,807 13,565,328 13,255,702 12,367,454 12,439,996 12,206,381 10,639,306 8,601,377	39,153 73,559 187,625 268,005 358,370 143,748 181,776 612,003 623,594	0.0028 0.0052 0.0138 0.0202 0.0290 0.0116 0.0149 0.0575 0.0725	0.9972 0.9948 0.9862 0.9798 0.9710 0.9884 0.9851 0.9425 0.9275	100.00 99.72 99.21 97.83 95.86 93.08 92.00 90.63 85.42
8.5	6,304,449	115,552	0.0183	0.9817	79.23
9.5 10.5 11.5 12.5 13.5 14.5 15.5 16.5 17.5	5,817,778 5,708,006 6,514,403 5,790,096 6,351,122 5,120,360 4,043,339 3,163,799 1,775,105 1,046,139	148,645 25,400 503,907 184,691 672,018 721,577 552,638 558,905 341,323 136,098	0.0256 0.0044 0.0774 0.0319 0.1058 0.1409 0.1367 0.1767 0.1923 0.1301	0.9744 0.9956 0.9226 0.9681 0.8942 0.8591 0.8633 0.8233 0.8077 0.8699	77.77 75.79 75.45 69.61 67.39 60.26 51.77 44.69 36.80 29.72
19.5 20.5 21.5 22.5 23.5 24.5 25.5 26.5 27.5 28.5	1,219,375 880,564 929,150 1,131,786 858,916 567,831 226,109 25,542 31,812 25,873	326,242 41,864 63,757 258,673 413,695 184,964 188,512 5,522 5,102 14,322	0.2675 0.0475 0.0686 0.2286 0.4816 0.3257 0.8337 0.2162 0.1604 0.5535	0.7325 0.9525 0.9314 0.7714 0.5184 0.6743 0.1663 0.7838 0.8396 0.4465	25.86 18.94 18.04 16.80 12.96 6.72 4.53 0.75 0.59
29.5 30.5 31.5 32.5 33.5 34.5 35.5 36.5 37.5 38.5	16,764 7,150 3,759 3,759 3,759 3,759 3,759	2,664 1,454	0.1589 0.2034 0.0000 0.0000 0.0000 0.0000	0.8411 0.7966 1.0000 1.0000 1.0000 1.0000	0.22 0.19 0.15 0.15 0.15 0.15 0.15

ACCOUNTS 381.00 AND 381.10 METERS

PLACEMENT	BAND 1959-2017		EXPERI	ENCE BAND	2005-2009, 2011-2017
BEGIN OF	EXPOSURES AT BEGINNING OF AGE INTERVAL	DURING AGE		SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5 40.5 41.5 42.5 43.5 44.5 45.5 46.5 47.5 48.5	3,751 3,751 1,897 1,897	1,853 569	0.0000		
49.5 50.5	1,329		0.0000		
51.5 52.5 53.5 54.5 55.5 56.5 57.5 58.5	1,329 1,329 1,329 1,329 514 514	815	0.0000 0.0000 0.0000 0.6132 0.0000 0.0000		

ACCOUNTS 381.00 AND 381.10 METERS

PLACEMENT H	BAND 1959-2009		EXPER	RIENCE BAN	D 2005-2009
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0 0.5 1.5 2.5 3.5 4.5 5.5 6.5 7.5 8.5	4,193,040 2,512,493 1,708,134 1,494,047 2,198,918 3,265,951 3,554,254 3,096,721 3,578,376 3,166,554	12,291 30 1,575 7,230 24,124	0.0000 0.0049 0.0000 0.0000 0.0000 0.0000 0.0005 0.0020 0.0076	1.0000 0.9951 1.0000 1.0000 1.0000 1.0000 0.9995 0.9980 0.9924	100.00 100.00 99.51 99.51 99.51 99.51 99.51 99.51 99.46 99.26
9.5 10.5 11.5 12.5 13.5 14.5 15.5 16.5 17.5	2,631,080 2,512,956 2,784,277 2,168,130 2,365,892 1,973,480 1,500,485 1,204,208 755,622 215,929	55,992 8,683 362,856 127,918 65,338 267,523 96,759 209,552 245,642 91,569	0.0213 0.0035 0.1303 0.0590 0.0276 0.1356 0.0645 0.1740 0.3251 0.4241	0.9787 0.9965 0.8697 0.9410 0.9724 0.8644 0.9355 0.8260 0.6749 0.5759	98.50 96.41 96.07 83.55 78.62 76.45 66.09 61.83 51.07 34.47
19.5 20.5 21.5 22.5 23.5 24.5 25.5 26.5 27.5 28.5	380,461 454,848 521,885 746,095 582,546 367,743 197,517 14,088 22,925 16,986	44,233 34,600 63,388 256,401 413,695 175,598 188,512 5,522 5,102 14,322	0.1163 0.0761 0.1215 0.3437 0.7102 0.4775 0.9544 0.3919 0.2225 0.8431	0.8837 0.9239 0.8785 0.6563 0.2898 0.5225 0.0456 0.6081 0.7775 0.1569	19.85 17.54 16.21 14.24 9.35 2.71 1.42 0.06 0.04 0.03
29.5 30.5 31.5 32.5 33.5 34.5 35.5 36.5 37.5 38.5	4,118 1,454	2,664 1,454	0.6469	0.3531	0.00

ACCOUNTS 381.00 AND 381.10 METERS

PLACEMENT	BAND 1959-2009		EXPER	IENCE BAN	D 2005-2009
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5 40.5 41.5 42.5 43.5 44.5					
45.5	3,751	1 050	0.0000		
46.5 47.5	3,751 1,897	1,853	0.4941		
48.5	1,897	569	0.2997		
49.5 50.5	1,329		0.0000		

120 ORIGINAL CURVE **2005-2020** EXPERIENCE 1959-2020 PLACEMENTS 100 8 60 AGE IN YEARS **IOWA 35-R3** 20 اه 7 30-10-9 8 20 РЕВСЕИТ ЗИВУІУІИС

FLORIDA CITY GAS ACCOUNT 382.00 METER INSTALLATIONS ORIGINAL AND SMOOTH SURVIVOR CURVES

ACCOUNT 382.00 METER INSTALLATIONS

PLACEMENT	BAND 1959-2020		EXPE	RIENCE BAN	D 2005-2020
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0 0.5 1.5 2.5 3.5 4.5 5.5 6.5 7.5 8.5	5,846,560 5,101,640 5,140,628 5,051,719 4,834,598 4,689,810 4,273,929 3,925,604 3,720,244 3,817,922	622 55,265 20,515 25,129 15,564 76,150 22,582 10,368	0.0000 0.0000 0.0001 0.0109 0.0042 0.0054 0.0036 0.0194 0.0061 0.0027	1.0000 1.0000 0.9999 0.9891 0.9958 0.9946 0.9964 0.9806 0.9939 0.9973	100.00 100.00 100.00 99.99 98.89 98.47 97.95 97.59 95.70
9.5 10.5 11.5 12.5 13.5 14.5 15.5 16.5 17.5 18.5	4,030,375 4,039,369 1,593,246 1,655,233 1,887,750 1,968,080 1,844,661 1,852,878 1,724,837 1,645,954	15,316 6,829 13,261 4,696 7,312 3,614 5,474 551 5,070 4,111	0.0027 0.0038 0.0017 0.0083 0.0028 0.0039 0.0018 0.0030 0.0003 0.0029 0.0025	0.9962 0.9983 0.9917 0.9972 0.9961 0.9982 0.9970 0.9997 0.9971	94.86 94.50 94.34 93.55 93.29 92.93 92.76 92.48 92.45 92.18
19.5 20.5 21.5 22.5 23.5 24.5 25.5 26.5 27.5 28.5	1,697,865 1,615,467 1,670,447 1,856,633 1,838,487 1,943,596 1,728,973 1,546,996 1,476,268 1,377,200	487 22 197 22 54 26 403 64	0.0003 0.0000 0.0001 0.0000 0.0000 0.0002 0.0000 0.0000 0.0000	0.9997 1.0000 0.9999 1.0000 1.0000 0.9998 1.0000 1.0000 0.9993	91.95 91.92 91.92 91.91 91.91 91.91 91.89 91.88 91.88
29.5 30.5 31.5 32.5 33.5 34.5 35.5 36.5 37.5 38.5	1,098,421 1,011,023 957,928 829,438 728,168 652,904 399,543 311,590 69,803 56,152	382 217 84,079 65,666 55,559 185,708 87,953 241,965 13,651 22,779	0.0003 0.0002 0.0878 0.0792 0.0763 0.2844 0.2201 0.7765 0.1956 0.4057	0.9997 0.9998 0.9122 0.9208 0.9237 0.7156 0.7799 0.2235 0.8044 0.5943	91.82 91.79 91.77 83.71 77.09 71.20 50.95 39.74 8.88 7.14

ACCOUNT 382.00 METER INSTALLATIONS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT I	EXPER	RIENCE BAN	D 2005-2020		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5 40.5 41.5 42.5 43.5 44.5 45.5 46.5 47.5 48.5	33,373 11,368 5,246 4,703 4,100 1,705 52,067 51,524 40,819 40,473	22,005 6,122 543 602 2,395 543 10,705 346 178	0.1036 0.1281 0.5842 0.0000 0.0104 0.2078	0.3406 0.4615 0.8964 0.8719 0.4158 1.0000 0.9896 0.7922 0.9915 0.9956	4.25 1.45 0.67 0.60 0.52 0.22 0.22 0.21 0.17
49.5 50.5 51.5 52.5 53.5 54.5 55.5 56.5 57.5	40,295 40,287 40,252 40,252 40,252 40,252 40,252 40,252	9 35 40,252	0.0002 0.0009 0.0000 0.0000 0.0000 0.0000 0.0000	0.9998 0.9991 1.0000 1.0000 1.0000 1.0000	0.17 0.17 0.17 0.17 0.17 0.17 0.17

ORIGINAL CURVE **2008-2020 EXPERIENCE** 2008-2020 PLACEMENTS 20 40 AGE IN YEARS IOWA 20-R1.5 20 9 اه 100 7 30-10-9 8 20 РЕКСЕИТ ЅИВУІУІИĠ

FLORIDA CITY GAS ACCOUNT 382.10 METER INSTALLATIONS - ERT ORIGINAL AND SMOOTH SURVIVOR CURVES

ACCOUNT 382.10 METER INSTALLATIONS - ERT

PLACEMENT	BAND 2008-2020		EXPER	RIENCE BAN	D 2008-2020
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0 0.5 1.5 2.5 3.5 4.5 5.5 6.5 7.5 8.5	6,845,177 6,724,397 6,724,397 6,724,397 6,722,540 6,722,540 4,694,666 4,694,666 4,694,666 4,694,666	231,450	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0493	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 0.9507	100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00
9.5 10.5 11.5 12.5	4,463,216 4,463,216 19,509		0.0000 0.0000 0.0000	1.0000 1.0000 1.0000	95.07 95.07 95.07 95.07



120 ORIGINAL CURVE **2005-2020** EXPERIENCE 1959-2020 PLACEMENTS 100 8 OWA 40-R2.5 60 AGE IN YEARS 4 20 اه 7 30-10-9 8 20 20 РЕКСЕИТ ЅИВУІУІИĠ

FLORIDA CITY GAS ACCOUNT 383.00 HOUSE REGULATORS ORIGINAL AND SMOOTH SURVIVOR CURVES

ACCOUNT 383.00 HOUSE REGULATORS

PLACEMENT	BAND 1959-2020		EXPEF	RIENCE BAN	D 2005-2020
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0 0.5 1.5 2.5 3.5 4.5 5.5 6.5 7.5	5,965,765 4,884,337 5,201,544 4,909,567 4,232,936 3,453,652 3,080,648 2,523,554 2,385,284 1,859,343	16,012 60,065 18,237 60,900 46,822 13,319 102,014 27,844 71,785 14,831	0.0027 0.0123 0.0035 0.0124 0.0111 0.0039 0.0331 0.0110 0.0301 0.0080	0.9973 0.9877 0.9965 0.9876 0.9889 0.9961 0.9669 0.9890 0.9699	100.00 99.73 98.51 98.16 96.94 95.87 95.50 92.34 91.32 88.57
9.5 10.5 11.5 12.5 13.5 14.5 15.5 16.5 17.5 18.5	1,879,654 1,775,614 1,459,371 1,309,590 1,429,679 1,468,770 1,446,093 1,384,764 1,051,683 1,067,145	2,187 1,256 6,879 260 1,498 46,088 9,492 2,355 4,104 7,321	0.0012 0.0007 0.0047 0.0002 0.0010 0.0314 0.0066 0.0017 0.0039 0.0069	0.9988 0.9993 0.9953 0.9998 0.9990 0.9686 0.9934 0.9983 0.9961 0.9931	87.86 87.76 87.70 87.29 87.27 87.18 84.44 83.89 83.75 83.42
19.5 20.5 21.5 22.5 23.5 24.5 25.5 26.5 27.5 28.5	1,048,801 1,085,828 1,224,877 1,231,399 1,212,060 1,206,808 1,029,337 903,718 834,530 760,539	6,697 3,265 452 1,260 981 9,917 5,873 3,152 1,456 1,303	0.0064 0.0030 0.0004 0.0010 0.0008 0.0082 0.0057 0.0035 0.0017	0.9936 0.9970 0.9996 0.9990 0.9992 0.9918 0.9943 0.9965 0.9983	82.85 82.32 82.07 82.04 81.96 81.89 81.22 80.75 80.47 80.33
29.5 30.5 31.5 32.5 33.5 34.5 35.5 36.5 37.5 38.5	579,944 534,033 513,436 487,070 470,175 450,799 369,008 329,291 299,339 191,557	1,064 261 2,334 770 988 491 1,938 4,139 1,162	0.0018 0.0005 0.0045 0.0000 0.0016 0.0022 0.0013 0.0059 0.0138 0.0061	0.9982 0.9995 0.9955 1.0000 0.9984 0.9978 0.9987 0.9941 0.9862 0.9939	80.19 80.05 80.01 79.64 79.51 79.34 79.23 78.77 77.68

ACCOUNT 383.00 HOUSE REGULATORS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT E	BAND 1959-2020		EXPER	RIENCE BAN	D 2005-2020
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5 40.5 41.5 42.5 43.5 44.5 45.5 46.5 47.5 48.5	143,871 37,076 31,144 28,206 17,355 14,079 60,901 60,505 59,878 57,351	8 2,377 509 26 141 270 59 25	0.0164 0.0009 0.0081 0.0192 0.0010	0.9999 0.9359 0.9836 0.9991 0.9919 0.9808 0.9990 0.9996 1.0000	77.21 77.20 72.25 71.07 71.00 70.43 69.08 69.01 68.98 68.98
49.5 50.5 51.5 52.5 53.5 54.5 55.5 56.5 57.5 58.5	57,239 48,797 45,538 43,569 40,130 37,600 30,631 28,904 28,464 28,307	8,193 860 1,820 2,166 2,525 6,879 1,629 440 157 34	0.1431 0.0176 0.0400 0.0497 0.0629 0.1829 0.0532 0.0152 0.0055 0.0012	0.8569 0.9824 0.9600 0.9503 0.9371 0.8171 0.9468 0.9848 0.9945 0.9988	68.98 59.11 58.07 55.75 52.97 49.64 40.56 38.40 37.82 37.61
59.5 60.5 61.5	28,274 28,263	10	0.0004	0.9996	37.56 37.55 37.55



ORIGINAL CURVE **2005-2020** EXPERIENCE 1959-2020 PLACEMENTS 100 ACCOUNT 384.00 HOUSE REGULATOR INSTALLATIONS 8 ORIGINAL AND SMOOTH SURVIVOR CURVES IOWA 40-R2.5 FLORIDA CITY GAS 60 AGE IN YEARS 4 20 اه 7 30-10-9 8 20 РЕВСЕИТ ЗИВУІУІИС



ACCOUNT 384.00 HOUSE REGULATOR INSTALLATIONS

PLACEMENT E	BAND 1959-2020		EXPER	RIENCE BAN	D 2005-2020
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0 0.5 1.5 2.5 3.5 4.5 5.5 6.5	1,854,526 1,289,281 1,350,320 1,238,326 1,100,247 1,026,677 838,596 701,924 582,548	510 390	0.0000 0.0000 0.0000 0.0005 0.0000 0.0000 0.0000	1.0000 1.0000 1.0000 0.9995 1.0000 1.0000 0.9993	100.00 100.00 100.00 100.00 100.00 99.95 99.95 99.95
8.5 9.5	629 , 066 718 , 417	124 101	0.0002	0.9998	99.89 99.87
10.5 11.5	711,269 717,949	161	0.0002	0.9998 1.0000	99.85 99.83
12.5 13.5	719,332 737,267	157 90	0.0002 0.0001	0.9998 0.9999	99.83 99.81
14.5	774,060	1,282	0.0017	0.9983	99.80
15.5 16.5	797,973 792,083	2,943	0.0037	0.9963 1.0000	99.63 99.26
17.5	748,136	411	0.0005	0.9995	99.26
18.5	706,643		0.0000	1.0000	99.21
19.5 20.5 21.5	625,305 590,079 616,052	44	0.0000 0.0000 0.0001	1.0000 1.0000 0.9999	99.21 99.21 99.21
22.5 23.5	700,960 698,086	328	0.0000 0.0005	1.0000 0.9995	99.20 99.20
24.5	738,791	020	0.0000	1.0000	99.16
25.5	645,065		0.0000	1.0000	99.16
26.5	569,988	598	0.0010	0.9990	99.16
27.5 28.5	565,133 522,874	363 105	0.0006 0.0002	0.9994 0.9998	99.05 98.99
29.5 30.5	507,534 469,834		0.0000	1.0000	98.97 98.97
31.5	446,219	257	0.0006	0.9994	98.97
32.5	427,423	93	0.0002	0.9998	98.91
33.5	411,071		0.0000	1.0000	98.89
34.5	401,292	234	0.0006	0.9994	98.89
35.5	337 , 377		0.0000	1.0000	98.83
36.5	307 , 039		0.0000	1.0000	98.83
37.5	284,830	53	0.0002	0.9998	98.83
38.5	200,548		0.0000	1.0000	98.81

ACCOUNT 384.00 HOUSE REGULATOR INSTALLATIONS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT H	BAND 1959-2020		EXPE	RIENCE BAN	D 2005-2020
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5 40.5 41.5 42.5 43.5 44.5 45.5 46.5 47.5 48.5	161,817 56,291 49,718 43,351 25,269 20,176 41,350 40,011 38,441 34,607	2,717	0.0168 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	0.9832 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	98.81 97.15 97.15 97.15 97.15 97.15 97.15 97.15 97.15
49.5 50.5 51.5 52.5 53.5 54.5 55.5 56.5 57.5	33,870 32,189 30,946 30,657 26,893 26,768 26,506 26,050 25,915 25,836	276	0.0082 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	0.9918 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	97.15 96.36 96.36 96.36 96.36 96.36 96.36 96.36 96.36
59.5 60.5 61.5	25,799 25,759		0.0000	1.0000	96.36 96.36 96.36

ORIGINAL CURVE ■ 2005-2020 EXPERIENCE 1970-2020 PLACEMENTS 2 ACCOUNT 385.00 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT 9 ORIGINAL AND SMOOTH SURVIVOR CURVES IOWA 35-S3 20 FLORIDA CITY GAS AGE IN YEARS 30 20 9 100 7 10-9 8 30 20 РЕВСЕИТ SURVIVING

ACCOUNT 385.00 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT

PLACEMENT 1	BAND 1970-2020		EXPE	RIENCE BAN	D 2005-2020
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0 0.5 1.5 2.5 3.5 4.5 5.5 6.5 7.5	825,870 359,902 393,296 322,625 340,569 618,571 846,049 873,267 1,509,736 1,526,055		0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00
9.5 10.5 11.5 12.5 13.5 14.5 15.5 16.5 17.5	1,622,457 1,789,283 1,821,525 1,928,936 2,070,086 2,291,557 2,354,867 2,456,783 2,524,909 2,571,701		0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00
19.5 20.5 21.5 22.5 23.5 24.5 25.5 26.5 27.5 28.5	2,598,513 2,350,238 2,163,483 2,139,016 1,520,291 1,506,159 1,410,521 1,237,360 1,092,083 848,996		0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00
29.5 30.5 31.5 32.5 33.5 34.5 35.5 36.5 37.5 38.5	707,847 486,376 423,066 304,234 202,714 151,151 106,394 76,668 38,389 35,638	2,444	0.0000 0.0000 0.0000 0.0000 0.0121 0.0000 0.0000 0.0000	1.0000 1.0000 1.0000 0.9879 1.0000 1.0000 1.0000 1.0000	100.00 100.00 100.00 100.00 100.00 98.79 98.79 98.79 98.79 98.79

ACCOUNT 385.00 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT ORIGINAL LIFE TABLE, CONT.

PLACEMENT	BAND 1970-2020		EXPER	RIENCE BAN	D 2005-2020
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5 40.5 41.5 42.5 43.5 44.5 45.5 46.5 47.5 48.5	17,894 15,431 9,035 7,298 7,298 7,298 7,298 7,298 7,298		0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	98.79 98.79 98.79 98.79 98.79 98.79 98.79 98.79 98.79
49.5	7,298		0.0000	1.0000	98.79 98.79

120 ORIGINAL CURVE = 2005-2020 EXPERIENCE 1962-2020 PLACEMENTS 100 8 60 AGE IN YEARS **IOWA 35-R3** 4 20 اه 7 30-10-9 8 20 РЕКСЕИТ ЅИВУІУІИĠ

FLORIDA CITY GAS ACCOUNT 387.00 OTHER EQUIPMENT ORIGINAL AND SMOOTH SURVIVOR CURVES

ACCOUNT 387.00 OTHER EQUIPMENT

PLACEMENT :	BAND 1962-2020		EXPER	RIENCE BAN	D 2005-2020
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0 0.5 1.5 2.5 3.5 4.5 5.5 6.5 7.5	1,406,947 1,419,037 1,422,435 1,024,931 1,024,121 684,461 624,274 551,892 551,892 551,892		0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00
9.5 10.5 11.5 12.5 13.5 14.5 15.5 16.5 17.5	551,893 554,025 366,902 150,486 72,017 78,579 21,426 19,269 16,562 17,298	3,670 18,187 692	0.0000 0.0066 0.0000 0.1209 0.0096 0.0000 0.0000 0.0000	1.0000 0.9934 1.0000 0.8791 0.9904 1.0000 1.0000 1.0000	100.00 100.00 99.34 99.34 87.33 86.49 86.49 86.49 86.49
19.5 20.5 21.5 22.5 23.5 24.5 25.5 26.5 27.5 28.5	17,298 42,182 42,951 54,593 56,972 58,463 63,372 106,187 105,038 109,245	2,132 3,382 4,310 1,011	0.0000 0.0000 0.0000 0.0391 0.0000 0.0534 0.0406 0.0096 0.0000	1.0000 1.0000 1.0000 0.9609 1.0000 1.0000 0.9466 0.9594 0.9904 1.0000	86.49 86.49 86.49 83.12 83.12 83.12 78.68 75.49 74.76
29.5 30.5 31.5 32.5 33.5 34.5 35.5 36.5 37.5 38.5	110,296 107,893 106,573 108,235 87,395 88,382 82,125 85,055 85,933 84,388	3,520 24,884 769 11,642 4,511 1,491 4,909 46,198	0.0000 0.0326 0.0000 0.2299 0.0088 0.1317 0.0549 0.0175 0.0571 0.5474	1.0000 0.9674 1.0000 0.7701 0.9912 0.8683 0.9451 0.9825 0.9429 0.4526	74.76 74.76 72.32 72.32 55.69 55.20 47.93 45.30 44.51 41.96

ACCOUNT 387.00 OTHER EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT I	BAND 1962-2020		EXPER	RIENCE BAN	D 2005-2020
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5 40.5 41.5 42.5 43.5 44.5 45.5 46.5 47.5 48.5	38,191 35,030 29,812 30,856 30,315 28,115 26,454 22,410 20,653 15,269	3,161 5,218 1,050 541 2,200 1,662 4,044 1,757 5,384 7,442	0.0175 0.0726 0.0591 0.1529 0.0784	0.9172 0.8510 0.9648 0.9825 0.9274 0.9409 0.8471 0.9216 0.7393 0.5126	18.99 17.42 14.82 14.30 14.05 13.03 12.26 10.39 9.57 7.08
49.5 50.5 51.5 52.5 53.5 54.5	7,827 5,459 2,095 2,095 2,095 2,095	2,369 3,364 2,095		0.6974 0.3837 1.0000 1.0000	3.63 2.53 0.97 0.97 0.97



55.5

ORIGINAL CURVE **2005-2020** EXPERIENCE 1962-2018 PLACEMENTS 100 ACCOUNT 390.00 STRUCTURES AND IMPROVEMENTS 8 ORIGINAL AND SMOOTH SURVIVOR CURVES FLORIDA CITY GAS AGE IN YEARS OWA 30-S0.5 4 20 اه 7 30-10-9 8 20 20 РЕВСЕИТ SURVIVING

GANNETT FLEMING

ACCOUNT 390.00 STRUCTURES AND IMPROVEMENTS

PLACEMENT 1	BAND 1962-2018		EXPE	RIENCE BAN	D 2005-2020
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0 0.5 1.5 2.5 3.5 4.5 5.5 6.5 7.5	12,011,222 12,389,365 11,961,099 11,391,681 11,505,081 5,266,924 5,136,059 5,246,528 3,500,647 3,214,096	2,792 60,483 5,949 221,985	0.0000 0.0000 0.0000 0.0000 0.0000 0.0005 0.0118 0.0011 0.0000 0.0691	1.0000 1.0000 1.0000 1.0000 0.9995 0.9882 0.9989 1.0000 0.9309	100.00 100.00 100.00 100.00 100.00 100.00 99.95 98.77 98.66 98.66
9.5 10.5 11.5 12.5 13.5 14.5 15.5 16.5 17.5 18.5	2,943,995 623,475 1,294,384 1,122,425 1,094,879 1,131,931 1,287,185 1,285,553 1,260,933 1,071,785	450 39,739 5,236 9,339 715 3,763 80,099 23,667	0.0637 0.0000 0.0003 0.0354 0.0048 0.0083 0.0006 0.0029 0.0635 0.0221	0.9363 1.0000 0.9997 0.9646 0.9952 0.9917 0.9994 0.9971 0.9365 0.9779	91.84 85.99 85.99 85.96 82.92 82.52 81.84 81.79 81.55 76.37
19.5 20.5 21.5 22.5 23.5 24.5 25.5 26.5 27.5 28.5	988,011 948,147 824,718 789,119 126,809 37,392 32,461 29,747 27,691 21,976	42,357 104,947 5,525 6,718 2,714 2,056 7,694 2,597	0.0429 0.1107 0.0000 0.0000 0.0436 0.1797 0.0836 0.0691 0.2778 0.1182	0.9571 0.8893 1.0000 1.0000 0.9564 0.8203 0.9164 0.9309 0.7222 0.8818	74.69 71.48 63.57 63.57 63.57 60.80 49.88 45.71 42.55 30.73
29.5 30.5 31.5 32.5 33.5 34.5 35.5 36.5 37.5 38.5	19,379 9,443 9,550 10,215 28,205 42,221 50,843 53,315 76,164 76,602	10,476 543 755 2,013 797 504 4,784 20,311	0.5406 0.0575 0.0000 0.0739 0.0714 0.0000 0.0157 0.0095 0.0628 0.2651	0.4594 0.9425 1.0000 0.9261 0.9286 1.0000 0.9843 0.9905 0.9372 0.7349	27.10 12.45 11.73 11.73 10.87 10.09 10.09 9.93 9.84 9.22

ACCOUNT 390.00 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1962-2018 EXPERIENCE BAND 2005-202								
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL			
39.5 40.5 41.5 42.5 43.5 44.5 45.5 46.5 47.5 48.5	123,738 157,780 151,134 359,607 351,682 351,386 338,835 289,208 285,762 19,125	15,596 10,092 57,372 7,925 295 12,552 49,626 3,446 265,845	0.0220 0.0008 0.0357 0.1465 0.0119 0.9303 0.0000	0.8740 0.9360 0.6204 0.9780 0.9992 0.9643 0.8535 0.9881 0.0697 1.0000	6.78 5.92 5.54 3.44 3.36 3.36 3.24 2.77 2.73 0.19			
50.5 51.5 52.5	12 12		0.0000	1.0000	0.19 0.19 0.19			



9 ORIGINAL CURVE ■ 2005-2020 EXPERIENCE 1985-2018 PLACEMENTS 20 40 AGE IN YEARS **JOWA 10-L2.5** 9 _0 7 30-10-9 8 20 40 20 РЕВСЕИТ ЗИВУІУІИС

ACCOUNT 392.00 TRANSPORTATION EQUIPMENT ORIGINAL AND SMOOTH SURVIVOR CURVES

ACCOUNT 392.00 TRANSPORTATION EQUIPMENT

PLACEMENT 1	BAND 1985-2018		EXPER	RIENCE BAN	D 2005-2020
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0 0.5 1.5 2.5 3.5 4.5 5.5 6.5 7.5	1,512,734 1,769,296 2,044,233 1,659,717 1,805,971 2,729,199 3,067,535 3,302,022 2,699,177 1,904,349	4,361 6,021 35,238 45,826 68,561 191,737 193,928 823,401 812,411 195,576	0.0029 0.0034 0.0172 0.0276 0.0380 0.0703 0.0632 0.2494 0.3010 0.1027	0.9971 0.9966 0.9828 0.9724 0.9620 0.9297 0.9368 0.7506 0.6990 0.8973	100.00 99.71 99.37 97.66 94.96 91.36 84.94 79.57 59.73 41.75
9.5 10.5 11.5 12.5 13.5 14.5 15.5 16.5 17.5	1,705,071 1,906,399 1,250,660 910,689 536,875 345,827 328,244 300,140 295,519 277,866	146,853 740,448 324,427 330,071 168,933 17,583 23,525 4,621 17,653 26,117	0.0861 0.3884 0.2594 0.3624 0.3147 0.0508 0.0717 0.0154 0.0597 0.0940	0.9139 0.6116 0.7406 0.6376 0.6853 0.9492 0.9283 0.9846 0.9403 0.9060	37.46 34.24 20.94 15.51 9.89 6.78 6.43 5.97 5.88 5.53
19.5 20.5 21.5 22.5 23.5 24.5 25.5 26.5 27.5 28.5	276,270 276,270 276,270 24,520 24,520 24,520 24,520 24,520 24,520 24,520	251,750	0.0000 0.0000 0.9112 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	1.0000 1.0000 0.0888 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	5.01 5.01 5.01 0.44 0.44 0.44 0.44 0.44 0.44
29.5 30.5 31.5	24,520 24,520	24,520	0.0000	1.0000	0.44

ORIGINAL CURVE ■ 2005-2020 EXPERIENCE 1996-2019 PLACEMENTS 25 ACCOUNT 392.10 TRANSPORTATION EQUIPMENT - AUTOS AND LIGHT TRUCKS 20 ORIGINAL AND SMOOTH SURVIVOR CURVES FLORIDA CITY GAS 15 AGE IN YEARS **IOWA 9-S2** 9 _|0 7 30-10-9 8 20 РЕВСЕИТ SURVIVING

ACCOUNT 392.10 TRANSPORTATION EQUIPMENT - AUTOS AND LIGHT TRUCKS

PLACEMENT BAND 1996-2019 EXPERIENCE BAND 2005-2							
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL		
0.0 0.5 1.5 2.5 3.5 4.5 5.5 6.5 7.5 8.5	2,957,989 3,051,987 2,984,070 2,008,562 2,163,397 2,604,076 2,813,859 2,770,478 2,164,125 1,541,337	29,251 45,274 36,881 105,344 185,679 660,690 607,597 185,098	0.0000 0.0000 0.0098 0.0225 0.0170 0.0405 0.0660 0.2385 0.2808 0.1201	1.0000 1.0000 0.9902 0.9775 0.9830 0.9595 0.9340 0.7615 0.7192 0.8799	100.00 100.00 100.00 99.02 96.79 95.14 91.29 85.27 64.93 46.70		
9.5 10.5 11.5 12.5 13.5 14.5 15.5	1,356,239 1,297,779 790,410 522,220 207,359 38,426 20,843	140,793 629,134 268,190 314,861 168,933 17,583 20,843	0.1038 0.4848 0.3393 0.6029 0.8147 0.4576 1.0000	0.8962 0.5152 0.6607 0.3971 0.1853 0.5424	41.09 36.83 18.97 12.54 4.98 0.92 0.50		



ORIGINAL CURVE ■ 2005-2020 EXPERIENCE 2009-2019 PLACEMENTS 25 ACCOUNT 392.20 TRANSPORTATION EQUIPMENT - SERVICE TRUCKS 2 ORIGINAL AND SMOOTH SURVIVOR CURVES FLORIDA CITY GAS 15 AGE IN YEARS IOWA 10-L3 9 اه 1001 7 30-10-9 8 20 РЕВСЕИТ SURVIVING

ANNETT FLEMING

ACCOUNT 392.20 TRANSPORTATION EQUIPMENT - SERVICE TRUCKS

PLACEMENT	BAND 2009-2019		EXPER	RIENCE BAN	D 2005-2020
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0 0.5 1.5 2.5 3.5 4.5 5.5 6.5 7.5 8.5	3,114,192 3,114,192 2,913,090 2,718,205 2,718,205 1,535,026 699,851 223,491 114,792 82,236	30,947 95,105 68,897 32,705	0.0000 0.0000 0.0000 0.0000 0.0114 0.0620 0.0000 0.3083 0.0000 0.3977	1.0000 1.0000 1.0000 1.0000 0.9886 0.9380 1.0000 0.6917 1.0000 0.6023	100.00 100.00 100.00 100.00 100.00 98.86 92.74 92.74 64.15 64.15
9.5	0_,_0	0_,	-		38.64

ORIGINAL CURVE ■ 2005-2020 EXPERIENCE 2009-2018 PLACEMENTS 25 ACCOUNT 392.30 TRANSPORTATION EQUIPMENT - HEAVY IRUCKS 20 ORIGINAL AND SMOOTH SURVIVOR CURVES IQWA 13-L3 FLORIDA CITY GAS 15 AGE IN YEARS 9 اه 1001 7 30-10-9 8 20 РЕВСЕИТ ЗИВУІУІИС

ACCOUNT 392.30 TRANSPORTATION EQUIPMENT - HEAVY TRUCKS

PLACEMENT	BAND 2009-2018		EXPER	RIENCE BAN	D 2005-2020
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0 0.5 1.5 2.5 3.5 4.5 5.5 6.5 7.5 8.5	863,717 863,717 776,644 310,203 310,203 310,203 310,203 310,203 310,203		0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00
9.5 10.5 11.5	310,203 106,652		0.0000	1.0000	100.00 100.00 100.00



ORIGINAL CURVE 2016-2016 PLACEMENTS 20 ACCOUNT 394.10 NATURAL GAS VEHICLE EQUIPMENT 40 ORIGINAL AND SMOOTH SURVIVOR CURVES **IOWA 20-S4** FLORIDA CITY GAS AGE IN YEARS 20 9 اه 7 30-10-9 8 20 РЕВСЕИТ SURVIVING

A GANNETT FLEMING

ACCOUNT 394.10 NATURAL GAS VEHICLE EQUIPMENT

PLACEMENT	BAND 2016-2016		EXPEF	RIENCE BAN	D 2010-2020
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0 0.5 1.5 2.5 3.5 4.5	1,569,876 1,569,876 1,564,203 1,564,203 1,564,203	5,673	0.0000 0.0036 0.0000 0.0000	1.0000 0.9964 1.0000 1.0000	100.00 100.00 99.64 99.64 99.64 99.64

ORIGINAL CURVE **2009-2020** EXPERIENCE 2007-2018 PLACEMENTS 20 ACCOUNT 396.00 POWER OPERATED EQUIPMENT 40 ORIGINAL AND SMOOTH SURVIVOR CURVES FLORIDA CITY GAS AGE IN YEARS IOWA 15-L2.5 20 9 اه 7 30-10-9 8 20 РЕВСЕИТ SURVIVING

ANNETT FLEMING

ACCOUNT 396.00 POWER OPERATED EQUIPMENT

PLACEMENT	BAND 2007-2018		EXPER	RIENCE BAN	D 2009-2020
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0 0.5 1.5 2.5 3.5 4.5 5.5 6.5 7.5 8.5	215,948 215,948 215,948 159,719 131,329 131,329 48,854 48,854 48,854		0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00
9.5 10.5 11.5	64,979 21,948	16,124	0.2481	0.7519 1.0000	100.00 75.19 75.19

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PART VIII. NET SALVAGE STATISTICS



ACCOUNT 375.00 STRUCTURES AND IMPROVEMENTS

SUMMARY OF BOOK SALVAGE

	REGULAR	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
YEAR	RETIREMENTS	AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
2009	5,067		0		0		0
2010	177,684		0		0		0
2011							
2012							
2013							
2014							
2015							
2016 2017	189,259		0		0		0
2017	109,239		U		U		U
2010							
2020							
2020							
TOTAL	372,010		0		0		0
THREE-YE	AR MOVING AVERAGES	5					
09-11	60,917		0		0		0
10-12	59 , 228		0		0		0
11-13							
12-14							
13-15							
14-16							
15-17	63,086		0		0		0
16-18	63,086		0		0		0
17-19	63,086		0		0		0
18-20							
FIVE-YEA	R AVERAGE						
16-20	37 , 852		0		0		0
10-20	31,032		O		U		U



ACCOUNT 376.10 MAINS - STEEL

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
				711100111			
2004	26,454	76,167	288		0	76,167-	
2005	40,928	94,500	231		0	94,500-	
2006	5,112	1,299	25		0	1,299-	
2007	623	13	2		0	13-	
2008	2,494	154	6		0	154-	
2009	218,494	122,501	56		0	122,501-	56-
2010		7,135				7,135-	
2011	10	185,087			0	185,087-	
2012		76,473			0	76,473-	
2013	122,453	307,247	251		0	307,247-	251-
2014	387,084	872 , 367	225		0	872 , 367-	
2015	78 , 556	723 , 088	920		0	723,088-	920-
2016	155,495	99,636	64		0	99,636-	64-
2017	417,162	234,736	56		0	234,736-	56-
2018	415,964	2,632,930	633		0	2,632,930-	633-
2019	886,990	802,170	90		0	802,170-	90-
2020	226,376	438,370	194	34,551	15	403,819-	178-
TOTAL	2,984,195	6,673,872	224	34,551	1	6,639,321-	222-
THREE-YE.	AR MOVING AVERAGE	ES					
04-06	24,165	57 , 322	237		0	57,322-	237-
05-07	15,554	31,937	205		0	31,937-	
06-08	2,743	489	18		0		18-
07-09	73,870	40,889	55		0	40,889-	55-
08-10	73,663	43,263	59		0	43,263-	59-
09-11	72,835	104,908	144		0	104,908-	144-
10-12	3	89,565			0	89,565-	
11-13	40,821	189,602	464		0	189,602-	464-
12-14	169,846	418,696	247		0	418,696-	247-
13-15	196,031	634,234	324		0	634,234-	
14-16	207,045	565,030	273		0	565,030-	
15-17	217,071	352 , 487			0	352,487-	
16-18	329,540	989,100	300		0	989,100-	
17-19	573 , 372	1,223,278			0	1,223,278-	
18-20	509 , 777	1,291,157		11,517	2	1,279,640-	
D-110							
F.TAE-AEY	R AVERAGE						
16-20	420,398	841,568	200	6,910	2	834,658-	199-

ACCOUNT 376.20 MAINS - PLASTIC

SUMMARY OF BOOK SALVAGE

		COST OF		GROSS	NET	
77E 3 D	REGULAR	REMOVAL	ъст	SALVAGE	SALVAGE	ъсш
YEAR	RETIREMENTS	AMOUNT	PCT	AMOUNT PCT	AMOUNT	PCT
2004	5,306		116	0	6,158-	
2005	4,549	22,401	492	0	22,401-	492-
2006	569		0	0		0
2007	18,000	3,163	18	0	3,163-	18-
2008	15,393	846	5	0	846-	5 -
2009	240,406	82 , 367	34	0	82,367-	34-
2010	101,881	38,724	38	0	38,724-	38-
2011	178,432	20,292	11	0	20,292-	11-
2012	160,381	49,856	31	0	49,856-	31-
2013	20,424	18,771	92	0	18,771-	92-
2014	245,078	401,505	164	0	401,505-	164-
2015	149,715	313,201	209	0	313,201-	209-
2016	23,082	31,803	138	0	31,803-	138-
2017	207,801	65,084	31	0	65,084-	31-
2018	105,641	591,461	560	0	591,461-	560-
2019	178,701	550,020	308	0	550,020-	308-
2020	697,058	218,440	31	0	218,440-	31-
TOTAL	2,352,417	2,414,091	103	0	2,414,091-	103-
THREE-YE	AR MOVING AVERAG	ES				
04-06	3,475	9,520	274	0	9,520-	274-
05-07	7,706	8,521		0	8,521-	111-
06-08	11,321	1,336	12	0	1,336-	
07-09	91,266	28,792		0	28,792-	32-
08-10	119,227	40,646	34	0	40,646-	34-
09-11	173 , 573	47,128	27	0	47,128-	27-
10-12	146,898	36,291	25	0	36,291-	25-
11-13	119,746	29,640	25	0	29,640-	25-
12-14	141,961	156 , 711	110	0	156,711-	110-
13-15	138,406	244,492	177	0	244,492-	177-
14-16	139,292	248,836	179	0	248,836-	179-
15-17	126,866	136,696	108	0	136,696-	108-
16-18	112,175	229,449	205	0	229,449-	205-
17-19	164,048	402,188	245	0	402,188-	245-
18-20	327,133	453,307	139	0	453,307-	139-
FIVE-YEA	R AVERAGE					
16-20	242,457	291,361	120	0	291,361-	120-

VIII-4

ACCOUNTS 378.00 AND 379.00 MEASURING AND REGULATING STATION EQUIPMENT

SUMMARY OF BOOK SALVAGE

	REGULAR	COST OF REMOVAL		GROSS SALVAGE	NET SALVAGE	
YEAR	REGULAR	AMOUNT	PCT	AMOUNT PC		PCT
2010	533		0		0	0
2011						
2012						
2013						
2014		5 , 518			5,518-	
2015						
2016						
2017	11,007		0		0	0
2018		30 , 372			30,372-	
2019		15 , 317			15,317-	
2020	165,636	202,883	122		202,883-	122-
TOTAL	177,176	254,089	143		254,089-	143-
THREE-YE	AR MOVING AVERAGE	IS				
10-12	178		0		0	0
11-13						
12-14		1,839			1,839-	
13-15		1,839			1,839-	
14-16		1,839			1,839-	
15-17	3,669		0		0	0
16-18	3,669	10,124	276		10,124-	276-
17-19	3,669	15,229	415		15,229-	415-
18-20	55,212	82 , 857	150		82,857-	150-
FTVE-YEA	R AVERAGE					
16-20	35 , 329	49,714	141		49,714-	141-



ACCOUNT 380.10 SERVICES - STEEL

		COST OF		GROSS	NET	
	REGULAR	REMOVAL	D.O.E.	SALVAGE	SALVAGE	Dam
YEAR	RETIREMENTS	AMOUNT	PCT	AMOUNT PCT	AMOUNT	PCT
2004	83,845	121,357	145	0	121,357-	145-
2005	73,240	322,357	440	0	322,357-	440-
2006	66,937	322,165	481	0	322,165-	481-
2007	120,203	92,233	77	0	92,233-	77-
2008	150,609	32,190	21	0	32,190-	21-
2009	1,784	199,385		0	199,385-	
2010	144,869	194,380	134	0	194,380-	134-
2011	110,594	308,448	279	0	308,448-	279-
2012	393,335	262,809	67	0	262,809-	67-
2013	64,094	210,100	328	0	210,100-	328-
2014	250,216	1,011,257	404	0	1,011,257-	404-
2015	91,057	665,105	730	0	665,105-	730-
2016	83,159	740,845	891	0	740,845-	891-
2017	80 , 292	116,297	145	0	116,297-	145-
2018	19,518	467,584		0	467,584-	
2019		158,315			158,315-	
2020	14,900	33,612	226	0	33,612-	226-
TOTAL	1,748,653	5,258,440	301	0	5,258,440-	301-
THREE-YE.	AR MOVING AVERAG	ES				
04-06	74,674	255,293	342	0	255,293-	342-
05-07	86,793	245,585		0	245,585-	
06-08	112,583	148,863		0	148,863-	
07-09	90,865	107,936		0	107,936-	
08-10	99,087	141,985		0	141,985-	
09-11	85,749	234,071		0	234,071-	
10-12	216,266	255,212		0	255,212-	
11-13	189,341	260,452		0	260,452-	
12-14	235,882	494,722		0	494,722-	
13-15	135,122	628,821		0	628,821-	
14-16	141,477	805 , 736		0	805,736-	
15-17	84,836	507,416		0	507,416-	
16-18	60,990	441,576		0	441,576-	
17-19	33,270	247,399	744	0	247,399-	
18-20	11,473	219,837		0	219,837-	
FIVE-YEA	R AVERAGE					
16-20	39,574	303,331	766	0	303,331-	766-

ACCOUNT 380.20 SERVICES - PLASTIC

		COST OF		GROSS		NET	
	REGULAR	REMOVAL	D.C.E.	SALVAGE		SALVAGE	D.C.E.
YEAR	RETIREMENTS	AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
2004	123,390	43,902	36		0	43,902-	36-
2005	108,270		48		0	52 , 306-	48-
2006	99,296	23,645	24		0	23,645-	24-
2007	173,541	25 , 776	15		0	25,776-	15-
2008	92 , 757	6,886	7		0	6,886-	7 –
2009	51,758	348,834	674		0	348,834-	674-
2010	47,110	344,184	731		0	344,184-	731-
2011	67,117	355,219	529		0	355,219-	529-
2012	97,205	520,338	535		0	520,338-	535 -
2013	154,751	231,007	149		0	231,007-	149-
2014	548,105	1,528,161	279		0	1,528,161-	279-
2015	233,113	5,450,406			0	5,450,406-	
2016	201,300	188,523	94		0	188,523-	94-
2017	238,956	708,581	297		0	708,581-	297-
2018	63,181	1,299,711			0	1,299,711-	
2019	9,652	621,923			0	621,923-	
2020	40,499	443,089		803	2	442,286-	
TOTAL	2,350,001	12,192,490	519	803	0	12,191,688-	519-
THREE-YE	AR MOVING AVERAG	GES					
04-06	110,319	39,951	36		0	39,951-	36-
05-07	127,036	33,909	27		0	33,909-	27-
06-08	121,865	18,769	15		0	18,769-	15-
07-09	106,019	127,165	120		0	127,165-	120-
08-10	63 , 875	233,301			0	233,301-	365-
09-11	55,328	349,412	632		0	349,412-	632-
10-12	70,477	406,580	577		0	406,580-	577 -
11-13	106,358	368,855	347		0	368,855-	347-
12-14	266,687	759 , 835	285		0	759 , 835-	285-
13-15	311,990	2,403,191	770		0	2,403,191-	770-
14-16	327,506	2,389,030	729		0	2,389,030-	729-
15-17	224,456	2,115,836	943		0	2,115,836-	943-
16-18	167,812	732,272	436		0	732,272-	436-
17-19	103,930	876 , 738	844		0	876,738-	844-
18-20	37 , 777	788,241		268	1	787,973-	
FIVE-YEA	R AVERAGE						
16-20	110,718	652,365	589	161	0	652,205-	589-

ACCOUNTS 381.00 AND 381.10 METERS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
2004	1,169,680		0	173	0	173	0
2005	214,359		0		0		0
2006	707,940		0		0		0
2007	218,445	7,155	3		0	7,155-	3-
2008	732,668		0		0		0
2009	1,064,666	65,282	6		0	65,282-	6-
2010	1,325,335	13,627	1		0	13,627-	1-
2011	918,646	3,510	0		0	3,510-	0
2012	400,207	28,219	7		0	28,219-	7-
2013	536,096	21,630	4		0	21,630-	4 –
2014	601,989	101,242	17		0	101,242-	17-
2015	796,970	112,402	14		0	112,402-	14-
2016	572 , 229	1,976	0		0	1,976-	0
2017	1,347,195	1,747	0		0	1,747-	0
2018	1,751,757	1,609	0		0	1,609-	0
2019	1,374,062	2,397	0		0	2,397-	0
2020	1,907,981	5,037	0		0	5,037-	0
TOTAL	15,640,226	365,835	2	173	0	365,662-	2-
THREE-YE	AR MOVING AVERAGE	ES					
04-06	697,326		0	58	0	58	0
05-07	380,248	2,385	1		0	2,385-	1-
06-08	553,018	2,385	0		0	2,385-	0
07-09	671 , 926	24,146	4		0	24,146-	4 –
08-10	1,040,890	26,303	3		0	26,303-	3-
09-11	1,102,882	27,473	2		0	27,473-	2-
10-12	881,396	15,119	2		0	15,119-	2-
11-13	618,316	17,786	3		0	17,786-	3-
12-14	512,764	50,364	10		0	50,364-	10-
13-15	645,018	78 , 425	12		0	78,425-	12-
14-16	657 , 063	71,873	11		0	71,873-	11-
15-17	905,465	38,708	4		0	38,708-	4 –
16-18	1,223,727	1,778	0		0	1,778-	0
17-19	1,491,005	1,918	0		0	1,918-	0
18-20	1,677,933	3,015	0		0	3,015-	0
FTVE-VEA	R AVERAGE						
			_		_		-
16-20	1,390,645	2,554	0		0	2,554-	0

VIII-8

ACCOUNT 382.00 METER INSTALLATIONS

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT PCT	NET SALVAGE AMOUNT	PCT
2004	31,994	10,857	34	0	10,857-	34-
2005	66,997	22,466	34	0	22,466-	34-
2006	9,632		0	0		0
2007	346	54	16	0	54-	16-
2008						
2009	13,770		0	0		0
2010	16,568		0	0		0
2011						
2012	78		0	0		0
2013						
2014	90	49,949		0	49,949-	
2015						
2016	192,831		0	0		0
2017	806,152	521	0	0	521-	0
2018	39,479	33	0	0	33-	0
2019						
2020						
TOTAL	1,177,937	83,881	7	0	83,881-	7-
THREE-YE	AR MOVING AVERAG	ES				
04-06	36,208	11,108	31	0	11,108-	31-
05-07	25,658	7,507	29	0	7,507-	
06-08	3,326	18	1	0	18-	
07-09	4,705	18	0	0	18-	0
08-10	10,113		0	0		0
09-11	10,113		0	0		0
10-12	5,549		0	0		0
11-13	26		0	0		0
12-14	56	16,650		0	16,650-	
13-15	30	16,650		0	16,650-	
14-16	64,307	16,650	26	0	16,650-	26-
15-17	332,994	174	0	0	174-	0
16-18	346,154	185	0	0	185-	0
17-19	281 , 877	185	0	0	185-	0
18-20	13,160	11	0	0	11-	0
FIVE-YEA	R AVERAGE					
		444	^	_	444	^
16-20	207,692	111	0	0	111-	0

ACCOUNT 382.10 METER INSTALLATIONS - ERT

	REGULAR	COST O REMOVA		GROSS SALVAG		NET SALVAGE]
YEAR	RETIREMENTS	AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
2018 2019 2020	231,450		0		0		0
TOTAL	231,450		0		0		0
THREE-YE	CAR MOVING AVERAGES	5					
18-20	77,150		0		0		0

ACCOUNT 383.00 HOUSE REGULATORS

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT PCT	NET SALVAGE AMOUNT	PCT
2004	83 , 570		0	0		0
2005	249,391		0	0		0
2006						
2007						
2008						
2009	203,651	1,616	1	0	1,616-	1-
2010	49,496	98	0	0	98-	0
2011	57 , 961	209	0	0	209-	0
2012	19,183	4,764	25	0	4,764-	25-
2013	14,861	4,245	29	0	4,245-	29-
2014	15,473	1,468	9	0	1,468-	9-
2015	17,412	16,455	95	0	16,455-	95-
2016	4,481	170	4	0	170-	4 –
2017	818	165	20	0	165-	20-
2018	15,808		0	0		0
2019	43		0	0		0
2020	1,113		0	0		0
TOTAL	733,261	29,190	4	0	29,190-	4 –
THREE-YE	AR MOVING AVERAG	ES				
04-06	110,987		0	0		0
05-07	83,130		0	0		0
06-08						
07-09	67,884	539	1	0	539-	1-
08-10	84,382	571	1	0	571-	1-
09-11	103,703	641	1	0	641-	1-
10-12	42,213	1,690	4	0	1,690-	4 -
11-13	30,668	3,073	10	0	3,073-	10-
12-14	16,506	3,492	21	0	3,492-	21-
13-15	15 , 915	7,389	46	0	7,389-	46-
14-16	12,456	6,031	48	0	6,031-	48-
15-17	7 , 571	5 , 597	74	0	5 , 597-	74-
16-18	7,036	112	2	0	112-	2-
17-19	5 , 556	55	1	0	55-	1-
18-20	5,655		0	0		0
FIVE-YEA	R AVERAGE					
16-20	4,453	67	2	0	67-	2-

ACCOUNT 384.00 HOUSE REGULATOR INSTALLATIONS

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
2004	16,871		0		0		0
2005	16,148	240-	1-		0	240	1
2006							
2007							
2008							
2009	9,634		0		0		0
2010	373		0		0		0
2011							
2012							
2013							
2014							
2015							
2016							
2017		147				147-	
2018							
2019							
2020							
TOTAL	43,026	93-	0		0	93	0
THREE-YE	AR MOVING AVERAGE	ES					
04-06	11,006	80-	1-		0	80	1
05-07	5 , 383	80-	1-		0	80	1
06-08	,						
07-09	3,211		0		0		0
08-10	3,336		0		0		0
09-11	3,336		0		0		0
10-12	124		0		0		0
11-13							
12-14							
13-15							
14-16							
15-17		49				49-	
16-18		49				49-	
17-19		49				49-	
18-20							
FIVE-YEAR	R AVERAGE						
16-20		29				29-	

ACCOUNT 385.00 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT

	REGULAR	COST O REMOVA		GROSS SALVAG		NET SALVAGE	G.
YEAR	RETIREMENTS	AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
2017 2018 2019 2020	2,444		0		0		0
TOTAL	2,444		0		0		0
THREE-YE	CAR MOVING AVERAGES	5					
17-19 18-20	815		0		0		0

ACCOUNT 387.00 OTHER EQUIPMENT

	REGULAR	COST OF REMOVAL		GROSS SALVAG	E	NET SALVAGE	202
YEAR	RETIREMENTS	AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
2014		758				758-	
2015							
2016							
2017	171 , 592		0		0		0
2018							
2019							
2020							
TOTAL	171,592	758	0		0	758-	0
THREE-YE	AR MOVING AVERAGE	S					
14-16		253				253-	
15-17	57 , 197		0		0		0
16-18	57,197		0		0		0
17-19	57 , 197		0		0		0
18-20							
FIVE-YEA	R AVERAGE						
16-20	34,318		0		0		0



ACCOUNT 390.00 STRUCTURES AND IMPROVEMENTS

		COST OF		GROSS		NET	
	REGULAR	REMOVAL		SALVAGE		SALVAGE	
YEAR	RETIREMENTS	AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
2007	362,550		0		0		0
2008							
2009							
2010	861,652		0		0		0
2011							
2012							
2013							
2014							
2015							
2016							
2017	55 , 234		0		0		0
2018							
2019		18,664				18,664-	
2020		46,993				46,993-	
TOTAL	1,279,436	65,657	5		0	65,657-	5-
THREE-YE	AR MOVING AVERAG	ES					
07-09	120,850		0		0		0
08-10	287,217		0		0		0
09-11	287,217		0		0		0
10-12	287,217		0		0		0
11-13							
12-14							
13-15							
14-16							
15-17	18,411		0		0		0
16-18	18,411		0		0		0
17-19	18,411	6,221	34		0	6,221-	34-
18-20		21,886				21,886-	
FIVE-YEA	R AVERAGE						
16-20	11,047	13,131	119		0	13,131-	119-

ACCOUNTS 392.00 THROUGH 392.30 TRANSPORTATION EQUIPMENT

		COST OF		GROSS		NET	
YEAR	REGULAR RETIREMENTS	REMOVAL AMOUNT	PCT	SALVAGE AMOUNT	PCT	SALVAGE AMOUNT	PCT
2004	165,270		0	24,854	15	24,854	15
2005	551,951		0	21,001	0	21,001	0
2006	11,853		0	30,084	254	30,084	254
2007	,			68,784		68,784	
2008	18,708		0	4,000	21	4,000	21
2009	179,584		0	8,000	4	8,000	4
2010	308,039		0	27,070	9	27,070	9
2011	1,724,433		0	58,326	3	58,326	3
2012	221,831		0	35 , 785	16	35 , 785	16
2013	136,569		0	6,804	5	6,804	5
2014	76 , 828		0		0		0
2015	157 , 861		0	32 , 530	21	32,530	21
2016	463,703		0	57 , 501	12	57 , 501	12
2017	36,940		0	10,530	29	10,530	29
2018	32,705		0		0		0
2019							
2020							
TOTAL	4,086,275		0	364,268	9	364,268	9
THREE-YE	AR MOVING AVERAG	ES					
04-06	243,025		0	18,313	8	18,313	8
05-07	187,935		0	32,956	18	32,956	18
06-08	10,187		0	34,289	337	34,289	337
07-09	66,097		0	26,928	41	26,928	41
08-10	168,777		0	13,023	8	13,023	8
09-11	737,352		0	31,132	4	31,132	4
10-12	751 , 434		0	40,394	5	40,394	5
11-13	694,278		0	33,638	5	33,638	5
12-14	145,076		0	14,196	10	14,196	10
13-15	123,753		0	13,111	11	13,111	11
14-16	232,797		0	30,010	13	30,010	13
15-17	219,501		0	33,520	15	33,520	15
16-18	177,783		0	22,677	13	22,677	13
17-19	23,215		0	3,510	15	3,510	15
18-20	10,902		0		0		0
FIVE-YEA	R AVERAGE						
16-20	106,670		0	13,606	13	13,606	13

ACCOUNT 394.10 NATURAL GAS VEHICLE EQUIPMENT

	REGULAR	COST O		GROSS SALVAG		NET SALVAGE	
YEAR	RETIREMENTS	AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
2017 2018 2019 2020	5 , 673		0		0		0
TOTAL	5,673		0		0		0
THREE-YE	CAR MOVING AVERAGE	S					
17-19 18-20	1,891		0		0		0

ACCOUNT 396.00 POWER OPERATED EQUIPMENT

	REGULAR	COST O		GROSS SALVAG		NET SALVAGE	
YEAR	RETIREMENTS	AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
2017 2018 2019 2020	16,124		0		0		0
TOTAL	16,124		0		0		0
THREE-YE	CAR MOVING AVERAGES	5					
17-19 18-20	5 , 375		0		0		0

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PART IX. DETAILED DEPRECIATION CALCULATIONS



ACCOUNT 375.00 STRUCTURES AND IMPROVEMENTS

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	ANNUAL RATE (4)	ACCRUAL AMOUNT (5)	REM. LIFE (6)	FUTURE FACTOR (7)	ACCRUALS AMOUNT (8)
SURVIVOR	CURVE IOWA	35-R4					
1975	596.16	35.00	2.86	17.05	1.26	0.0360	21
1989	4,728.88	35.00	2.86	135.25	5.87	0.1677	793
1997	2,057.37	35.00	2.86	58.84	11.20	0.3200	658
1998	395.23	35.00	2.86	11.30	11.97	0.3420	135
2001	1,306.25	35.00	2.86	37.36	14.41	0.4117	538
2002	364.15	35.00	2.86	10.41	15.26	0.4360	159
2008	6,435.44	35.00	2.86	184.05	20.71	0.5917	3,808
2014	437.50	35.00	2.86	12.51	26.54	0.7583	332
2015	6,690.25	35.00	2.86	191.34	27.53	0.7866	5,262
2016	2,450.24	35.00	2.86	70.08	28.52	0.8149	1,997
2017	10,862.64	35.00	2.86	310.67	29.51	0.8431	9,159
2018	393.76	35.00	2.86	11.26	30.51	0.8717	343
2020	54,205.88	35.00	2.86	1,550.29	32.50	0.9286	50,334
2021	13,344.27	35.00	2.86	381.65	33.50	0.9571	12,772
2022	105,359.10	35.00	2.86	3,013.27	34.50	0.9857	103,854
	209,627.12			5,995.33			190,165
	COMPOSITE RE	MAINING :	LIFE, YEAR	S		31.72	

ACCOUNT 376.10 MAINS - STEEL

	ORIGINAL	AVG.	ANNUAL	ACCRUAL	REM.	FUTURE	ACCRUALS
YEAR	COST	LIFE	RATE	AMOUNT	LIFE	FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
CIIDIII	VIOD CIIDITE TOUR	CE D4					
SURVI	VOR CURVE IOWA	65-R4					
1963	1,639,858.55	65.00	1.54	25,253.82	12.45	0.1915	314,099
1964	262,084.19	65.00	1.54	4,036.10	13.06	0.2009	52,658
1965	1,427,008.43	65.00	1.54	21,975.93	13.69	0.2106	300 , 557
1966	799 , 565.82	65.00	1.54	12,313.31	14.34	0.2206	176,400
1967	688,601.34	65.00	1.54	10,604.46	15.00	0.2308	158,909
1968	579 , 611.66	65.00	1.54	8,926.02	15.67	0.2411	139,733
1969	884,559.50	65.00	1.54	13,622.22	16.36	0.2517	222,635
1970	1,037,790.02	65.00	1.54	15,981.97	17.05	0.2623	272,223
1971	778 , 287.69	65.00	1.54	11,985.63	17.76	0.2732	212,652
1972	1,217,146.66	65.00	1.54	18,744.06	18.48	0.2843	346,047
1973	1,111,737.21	65.00	1.54	17,120.75	19.20	0.2954	328,385
1974	1,917,850.99	65.00	1.54	29,534.91	19.94	0.3068	588 , 339
1975	1,210,897.61	65.00	1.54	18,647.82	20.69	0.3183	385,441
1976	890,744.21	65.00	1.54	13,717.46	21.46	0.3302	294 , 079
1977	1,193,700.42	65.00	1.54	18,382.99	22.23	0.3420	408,246
1978	1,184,389.72	65.00	1.54	18,239.60	23.02	0.3542	419,452
1979	1,207,012.75	65.00	1.54	18,588.00	23.81	0.3663	442,141
1980	1,216,455.02	65.00	1.54	18,733.41	24.62	0.3788	460,757
1981	2,285,284.22	65.00	1.54	35,193.38	25.44	0.3914	894,415
1982	2,406,618.86	65.00	1.54	37,061.93	26.27	0.4042	972,635
1983	2,295,764.66	65.00	1.54	35,354.78	27.12	0.4172	957,862
1984	1,486,512.56	65.00	1.54	22,892.29	27.97	0.4303	639,661
1985	1,019,001.59	65.00	1.54	15,692.62	28.83	0.4435	451,968
1986	970,588.33	65.00	1.54	14,947.06	29.70	0.4569	443,481
1987	1,465,445.63	65.00	1.54	22,567.86	30.58	0.4705	689,434
1988	374,978.15	65.00	1.54	5,774.66	31.47	0.4842	181,546
1989	360,265.45	65.00	1.54	5,548.09	32.37	0.4980	179,412
1990 1991	389,448.23 329,103.60	65.00 65.00	1.54 1.54	5,997.50 5,068.20	33.28 34.20	0.5120 0.5262	199,397 173,158
1991	2,408,204.43	65.00	1.54	37,086.35	35.12	0.5202	1,301,177
1992	1,323,583.07	65.00	1.54	20,383.18	36.05	0.5546	734,086
1993	5,795,296.26	65.00	1.54	89,247.56	36.99	0.5691	3,297,987
1995	2,026,633.00	65.00	1.54	31,210.15	37.93	0.5835	1,182,621
1996	3,808,547.48	65.00	1.54	58,651.63	38.88	0.5982	2,278,083
1997	574,361.93	65.00	1.54	8,845.17	39.83	0.6128	351,952
1998	962,788.73	65.00	1.54	14,826.95	40.79	0.6275	604,188
1999	3,101,090.81	65.00	1.54	47,756.80	41.75	0.6423	1,991,862
2000	907,443.78	65.00	1.54	13,974.63	42.72	0.6572	596,399
2001	4,567,119.97	65.00	1.54	70,333.65	43.69	0.6722	3,069,790
2001	980,851.71	65.00	1.54	15,105.12	44.66	0.6871	673,924
2002	1,361,920.14	65.00	1.54	20,973.57	45.64	0.7022	956,272
2003	97,093.12	65.00	1.54	1,495.23	46.62	0.7172	69,638
2005	14,483,554.84	65.00	1.54	223,046.74	47.60	0.7323	10,606,452
2006	871,241.62	65.00	1.54	13,417.12	48.58	0.7474	651,149
	,		· · ·	-,			, = 13

ACCOUNT 376.10 MAINS - STEEL

CALCULATION OF COMPOSITE REMAINING LIFE RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR	ORIGINAL COST	AVG. LIFE	ANNUAI RATE	L ACCRUAL AMOUNT	REM. LIFE	FUTURE FACTOR	ACCRUALS AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVI	IVOR CURVE IOWA	65-R4					
2007	206,707.79	65.00	1.54	3,183.30	49.57	0.7626	157,639
2008	1,094,191.60	65.00	1.54	16,850.55	50.56	0.7779	851,117
2009	2,610,302.18	65.00	1.54	40,198.65	51.55	0.7931	2,070,178
2010	1,518,889.49	65.00	1.54	23,390.90	52.54	0.8083	1,227,734
2011	1,617,318.06	65.00	1.54	24,906.70	53.53	0.8235	1,331,926
2012	6,290,032.95	65.00	1.54	96,866.51	54.53	0.8389	5,276,834
2013	1,485,409.47	65.00	1.54	22,875.31	55.52	0.8542	1,268,762
2014	2,925,214.09	65.00	1.54	45,048.30	56.52	0.8695	2,543,591
2015	4,445,086.64	65.00	1.54	68,454.33	57.51	0.8848	3,932,879
2016	8,611,013.00	65.00	1.54	132,609.60	58.51	0.9002	7,751,203
2017	1,658,807.26	65.00	1.54	25,545.63	59.51	0.9155	1,518,704
2018	9,503,167.53	65.00	1.54	146,348.78	60.51	0.9309	8,846,689
2019	11,069,519.13	65.00	1.54	170,470.59	61.50	0.9462	10,473,426
2020	10,940,976.25	65.00	1.54	168,491.03	62.50	0.9615	10,520,186
2021	285,118.39	65.00	1.54	4,390.82	63.50	0.9769	278,538
2022	9,223,226.89	65.00	1.54	142,037.69	64.50	0.9923	9,152,300
	149,385,024.68		2	2,300,529.37			106,873,008

COMPOSITE REMAINING LIFE, YEARS..

46.46

ACCOUNT 376.20 MAINS - PLASTIC

CALCULATION OF COMPOSITE REMAINING LIFE RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2022

	ORIGINAL	AVG.	ANNUAL	ACCRUAL	REM.	FUTURE	ACCRUALS
YEAF	R COST	LIFE	RATE	AMOUNT	LIFE	FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURV	IVOR CURVE IOWA	65-R4					
1985	20,480.78	65.00	1.54	315.40	28.83	0.4435	9,084
1986	17,788.08	65.00	1.54	273.94	29.70	0.4569	8,128
1987	1,408,001.97	65.00	1.54	21,683.23	30.58	0.4705	662,409
1988	1,539,503.22	65.00	1.54	23,708.35	31.47	0.4842	745,350
1989	1,849,907.41	65.00	1.54	28,488.57	32.37	0.4980	921,254
1990	2,395,397.30	65.00	1.54	36,889.12	33.28	0.5120	1,226,443
1991	2,169,215.27	65.00	1.54	33,405.92	34.20	0.5262	1,141,333
1992	2,070,269.50	65.00	1.54	31,882.15	35.12	0.5403	1,118,587
1993	2,568,850.94	65.00	1.54	39,560.30	36.05	0.5546	1,424,736
1994	4,219,062.04	65.00	1.54	64,973.56	36.99	0.5691	2,400,984
1995	2,843,208.25	65.00	1.54	43,785.41	37.93	0.5835	1,659,126
1996	3,188,816.50	65.00	1.54	49,107.77	38.88	0.5982	1,907,391
1997	1,352,541.37	65.00	1.54	20,829.14	39.83	0.6128	828 , 797
1998	3,306,381.17	65.00	1.54	50,918.27	40.79	0.6275	2,074,886
1999	2,096,757.59	65.00	1.54	32,290.07	41.75	0.6423	1,346,768
2000	2,408,953.39	65.00	1.54	37 , 097.88	42.72	0.6572	1,583,236
2001	2,375,925.16	65.00	1.54	36,589.25	43.69	0.6722	1,596,978
2002	3,840,483.41	65.00	1.54	59,143.44	44.66	0.6871	2,638,719
2003	2,593,763.91	65.00	1.54	39,943.96	45.64	0.7022	1,821,211
2004	917,466.98	65.00	1.54	14,128.99	46.62	0.7172	658 , 035
2005	622,237.20	65.00	1.54	9,582.45	47.60	0.7323	455,671
2006	4,241,355.94	65.00	1.54	65,316.88	48.58	0.7474	3,169,905
2007	4,074,604.54	65.00	1.54	62,748.91	49.57	0.7626	3,107,375
2008	5,736,861.80	65.00	1.54	88,347.67	50.56	0.7779	4,462,418
2009	3,765,357.01	65.00	1.54	57 , 986.50	51.55	0.7931	2,986,229
2010	3,017,523.22	65.00	1.54	46,469.86	52.54	0.8083	2,439,094
2011	3,500,476.04	65.00	1.54	53,907.33	53.53	0.8235	2,882,782
2012	2,776,666.36	65.00	1.54	42,760.66	54.53	0.8389	2,329,401
2013	1,946,506.46	65.00	1.54	29,976.20	55.52	0.8542	1,662,608
2014	9,591,968.34	65.00	1.54	147,716.31	56.52	0.8695	8,340,600
2015	9,945,686.73	65.00	1.54	153,163.58	57.51	0.8848	8,799,645
2016	13,015,183.90	65.00	1.54	200,433.83	58.51	0.9002	11,715,618
2017	12,811,883.45	65.00	1.54	197,303.01	59.51	0.9155	11,729,792
2018	15,710,470.24	65.00	1.54	241,941.24	60.51	0.9309	14,625,191
2019	17,868,512.73	65.00	1.54	275,175.10	61.50	0.9462	16,906,293
2020	14,564,781.86	65.00	1.54	224,297.64	62.50	0.9615	14,004,620
2021	6,788,949.90	65.00	1.54	104,549.83	63.50	0.9769	6,632,261
2022	19,454,031.37	65.00	1.54	299,592.08	64.50	0.9923	19,304,430
	192,615,831.33		2.	,966,283.80			161,327,388

COMPOSITE REMAINING LIFE, YEARS..

54.39



ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

CALCULATION OF COMPOSITE REMAINING LIFE RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	ANNUAL RATE (4)	ACCRUAL AMOUNT (5)	REM. LIFE (6)	FUTURE FACTOR (7)	ACCRUALS AMOUNT (8)
SURVIVOR	CURVE IOWA	35-S3					
2011	38,666.03	35.00	2.86	1,105.85	23.53	0.6723	25 , 995
2014	260,634.95	35.00	2.86	7,454.16	26.50	0.7571	197,337
2015	128,609.66	35.00	2.86	3,678.24	27.50	0.7857	101,050
2016	557,188.88	35.00	2.86	15,935.60	28.50	0.8143	453,713
2017	22,617.80	35.00	2.86	646.87	29.50	0.8429	19,064
2018	32,176.28	35.00	2.86	920.24	30.50	0.8714	28,039
2019	307,481.82	35.00	2.86	8,793.98	31.50	0.9000	276,734
2020	604,694.81	35.00	2.86	17,294.27	32.50	0.9286	561,501
2022	763,879.73	35.00	2.86	21,846.96	34.50	0.9857	752 , 964
2	,715,949.96			77,676.17			2,416,397
	COMPOSITE REN	MAINING I	LIFE, YEARS	S		31.11	

IX-6

ACCOUNT 379.00 MEASURING AND REGULATING STATION EQUIPMENT - CITY GATE

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	ANNUAL RATE (4)	ACCRUAL AMOUNT (5)	REM. LIFE (6)	FUTURE FACTOR (7)	ACCRUALS AMOUNT (8)
SURVIV	OR CURVE IOWA	35-S3					
1959	14,737.97	35.00	2.86	421.51	0.77	0.0220	324
1960	58.87	35.00	2.86	1.68	0.91	0.0260	2
1961	1,335.11	35.00	2.86	38.18	1.04	0.0297	40
1962	2,739.83	35.00	2.86	78.36	1.18	0.0337	92
1963	346.40	35.00	2.86	9.91	1.32	0.0377	13
1965	3,399.20	35.00	2.86	97.22	1.61	0.0460	156
1966	5,156.83	35.00	2.86	147.49	1.76	0.0503	259
1967	1,254.00	35.00	2.86	35.86	1.91	0.0546	68
1968	3.41	35.00	2.86	0.10	2.07	0.0591	
1969	33,573.48	35.00	2.86	960.20	2.24	0.0640	2,149
1970	15,463.85	35.00	2.86	442.27	2.41	0.0689	1,065
1971	17,909.40	35.00	2.86	512.21	2.59	0.0740	1,325
1972	17,191.58	35.00	2.86	491.68	2.77	0.0791	1,361
1973	8,945.06	35.00	2.86	255.83	2.96	0.0846	756
1974	27,646.93	35.00	2.86	790.70	3.16	0.0903	2,496
1975	3,228.78	35.00	2.86	92.34	3.37	0.0963	311
1976	113,453.89	35.00	2.86	3,244.78	3.58	0.1023	11,605
1977	294.25	35.00	2.86	8.42	3.81	0.1089	32
1980	1,735.23	35.00	2.86	49.63	4.54	0.1297	225
1981	15,663.00	35.00	2.86	447.96	4.81	0.1374	2,153
1982	431.39	35.00	2.86	12.34	5.09	0.1454	63
1987	1,339.06	35.00	2.86	38.30	6.73	0.1923	257
1989	19.60	35.00	2.86	0.56	7.51	0.2146	4
1990	155,274.15	35.00	2.86	4,440.84	7.94	0.2269	35,225
1991	217,879.30	35.00	2.86	6,231.35	8.39	0.2397	52,228
1992	79,569.36	35.00	2.86	2,275.68	8.87	0.2534	20,165
1993	424,832.10	35.00	2.86	12,150.20	9.38	0.2680	113,855
1994	736,074.62	35.00	2.86	21,051.73	9.91	0.2831	208,412
1995	196,751.04	35.00	2.86	5,627.08	10.47	0.2991	58,856
1996	63,067.57	35.00	2.86	1,803.73	11.07	0.3163	19,948
1997	1,289,839.98	35.00	2.86	36,889.42	11.70	0.3343	431,181
1998	596,887.06	35.00	2.86	17,070.97	12.35	0.3529	210,618
1999	339,859.81	35.00	2.86	9,719.99	13.05	0.3729	126,720
2000	307,550.87	35.00	2.86	8,795.95	13.77	0.3934	121,000
2001	86,526.54	35.00	2.86	2,474.66	14.53	0.4151	35 , 921
2002	252,971.55	35.00	2.86	7,234.99	15.32	0.4377	110,728
2003	319,783.48	35.00	2.86	9,145.81	16.14	0.4611	147,465
2004	627,147.32	35.00	2.86	17,936.41	16.99	0.4854	304,436
2008	33,571.26	35.00	2.86	960.14	20.63	0.5894	19,788
2009	238,262.98	35.00	2.86	6,814.32	21.58	0.6166	146,906
2010	2,653.24	35.00	2.86	75.88	22.55	0.6443	1,709
2011	3,158.86	35.00	2.86	90.34	23.53	0.6723	2,124
2012	1,366.02	35.00	2.86	39.07	24.52	0.7006	957
2013	7,097.52	35.00	2.86	202.99	25.51	0.7289	5,173

ACCOUNT 379.00 MEASURING AND REGULATING STATION EQUIPMENT - CITY GATE

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	ANNUAL RATE (4)	ACCRUAL AMOUNT (5)	REM. LIFE (6)	FUTURE FACTOR (7)	ACCRUALS AMOUNT (8)
SURVI	VOR CURVE IOWA	35-S3					
2014	422,415.36	35.00	2.86	12,081.08	26.50	0.7571	319,828
2015	206,772.64	35.00	2.86	5,913.70	27.50	0.7857	162,463
2016	2,991,461.05	35.00	2.86	85,555.79	28.50	0.8143	2,435,917
2017	84,360.50	35.00	2.86	2,412.71	29.50	0.8429	71,104
2018	396,403.57	35.00	2.86	11,337.14	30.50	0.8714	345,438
2019	4,169,590.59	35.00	2.86	119,250.29	31.50	0.9000	3,752,632
2020	1,757,303.75	35.00	2.86	50,258.89	32.50	0.9286	1,631,780
2021	170,758.32	35.00	2.86	4,883.69	33.50	0.9571	163,440
2022	3,141,439.49	35.00	2.86	89,845.17	34.50	0.9857	3,096,548
	19,606,557.02			560,747.54			14,177,321
	COMPOSITE REN	MAINING	LIFE, YEAR	RS		25.28	

ACCOUNT 380.10 SERVICES - STEEL

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	ANNUAL RATE (4)	ACCRUAL AMOUNT (5)	REM. LIFE (6)	FUTURE FACTOR (7)	ACCRUALS AMOUNT (8)
			(1)	(3)	(0)	(, ,	(0)
SURVIVOR	CURVE IOWA	50-R2.5					
1963	10,244.68	50.00	2.00	204.89	8.34	0.1668	1,709
1964	2,100.09	50.00	2.00	42.00	8.66	0.1732	364
1965	20,308.86	50.00	2.00	406.18	8.99	0.1798	3 , 652
1966	131,212.19	50.00	2.00	2,624.24	9.33	0.1866	24,484
1967	142,835.55	50.00	2.00	2,856.71	9.68	0.1936	27 , 653
1968	124,158.65	50.00	2.00	2,483.17	10.06	0.2012	24,981
1969	251,853.01	50.00	2.00	5,037.06	10.45	0.2090	52,637
1970	55,075.31	50.00	2.00	1,101.51	10.85	0.2170	11,951
1971	328,064.81	50.00	2.00	6,561.30	11.28	0.2256	74,011
1972	490,094.73	50.00	2.00	9,801.89	11.72	0.2344	114,878
1973	409,644.62	50.00	2.00	8,192.89	12.18	0.2436	99,789
1974	578,102.42	50.00	2.00	11,562.05	12.66	0.2532	146,376
1975	517,714.72	50.00	2.00	10,354.29	13.15	0.2630	136,159
1976	568,277.01	50.00	2.00	11,365.54	13.66	0.2732	155,253
1977	410,682.27 423,446.26	50.00	2.00	8,213.65	14.19	0.2838	116,552
1978 1979	434,026.34	50.00	2.00	8,468.93 8,680.53	14.73 15.29	0.2946 0.3058	124,747 132,725
1979	522,220.53	50.00	2.00	10,444.41	15.29	0.3036	165,753
1981	662,316.54	50.00	2.00	13,246.33	16.46	0.3174	218,035
1982	844,395.18	50.00	2.00	16,887.90	17.07	0.3292	288,277
1983	633,856.10	50.00	2.00	12,677.12	17.69	0.3538	224,258
1984	623,249.58	50.00	2.00	12,464.99	18.32	0.3664	228,359
1985	538,130.29	50.00	2.00	10,762.61	18.97	0.3794	204,167
1986	758,987.38	50.00	2.00	15,179.75	19.63	0.3926	297,978
1987	70,815.64	50.00	2.00	1,416.31	20.30	0.4060	28,751
1988	51,193.73	50.00	2.00	1,023.87	20.99	0.4198	21,491
1989	1,908.05	50.00	2.00	38.16	21.68	0.4336	827
1990	22,159.96	50.00	2.00	443.20	22.39	0.4478	9,923
1991	4,919.73	50.00	2.00	98.39	23.11	0.4622	2,274
1992	786,110.40	50.00	2.00	15,722.21	23.84	0.4768	374,817
1993	5,351.87	50.00	2.00	107.04	24.58	0.4916	2,631
1994	26,977.90	50.00	2.00	539.56	25.33	0.5066	13,667
1995	30,515.97	50.00	2.00	610.32	26.09	0.5218	15 , 923
1996 1	,466,939.39	50.00	2.00	29,338.79	26.86	0.5372	788,040
1997	38,373.05	50.00	2.00	767.46	27.63	0.5526	21,205
1998	46,756.44	50.00	2.00	935.13	28.42	0.5684	26,576
1999	70 , 787.87	50.00	2.00	1,415.76	29.22	0.5844	41,368
2000	52 , 138.09	50.00	2.00	1,042.76	30.02	0.6004	31,304
2001	119,088.93	50.00	2.00	2,381.78	30.84	0.6168	73,454
2002	129,100.26	50.00	2.00	2,582.01	31.66	0.6332	81,746
2003	50,010.10	50.00	2.00	1,000.20	32.49	0.6498	32,497
2004	2,252.71	50.00	2.00	45.05	33.33	0.6666	1,502
2005	707,301.45	50.00	2.00	14,146.03	34.18	0.6836	483,511
2006	15,901.80	50.00	2.00	318.04	35.03	0.7006	11,141



ACCOUNT 380.10 SERVICES - STEEL

CALCULATION OF COMPOSITE REMAINING LIFE RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	ANNUAL RATE (4)	ACCRUAL AMOUNT (5)	REM. LIFE (6)	FUTURE FACTOR (7)	ACCRUALS AMOUNT (8)
SURVIVO	R CURVE IOWA	50-R2.5					
2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022	13,299.38 105,563.34 485,254.31 82,838.82 112,640.38 116,799.44 127,582.25 130,143.30 85,967.03 137,618.49 69,315.35 56,822.43 3,881.43 639,135.25 12,926.76 218,151.93	50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00	2.00 2.00 2.00 2.00 2.00 2.00 2.00 2.00	265.99 2,111.27 9,705.09 1,656.78 2,252.81 2,335.99 2,551.64 2,602.87 1,719.34 2,752.37 1,386.31 1,136.45 77.63 12,782.70 258.54 4,363.04	35.89 36.76 37.64 38.52 39.41 40.30 41.20 42.11 43.02 43.93 44.86 45.78 46.71 47.65 48.59 49.53	0.7178 0.7352 0.7528 0.7704 0.7882 0.8060 0.8240 0.8422 0.8604 0.8786 0.8972 0.9156 0.9342 0.9530 0.9718	9,546 77,610 365,299 63,819 88,783 94,140 105,128 109,607 73,966 120,912 62,190 52,027 3,626 609,096 12,562 216,101
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COMPOSITE REMAINING LIFE, YEARS..

22.47

ACCOUNT 380.20 SERVICES - PLASTIC

	ORIGINAL	AVG.		ACCRUAL	REM.		ACCRUALS
YEAR	COST	LIFE	RATE	AMOUNT	LIFE	FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIV	OR CURVE IOWA	50-R2.5					
1979	47,758.61	50.00	2.00	955.17	15.29	0.3058	14,605
1981	70.67	50.00	2.00	1.41	16.46	0.3292	23
1983	23,587.14	50.00	2.00	471.74	17.69	0.3538	8,345
1984	98,944.35	50.00	2.00	1,978.89	18.32	0.3664	36,253
1985	140,139.71	50.00	2.00	2,802.79	18.97	0.3794	53,169
1986	15,912.62	50.00	2.00	318.25	19.63	0.3926	6,247
1987	719,861.85	50.00	2.00	14,397.24	20.30	0.4060	292,264
1988	1,057,896.06	50.00	2.00	21,157.92	20.99	0.4198	444,105
1989	883,388.37	50.00	2.00	17,667.77	21.68	0.4336	383,037
1990	1,015,172.89	50.00	2.00	20,303.46	22.39	0.4478	454,594
1991	1,038,897.86	50.00	2.00	20,777.96	23.11	0.4622	480,179
1992	1,211,684.55	50.00	2.00	24,233.69	23.84	0.4768	577,731
1993	1,571,070.16	50.00	2.00	31,421.40	24.58	0.4916	772,338
1994	1,987,182.26	50.00	2.00	39,743.65	25.33	0.5066	1,006,707
1995	1,715,054.80	50.00	2.00	34,301.10	26.09	0.5218	894,916
1996	964,844.06	50.00	2.00	19,296.88	26.86	0.5372	518,314
1997	838,417.82	50.00	2.00	16,768.36	27.63	0.5526	463,310
1998	2,050,671.31	50.00	2.00	41,013.43	28.42	0.5684	1,165,602
1999	1,147,281.09	50.00	2.00	22,945.62	29.22	0.5844	670,471
2000	2,898,030.56	50.00	2.00	57,960.61	30.02	0.6004	1,739,978
2001	1,336,323.62	50.00	2.00	26,726.47	30.84	0.6168	824,244
2002	1,687,242.21	50.00	2.00	33,744.84	31.66	0.6332	1,068,362
2003	2,015,082.78	50.00	2.00	40,301.66	32.49	0.6498	1,309,401
2004	616,486.47	50.00	2.00	12,329.73	33.33	0.6666	410,950
2005	360,265.93	50.00	2.00	7,205.32	34.18	0.6836	246,278
2006	1,395,332.78	50.00	2.00	27,906.66	35.03	0.7006	977,570
2007	1,918,378.80	50.00	2.00	38,367.58	35.89	0.7178	1,377,012
2008	2,572,426.06	50.00	2.00	51,448.52	36.76	0.7352	1,891,248
2009	2,495,718.84	50.00	2.00	49,914.38	37.64	0.7528	1,878,777
2010	1,873,396.75	50.00	2.00	37,467.94	38.52	0.7704	1,443,265
2011	800,292.67	50.00	2.00	16,005.85	39.41	0.7882	630,791
2012	3,548,612.74	50.00	2.00	70,972.25	40.30	0.8060	2,860,182
2013	1,112,773.95	50.00	2.00	22,255.48	41.20	0.8240	916,926
2014	3,872,802.83	50.00	2.00	77,456.06	42.11	0.8422	3,261,675
2015	2,514,151.32	50.00	2.00	50,283.03	43.02	0.8604	2,163,176
2016	10,472,114.57	50.00	2.00	209,442.29	43.93	0.8786	9,200,800
2017	7,007,122.62	50.00	2.00	140,142.45	44.86	0.8972	6,286,790
2018	6,435,145.25	50.00	2.00	128,702.90	45.78	0.9156	5,892,019
2019	2,327,720.57	50.00	2.00	46,554.41	46.71	0.9342	2,174,557

ACCOUNT 380.20 SERVICES - PLASTIC

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	ANNUAL RATE (4)	ACCRUAL AMOUNT (5)	REM. LIFE (6)	FUTURE FACTOR (7)	ACCRUALS AMOUNT (8)
SURVI	VOR CURVE IOWA	50-R2.5					
2020 2021 2022	14,162,799.39 4,716,962.97 11,124,071.87	50.00 50.00 50.00	2.00 2.00 2.00	283,255.99 94,339.26 222,481.44	47.65 48.59 49.53	0.9530 0.9718 0.9906	13,497,148 4,583,945 11,019,506
	103,791,091.73		2,	,075,821.85			83,896,810
	COMPOSITE REN	MAINING 1	LIFE, YEAR	S		40.42	

ACCOUNT 381.00 METERS

CALCULATION OF COMPOSITE REMAINING LIFE RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2022

	ORIGINAL	AVG.	ANNUAL	ACCRUAL	REM.	FUTURE	ACCRUALS
YEAR	COST	LIFE	RATE	AMOUNT	LIFE	FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVI	VOR CURVE IOWA	20-S2.5					
1981	3,151.45						
1986	1,753.02	20.00	5.00	87.65	0.64	0.0320	56
1987	6,331.09	20.00	5.00	316.55	0.82	0.0410	260
1990	2,380.79	20.00	5.00	119.04	1.39	0.0695	165
1991	15,978.09	20.00	5.00	798.90	1.58	0.0790	1,262
1992	159,727.72	20.00	5.00	7,986.39	1.77	0.0885	14,136
1993	71,439.46	20.00	5.00	3,571.97	1.96	0.0980	7,001
1994	107,732.02	20.00	5.00	5,386.60	2.16	0.1080	11,635
1995	17,806.54	20.00	5.00	890.33	2.38	0.1190	2,119
1996	8,186.33	20.00	5.00	409.32	2.60	0.1300	1,064
1997	122,254.34	20.00	5.00	6,112.72	2.84	0.1420	17,360
1998	5,579.19	20.00	5.00	278.96	3.09	0.1545	862
1999	247,331.20	20.00	5.00	12,366.56	3.36	0.1680	41,552
2000	485,345.56	20.00	5.00	24,267.28	3.66	0.1830	88,818
2001	291,419.72	20.00	5.00	14,570.99	3.98	0.1990	57,993
2002	428,215.12	20.00	5.00	21,410.76	4.32	0.2160	92,494
2003	355,206.25	20.00	5.00	17,760.31	4.70	0.2350	83,473
2004	178,830.14	20.00	5.00	8,941.51	5.12	0.2560	45,781
2007	763,888.92	20.00	5.00	38,194.45	6.61	0.3305	252,465
2008	395,979.61	20.00	5.00	19,798.98	7.19	0.3595	142,355
2009	556,266.40	20.00	5.00	27,813.32	7.83	0.3915	217,778
2010	1,940,343.39	20.00	5.00	97,017.17	8.51	0.4255	825,616
2011	590,294.56	20.00	5.00	29,514.73	9.25	0.4625	273,011
2012	1,469,726.22	20.00	5.00	73,486.31	10.04	0.5020	737,803
2013	572,406.86	20.00	5.00	28,620.34	10.87	0.5435	311,103
2014	1,519,648.26	20.00	5.00	75,982.41	11.74	0.5870	892 , 034
2015	795,271.80	20.00	5.00	39,763.59	12.64	0.6320	502,612
2016	1,189,861.46	20.00	5.00	59,493.07	13.58	0.6790	807 , 916
2017	1,281,188.34	20.00	5.00	64,059.42	14.54	0.7270	931,424
2018	1,366,523.95	20.00	5.00	68,326.20	15.52	0.7760	1,060,423
2019	708,683.36	20.00	5.00	35,434.17	16.51	0.8255	585 , 018
2020	2,527,284.37	20.00	5.00	126,364.22	17.50	0.8750	2,211,374
2021	1,093,715.31	20.00	5.00	54,685.77	18.50	0.9250	1,011,687
2022	2,627,690.07	20.00	5.00	131,384.50	19.50	0.9750	2,561,998
	21,907,440.91		1.	,095,214.49			13,790,648
	,, ,		- /	, = =			,,

COMPOSITE REMAINING LIFE, YEARS..

12.59

ACCOUNT 381.10 METERS - ERT

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	ANNUAL RATE (4)	ACCRUAL AMOUNT (5)	REM. LIFE (6)	FUTURE FACTOR (7)	ACCRUALS AMOUNT (8)
SURVIVOR	CURVE IOWA	20-S2.5					
2009 2010 2011 2012 2014 2015 2016 2017 2018 2020	561,697.92 29,264.23 280.01 1,273.52 6,592.62 7,454.53 1,021.41 1,771.38 2,456.87 459,104.78	20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00	5.00 5.00 5.00 5.00 5.00 5.00 5.00 5.00	28,084.90 1,463.21 14.00 63.68 329.63 372.73 51.07 88.57 122.84 22,955.24	7.83 8.51 9.25 10.04 11.74 12.64 13.58 14.54 15.52	0.3915 0.4255 0.4625 0.5020 0.5870 0.6320 0.6790 0.7270 0.7760	219,905 12,452 130 639 3,870 4,711 694 1,288 1,907 401,717
2021	524,444.79 196,330.63	20.00	5.00	26,222.24 9,816.53	18.50 19.50	0.9250 0.9750	485,111 191,422
1	,791,692.69			89,584.64			1,323,846
	COMPOSITE REI	MAINING I	LIFE, YEAR	S		14.78	

ACCOUNT 382.00 METER INSTALLATIONS

CALCULATION OF COMPOSITE REMAINING LIFE RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	ANNUAL RATE (4)	ACCRUAL AMOUNT (5)	REM. LIFE (6)	FUTURE FACTOR (7)	ACCRUALS AMOUNT (8)
SURVI	VOR CURVE IOWA	35-R3					
1985	42,223.53	35.00	2.86	1,207.59	5.97	0.1706	7,202
1986	13,023.13	35.00	2.86	372.46	6.39	0.1826	2,378
1987	23,764.72	35.00	2.86	679.67	6.83	0.1951	4,637
1988	32,498.23	35.00	2.86	929.45	7.30	0.2086	6 , 778
1989	38,339.16	35.00	2.86	1,096.50	7.80	0.2229	8,544
1990	64,638.31	35.00	2.86	1,848.66	8.32	0.2377	15 , 365
1991	215,357.22	35.00	2.86	6,159.22	8.87	0.2534	54 , 578
1992	81,881.91	35.00	2.86	2,341.82	9.45	0.2700	22,108
1993	83,038.56	35.00	2.86	2,374.90	10.05	0.2871	23,844
1994	154,012.47	35.00	2.86	4,404.76	10.68	0.3051	46,995
1995	188,886.25	35.00	2.86	5,402.15	11.32	0.3234	61,091
1996	117,676.95	35.00	2.86	3,365.56	11.99	0.3426	40,313
1997	92,498.64	35.00	2.86	2,645.46	12.68	0.3623	33,511
2000	135,985.22	35.00	2.86	3,889.18	14.86	0.4246	57 , 735
2001	90,741.54	35.00	2.86	2,595.21	15.63	0.4466	40,522
2002	89,019.65	35.00	2.86	2,545.96	16.40	0.4686	41,712
2003	155,576.00	35.00	2.86	4,449.47	17.20	0.4914	76 , 455
2004	32,113.52	35.00	2.86	918.45	18.00	0.5143	16,516
2005	167,696.81	35.00	2.86	4,796.13	18.83	0.5380	90,221
2006	214.39	35.00	2.86	6.13	19.66	0.5617	120
2007	16,143.45	35.00	2.86	461.70	20.51	0.5860	9,460
2008	2,929.69	35.00	2.86	83.79	21.38	0.6109	1,790
2009	1,332,590.73	35.00	2.86	38,112.09	22.25	0.6357	847,141
2010	162,198.63	35.00	2.86	4,638.88	23.14	0.6611	107,236
2011	6,106.78	35.00	2.86	174.65	24.04	0.6869	4,195
2012	25,428.37	35.00	2.86	727.25	24.95	0.7129	18,127
2013	67 , 322.07	35.00	2.86	1,925.41	25.87	0.7391	49,760
2014	102,578.06	35.00	2.86	2,933.73	26.80	0.7657	78 , 545
2015	216,257.12	35.00	2.86	6,184.95	27.74	0.7926	171,399
2016	120,523.69	35.00	2.86	3,446.98	28.69	0.8197	98,794
2017	92,267.51	35.00	2.86	2,638.85	29.65	0.8471	78,163
2018	75 , 895.94	35.00	2.86	2,170.62	30.61	0.8746	66,376
2019	124,455.43	35.00	2.86	3,559.43	31.58	0.9023	112,295
2020	719,590.03	35.00	2.86	20,580.27	32.55	0.9300	669,219
2021	420,327.95	35.00	2.86	12,021.38	33.53	0.9580	402,674
2022	514,809.33	35.00	2.86	14,723.55	34.51	0.9860	507,602
	5,818,610.99			166,412.26			3,873,401

COMPOSITE REMAINING LIFE, YEARS..

23.28



ACCOUNT 382.10 METER INSTALLATIONS - ERT

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	ANNUAL RATE (4)	ACCRUAL AMOUNT (5)	REM. LIFE (6)	FUTURE FACTOR (7)	ACCRUALS AMOUNT (8)
SURVIVOR	CURVE IOWA	20-R1.5					
2008	14,442.01	20.00	5.00	722.10	9.40	0.4700	6 , 788
2009	397,709.21	20.00	5.00	19,885.46	10.02	0.5010	199,252
2015	10.19	20.00	5.00	0.51	14.14	0.7070	7
2017	194.59	20.00	5.00	9.73	15.64	0.7820	152
2018	668.60	20.00	5.00	33.43	16.40	0.8200	548
2020	97,851.81	20.00	5.00	4,892.59	17.97	0.8985	87,920
2021	14,782.62	20.00	5.00	739.13	18.78	0.9390	13,881
2022	8,250.23	20.00	5.00	412.51	19.59	0.9795	8,081
	533,909.26			26,695.46			316,629
	COMPOSITE REN	MAINING I	JIFE, YEARS	S		11.86	

ACCOUNT 383.00 HOUSE REGULATORS

C11	YEAR	ORIGINAL COST	AVG. LIFE	RATE	ACCRUAL AMOUNT	REM. LIFE	FACTOR	ACCRUALS AMOUNT
1967	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1969	SURVIVOR	CURVE IOWA	40-R2.5					
1970	1967	422.51	40.00	2.50	10.56	4.60	0.1150	49
1971	1969	1,074.06	40.00	2.50	26.85	5.08	0.1270	136
1972 1,392,14 40.00 2.50 6.98 6.12 0.1530 43 1974 140.60 40.00 2.50 6.98 6.12 0.1530 43 1974 140.60 40.00 2.50 3.52 6.40 0.1600 22 1975 3,342,44 40.00 2.50 42.71 7.02 0.1755 300 1977 6,033,42 40.00 2.50 150.84 7.36 0.1840 1,110 1978 1,444,71 40.00 2.50 36.12 7.71 0.1928 278 1980 61,583.16 40.00 2.50 54.36 8.08 0.2020 439 1981 29,336.64 40.00 2.50 733.42 8.89 0.2223 6,520 1983 19,616.50 40.00 2.50 1,636.71 9.33 0.2448 4,801 1984 27,684.25 40.00 2.50 1,502.15 10.77 0.2568 7,108	1970	27.00	40.00	2.50	0.68	5.32	0.1330	4
1973 279.05 40.00 2.50 6.98 6.12 0.1530 43 1974 140.60 40.00 2.50 3.52 6.40 0.1600 22 1975 3,342.44 40.00 2.50 83.56 6.71 0.1678 561 1976 1,708.48 40.00 2.50 150.84 7.36 0.1840 1,110 1978 1,444.71 40.00 2.50 36.12 7.71 0.1928 278 1979 2,174.46 40.00 2.50 54.36 8.08 0.2020 439 1980 61,583.16 40.00 2.50 733.42 8.89 0.2120 13,056 1981 29,336.64 40.00 2.50 733.42 8.89 0.2223 6,520 1982 65,468.30 40.00 2.50 490.41 9.79 0.2448 4,801 1984 27,684.25 40.00 2.50 490.41 9.79 0.2448 4,801	1971	62.03	40.00	2.50	1.55	5.58	0.1395	9
1974	1972	1,392.14	40.00		34.80	5.84	0.1460	203
1975 3,342.44 40.00 2.50 83.56 6.71 0.1678 561 1976 1,708.48 40.00 2.50 42.71 7.02 0.1755 300 1977 6,033.42 40.00 2.50 150.84 7.36 0.1840 1,110 1978 1,444.71 40.00 2.50 36.12 7.71 0.1928 278 1979 2,174.46 40.00 2.50 54.36 8.08 0.2020 439 1980 61,583.16 40.00 2.50 7,534.58 8.48 0.2120 13,056 1981 29,336.64 40.00 2.50 733.42 8.89 0.2223 6,520 1982 65,468.30 40.00 2.50 490.41 9.79 0.2448 4,801 1983 19,616.50 40.00 2.50 692.11 10.27 0.2568 7,108 1984 27,684.25 40.00 2.50 380.67 11.30 0.285 4,302 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
1976 1,708.48 40.00 2.50 42.71 7.02 0.1755 300 1977 6,033.42 40.00 2.50 150.84 7.36 0.1840 1,110 1978 1,444.71 40.00 2.50 36.12 7.71 0.1928 278 1979 2,174.46 40.00 2.50 54.36 8.08 0.2020 439 1980 61,583.16 40.00 2.50 1,539.58 8.48 0.2120 13,056 1981 29,336.64 40.00 2.50 733.42 8.89 0.2223 6,520 1982 65,468.30 40.00 2.50 490.41 9.79 0.2448 4,801 1984 27,684.25 40.00 2.50 692.11 10.27 0.2693 16,178 1985 60,086.19 40.00 2.50 380.67 11.30 0.2825 4,302 1987 12,915.07 40.00 2.50 322.88 11.84 0.2960 3.823			40.00				0.1600	22
1977 6,033.42 40.00 2.50 150.84 7.36 0.1840 1,110 1978 1,444.71 40.00 2.50 36.12 7.71 0.1928 278 1980 61,583.16 40.00 2.50 54.36 8.08 0.2020 439 1980 61,583.16 40.00 2.50 733.42 8.89 0.2223 6,520 1981 29,336.64 40.00 2.50 733.42 8.89 0.2223 6,520 1983 19,616.50 40.00 2.50 490.41 9.79 0.2448 4,801 1984 27,684.25 40.00 2.50 692.11 10.27 0.2568 7,108 1986 15,226.71 40.00 2.50 380.67 11.30 0.2825 4,302 1987 12,915.07 40.00 2.50 380.67 11.30 0.2825 4,302 1987 12,915.07 40.00 2.50 361.10 12.99 0.3248 4,691 <td></td> <td></td> <td>40.00</td> <td></td> <td>83.56</td> <td></td> <td></td> <td></td>			40.00		83.56			
1978 1,444.71 40.00 2.50 36.12 7.71 0.1928 278 1979 2,174.46 40.00 2.50 54.36 8.08 0.2020 439 1980 61,583.16 40.00 2.50 733.42 8.89 0.2223 6,520 1981 29,336.64 40.00 2.50 733.42 8.89 0.2223 6,520 1982 65,468.30 40.00 2.50 490.41 9.73 0.2333 15,270 1983 19,616.50 40.00 2.50 490.41 9.73 0.2448 4,801 1984 27,684.25 40.00 2.50 692.11 10.27 0.2568 7,108 1985 60,086.19 40.00 2.50 380.67 11.30 0.2825 4,302 1987 12,915.07 40.00 2.50 380.67 11.30 0.2825 4,302 1987 12,915.07 40.00 2.50 361.10 12.99 0.3284 4,691 <td></td> <td></td> <td></td> <td></td> <td>42.71</td> <td></td> <td></td> <td></td>					42.71			
1979 2,174.46 40.00 2.50 54.36 8.08 0.2020 439 1980 61,583.16 40.00 2.50 1,539.58 8.48 0.2120 13,056 1981 29,336.64 40.00 2.50 1,636.71 9.33 0.2333 15,270 1983 19,616.50 40.00 2.50 490.41 9.79 0.2448 4,801 1984 27,684.25 40.00 2.50 692.11 10.27 0.2568 7,108 1985 60,086.19 40.00 2.50 380.67 11.30 0.2825 4,302 1987 12,915.07 40.00 2.50 322.88 11.84 0.2960 3,823 1988 20,389.03 40.00 2.50 361.10 12.99 0.3248 4,691 1990 33,951.88 40.00 2.50 361.10 12.99 0.3248 4,691 1991 152,438.36 40.00 2.50 3,810.96 14.21 0.3553								
1980 61,583.16 40.00 2.50 1,539.58 8.48 0.2120 13,056 1981 29,336.64 40.00 2.50 733.42 8.89 0.2223 6,520 1982 65,468.30 40.00 2.50 1,636.71 9.33 0.2333 15,270 1983 19,616.50 40.00 2.50 490.41 9.79 0.2448 4,801 1984 27,684.25 40.00 2.50 692.11 10.27 0.2568 7,108 1985 60,086.19 40.00 2.50 380.67 11.30 0.2825 4,302 1987 12,915.07 40.00 2.50 322.88 11.84 0.2960 3,823 1988 20,389.03 40.00 2.50 509.73 12.41 0.3103 6,326 1989 14,444.15 40.00 2.50 361.10 12.99 0.3248 4,691 1990 33,951.88 40.00 2.50 3,80.96 14.21 0.3553								
1981 29,336.64 40.00 2.50 733.42 8.89 0.2223 6,520 1982 65,468.30 40.00 2.50 1,636.71 9.33 0.2333 15,270 1983 19,616.50 40.00 2.50 490.41 9.79 0.2448 4,801 1984 27,684.25 40.00 2.50 692.11 10.27 0.2568 7,108 1985 60,086.19 40.00 2.50 380.67 11.30 0.2825 4,302 1987 12,915.07 40.00 2.50 322.88 11.84 0.2960 3,823 1988 20,389.03 40.00 2.50 361.10 12.99 0.3248 4,691 1990 33,951.88 40.00 2.50 381.10 12.99 0.3248 4,691 1992 62,533.73 40.00 2.50 3,810.96 14.21 0.3553 54,154 1993 70,127.11 40.00 2.50 1,563.34 14.85 0.3713								
1982 65,468.30 40.00 2.50 1,636.71 9.33 0.2333 15,270 1983 19,616.50 40.00 2.50 490.41 9.79 0.2448 4,801 1984 27,684.25 40.00 2.50 692.11 10.27 0.2568 7,108 1985 60,086.19 40.00 2.50 1,502.15 10.77 0.2693 16,178 1986 15,226.71 40.00 2.50 380.67 11.30 0.2825 4,302 1987 12,915.07 40.00 2.50 322.88 11.84 0.2960 3,823 1988 20,389.03 40.00 2.50 361.10 12.99 0.3248 4,691 1990 33,951.88 40.00 2.50 381.096 14.21 0.3553 54,154 1992 62,533.73 40.00 2.50 3,810.96 14.21 0.3553 54,154 1992 62,533.73 40.00 2.50 1,563.34 14.85 0.3713 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
1983 19,616.50 40.00 2.50 490.41 9.79 0.2448 4,801 1984 27,684.25 40.00 2.50 692.11 10.27 0.2568 7,108 1985 60,086.19 40.00 2.50 1,502.15 10.77 0.2693 16,178 1986 15,226.71 40.00 2.50 380.67 11.30 0.2825 4,302 1987 12,915.07 40.00 2.50 322.88 11.84 0.2960 3,823 1988 20,389.03 40.00 2.50 509.73 12.41 0.3103 6,326 1989 14,444.15 40.00 2.50 361.10 12.99 0.3248 4,691 1990 33,951.88 40.00 2.50 3,810.96 14.21 0.3553 54,154 1991 152,438.36 40.00 2.50 1,563.34 14.85 0.3713 23,216 1992 62,533.73 40.00 2.50 1,753.18 15.50 0.3875 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
1984 27,684.25 40.00 2.50 692.11 10.27 0.2568 7,108 1985 60,086.19 40.00 2.50 1,502.15 10.77 0.2693 16,178 1986 15,226.71 40.00 2.50 380.67 11.30 0.2825 4,302 1987 12,915.07 40.00 2.50 392.88 11.84 0.2960 3,823 1988 20,389.03 40.00 2.50 509.73 12.41 0.3103 6,326 1989 14,444.15 40.00 2.50 361.10 12.99 0.3248 4,691 1990 33,951.88 40.00 2.50 3,810.96 14.21 0.3553 54,154 1992 62,533.73 40.00 2.50 1,563.34 14.85 0.3713 23,216 1993 70,127.11 40.00 2.50 1,753.18 15.50 0.3875 27,174 1994 103,124.77 40.00 2.50 3,677.52 16.86 0.42								
1985 60,086.19 40.00 2.50 1,502.15 10.77 0.2693 16,178 1986 15,226.71 40.00 2.50 380.67 11,30 0.2825 4,302 1987 12,915.07 40.00 2.50 322.88 11,84 0.2960 3,823 1988 20,389.03 40.00 2.50 509.73 12.41 0.3103 6,326 1989 14,444.15 40.00 2.50 361.10 12.99 0.3248 4,691 1990 33,951.88 40.00 2.50 848.80 13.59 0.3398 11,535 1991 152,438.36 40.00 2.50 3,810.96 14.21 0.3553 54,154 1992 62,533.73 40.00 2.50 1,753.18 15.50 0.3875 27,174 1994 103,124.77 40.00 2.50 2,578.12 16.17 0.4043 41,688 1995 147,100.73 40.00 2.50 2,422.77 17.56 0								
1986 15,226.71 40.00 2.50 380.67 11.30 0.2825 4,302 1987 12,915.07 40.00 2.50 322.88 11.84 0.2960 3,823 1988 20,389.03 40.00 2.50 509.73 12.41 0.3103 6,326 1989 14,444.15 40.00 2.50 361.10 12.99 0.3248 4,691 1990 33,951.88 40.00 2.50 848.80 13.59 0.3398 11,535 1991 152,438.36 40.00 2.50 3,810.96 14.21 0.3553 54,154 1992 62,533.73 40.00 2.50 1,563.34 14.85 0.3713 23,216 1993 70,127.11 40.00 2.50 1,753.18 15.50 0.3875 27,174 1994 103,124.77 40.00 2.50 2,578.12 16.17 0.4043 41,688 1995 147,100.73 40.00 2.50 3,677.52 16.86 0								
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1988 20,389.03 40.00 2.50 509.73 12.41 0.3103 6,326 1989 14,444.15 40.00 2.50 361.10 12.99 0.3248 4,691 1990 33,951.88 40.00 2.50 848.80 13.59 0.3398 11,553 1991 152,438.36 40.00 2.50 1,563.34 14.21 0.3553 54,154 1992 62,533.73 40.00 2.50 1,563.34 14.85 0.3713 23,216 1993 70,127.11 40.00 2.50 1,753.18 15.50 0.3875 27,174 1994 103,124.77 40.00 2.50 2,578.12 16.17 0.4043 41,688 1995 147,100.73 40.00 2.50 2,422.77 17.56 0.4390 42,544 1997 63,263.72 40.00 2.50 2,046.21 19.00 0.4750 38,878 2001 94,040.07 40.00 2.50 2,351.00 21.25								
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					10,840.89			
	2015	303,125.96	40.00		7,578.15	33.05	0.8263	250,458

ACCOUNT 383.00 HOUSE REGULATORS

	ORIGINAL	AVG.	ANNUAL	ACCRUAL	REM.	FUTURE	ACCRUALS
YEAR	COST	LIFE	RATE	AMOUNT	LIFE	FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR	CURVE IOWA	40-R2.5					
2016	626,316.63	40.00	2.50	15,657.92	33.96	0.8490	531,743
2017	623,683.42	40.00	2.50	15,592.09	34.87	0.8718	543,696
2018	324,146.28	40.00	2.50	8,103.66	35.79	0.8948	290,030
2019	14,036.79	40.00	2.50	350.92	36.72	0.9180	12,886
2020	939,313.52	40.00	2.50	23,482.84	37.65	0.9413	884,129
2021	578,725.79	40.00	2.50	14,468.14	38.59	0.9648	558,326
2022	833,213.17	40.00	2.50	20,830.33	39.53	0.9883	823,423
7,	,565 , 636.28			189,140.97			5,833,515
	30.84						

ACCOUNT 384.00 HOUSE REGULATOR INSTALLATIONS

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	ANNUAL RATE (4)	ACCRUAL AMOUNT (5)	REM. LIFE (6)	FUTURE FACTOR (7)	ACCRUALS AMOUNT (8)
SURVIVOR	CURVE IOWA	40-R2.5					
1959	16,699.58	40.00	2.50	417.49	2.81	0.0703	1,173
1960	23.38	40.00	2.50	0.58	3.04	0.0760	2
1962	64.48	40.00	2.50	1.61	3.48	0.0870	6
1963	113.01	40.00	2.50	2.83	3.69	0.0923	10
1964	306.62	40.00	2.50	7.67	3.91	0.0978	30
1965 1966	192.25 106.77	40.00	2.50 2.50	4.81 2.67	4.14 4.37	0.1035	20 12
1967	197.82	40.00	2.50	4.95	4.60	0.1093 0.1150	23
1968	252.52	40.00	2.50	6.31	4.83	0.1130	30
1969	986.57	40.00	2.50	24.66	5.08	0.1200	125
1970	962.88	40.00	2.50	24.07	5.32	0.1270	128
1971	586.78	40.00	2.50	14.67	5.58	0.1395	82
1972	3,064.66	40.00	2.50	76.62	5.84	0.1355	447
1973	1,231.77	40.00	2.50	30.79	6.12	0.1530	188
1974	1,168.56	40.00	2.50	29.21	6.40	0.1600	187
1975	3,951.00	40.00	2.50	98.78	6.71	0.1678	663
1976	4,150.49	40.00	2.50	103.76	7.02	0.1755	728
1977	15,177.69	40.00	2.50	379.44	7.36	0.1840	2,793
1978	5,360.96	40.00	2.50	134.02	7.71	0.1928	1,033
1979	5,791.44	40.00	2.50	144.79	8.08	0.2020	1,170
1980	90,203.33	40.00	2.50	2,255.08	8.48	0.2120	19,123
1981	33,893.96	40.00	2.50	847.35	8.89	0.2223	7,533
1982	74,615.83	40.00	2.50	1,865.40	9.33	0.2333	17,404
1983	23,146.38	40.00	2.50	578.66	9.79	0.2448	5 , 665
1984	27,371.71	40.00	2.50	684.29	10.27	0.2568	7,028
1985	61,546.47	40.00	2.50	1,538.66	10.77	0.2693	16,571
1986	10,261.92	40.00	2.50	256.55	11.30	0.2825	2,899
1987	15,730.12	40.00	2.50	393.25	11.84	0.2960	4,656
1988	20,454.17	40.00	2.50	511.35	12.41	0.3103	6,346
1989	23,197.43	40.00	2.50	579.94	12.99	0.3248	7,533
1990	36,655.51	40.00	2.50	916.39	13.59	0.3398	12,454
1991	15,580.79	40.00	2.50	389.52	14.21	0.3553	5,535
1992	44,194.70	40.00	2.50	1,104.87	14.85	0.3713	16,407
1993	20,944.43	40.00	2.50	523.61	15.50	0.3875	8,116
1994	76,499.74	40.00	2.50	1,912.49	16.17	0.4043	30,925
1995	96,265.13	40.00	2.50	2,406.63	16.86	0.4215	40,576
1996	59,591.86	40.00	2.50	1,489.80	17.56	0.4390	26,161
1997	41,527.18	40.00	2.50	1,038.18	18.27	0.4568	18,968
2000	50,955.27	40.00	2.50	1,273.88	20.49	0.5123	26,102
2001	39,343.70	40.00	2.50	983.59	21.25	0.5313	20,901
2002	52,098.78 60,887.84	40.00	2.50	1,302.47	22.03	0.5508	28,693
2003		40.00	2.50	1,522.20 631.80	22.82 23.62	0.5705	34,737
2004	25,271.80	40.00	2.50	30.70	25.25	0.5905 0.6313	14 , 923 775
2006	1,227.80	40.00	2.50	30.70	23.23	0.0313	113

ACCOUNT 384.00 HOUSE REGULATOR INSTALLATIONS

CALCULATION OF COMPOSITE REMAINING LIFE RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2022

	ORIGINAL	AVG.	ANNUAL	ACCRUAL	REM.	FUTURE	ACCRUALS
YEAR	COST	LIFE	RATE	AMOUNT	LIFE	FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR	CURVE IOWA	40-R2.5					
2007	1,141.59	40.00	2.50	28.54	26.08	0.6520	744
2008	32,548.30	40.00	2.50	813.71	26.92	0.6730	21,905
2009	11,083.44	40.00	2.50	277.09	27.77	0.6943	7,695
2010	65,634.83	40.00	2.50	1,640.87	28.63	0.7158	46,978
2011	10,573.77	40.00	2.50	264.34	29.50	0.7375	7,798
2012	13,663.13	40.00	2.50	341.58	30.37	0.7593	10,374
2013	21,406.35	40.00	2.50	535.16	31.26	0.7815	16,729
2014	34,190.06	40.00	2.50	854.75	32.15	0.8038	27,480
2015	12,283.76	40.00	2.50	307.09	33.05	0.8263	10,149
2016	6,583.29	40.00	2.50	164.58	33.96	0.8490	5 , 589
2017	28,694.34	40.00	2.50	717.36	34.87	0.8718	25,014
2018	10,633.39	40.00	2.50	265.83	35.79	0.8948	9,514
2020	496,565.89	40.00	2.50	12,414.15	37.65	0.9413	467,393
2021	75,340.15	40.00	2.50	1,883.50	38.59	0.9648	72 , 684
2022	240,091.71	40.00	2.50	6,002.29	39.53	0.9883	237,271
2,	,122,289.08			53,057.23			1,356,198
	COMPOCIME DEN	AN TRITAL T	C		25 56		

COMPOSITE REMAINING LIFE, YEARS..

25.56



IX-20

ACCOUNT 385.00 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT

CALCULATION OF COMPOSITE REMAINING LIFE RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2022

VEND	ORIGINAL	AVG. LIFE		ACCRUAL AMOUNT	REM. LIFE	FUTURE FACTOR	ACCRUALS
YEAR (1)	COST (2)	(3)	RATE (4)	(5)	(6)	(7)	AMOUNT (8)
			(1)	(5)	(0)	(, ,	(0)
SURVIVOR	CURVE IOWA	35-S3					
1970	6,809.25	35.00	2.86	194.74	2.41	0.0689	469
1978	1,736.94	35.00	2.86	49.68	4.04	0.1154	200
1979	6,396.04	35.00	2.86	182.93	4.28	0.1223	782
1980	2,189.20	35.00	2.86	62.61	4.54	0.1297	284
1981	16,560.96	35.00	2.86	473.64	4.81	0.1374	2,276
1982	2,445.30	35.00	2.86	69.94	5.09	0.1454	356
1983	38,278.91	35.00	2.86	1,094.78	5.38	0.1537	5,884
1984	26,870.51	35.00	2.86	768.50	5.69	0.1626	4,368
1985	40,323.35	35.00	2.86	1,153.25	6.02	0.1720	6,936
1986	56,417.25	35.00	2.86	1,613.53	6.36	0.1817	10,252
1987	94,399.01	35.00	2.86	2,699.81	6.73	0.1923	18,152
1988	118,832.17	35.00	2.86	3,398.60	7.11	0.2031	24,140
1989	63,310.17	35.00	2.86	1,810.67	7.51	0.2146	13,584
1990	221,470.56	35.00	2.86	6,334.06	7.94	0.2269	50,243
1991	141,149.81	35.00	2.86	4,036.88	8.39	0.2397	33,835
1992	231,989.50	35.00	2.86	6,634.90	8.87	0.2534	58 , 793
1993	139,282.02	35.00	2.86	3,983.47	9.38	0.2680	37 , 328
1994	174,897.84	35.00	2.86	5,002.08	9.91	0.2831	49,521
1995	102,033.85	35.00	2.86	2,918.17	10.47	0.2991	30,522
1996	16,595.05	35.00	2.86	474.62	11.07	0.3163	5,249
1997	621,791.64	35.00	2.86	17,783.24	11.70	0.3343	207,859
1998	26,157.85	35.00	2.86	748.11	12.35	0.3529	9,230
1999	221,553.06	35.00	2.86	6,336.42	13.05	0.3729	82 , 608
2000	274,138.53	35.00	2.86	7,840.36	13.77	0.3934	107,854
2001	17,944.72	35.00	2.86	513.22	14.53	0.4151	7,450
2002	9,625.50	35.00	2.86	275.29	15.32	0.4377	4,213
2003	33,393.88	35.00	2.86	955.06	16.14	0.4611	15 , 399
2004	16,915.58	35.00	2.86	483.79	16.99	0.4854	8,211
2008	135,675.56	35.00	2.86	3,880.32	20.63	0.5894	79 , 971
2009	113,035.13	35.00	2.86	3,232.80	21.58	0.6166	69,694
2010	8,071.78	35.00	2.86	230.85	22.55	0.6443	5,201
2011	5,631.13	35.00	2.86	161.05	23.53	0.6723	3 , 786
2012	276.17	35.00	2.86	7.90	24.52	0.7006	193
2018	80,297.14	35.00	2.86	2,296.50	30.50	0.8714	69 , 973
2020	483,235.46	35.00	2.86	13,820.53	32.50	0.9286	448,718
2021	1.57	35.00	2.86	0.04	33.50	0.9571	2
2022	175,830.59	35.00	2.86	5,028.75	34.50	0.9857	173,318
3,	,725,562.98			106,551.09			1,646,854

COMPOSITE REMAINING LIFE, YEARS..

15.46



ACCOUNT 387.00 OTHER EQUIPMENT

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	ANNUAL RATE (4)	ACCRUAL AMOUNT (5)	REM. LIFE (6)	FUTURE FACTOR (7)	ACCRUALS AMOUNT (8)
SURVIVOR	CURVE IOWA	35-R3					
2002	1,089.02	35.00	2.86	31.15	16.40	0.4686	510
2003	1,415.53	35.00	2.86	40.48	17.20	0.4914	696
2004	1,368.50	35.00	2.86	39.14	18.00	0.5143	704
2005	43,049.67	35.00	2.86	1,231.22	18.83	0.5380	23,161
2007	57,592.73	35.00	2.86	1,647.15	20.51	0.5860	33,749
2008	206,322.52	35.00	2.86	5,900.82	21.38	0.6109	126,034
2009	180,018.26	35.00	2.86	5,148.52	22.25	0.6357	114,439
2011	340.22	35.00	2.86	9.73	24.04	0.6869	234
2014	72,382.24	35.00	2.86	2,070.13	26.80	0.7657	55 , 424
2015	60,186.32	35.00	2.86	1,721.33	27.74	0.7926	47,702
2016	339,660.71	35.00	2.86	9,714.30	28.69	0.8197	278,423
2017	809.80	35.00	2.86	23.16	29.65	0.8471	686
2018	521,548.79	35.00	2.86	14,916.30	30.61	0.8746	456,131
2020	116,744.71	35.00	2.86	3,338.90	32.55	0.9300	108,573
2021	85,629.68	35.00	2.86	2,449.01	33.53	0.9580	82,033
2022	273,359.85	35.00	2.86	7,818.09	34.51	0.9860	269,533
1	,961,518.55			56,099.43			1,598,032
	COMPOSITE RE	MAINING :	LIFE, YEAR	S		28.49	

ACCOUNT 390.00 STRUCTURES AND IMPROVEMENTS

CALCULATION OF COMPOSITE REMAINING LIFE RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	ANNUAL RATE (4)	ACCRUAL AMOUNT (5)	REM. LIFE (6)	FUTURE FACTOR (7)	ACCRUALS AMOUNT (8)
SURVI	OR CURVE IOWA	30-S0.5					
2001 2005	2,141.75 315.88	30.00	3.33 3.33	71.32 10.52	14.73 16.88	0.4910 0.5627	1,052 178
2010	2,176,848.24	30.00	3.33	72,489.05	19.93	0.6643	1,446,146
2012 2013	289,015.15 1,673,211.52	30.00	3.33 3.33	9,624.20 55,717.94	21.28 21.99	0.7093 0.7330	205,007 1,226,464
2015	107,931.40	30.00	3.33	3,594.12	23.47	0.7823	84,438
2016 2017	4,274,120.09 6,368.17	30.00	3.33 3.33	142,328.20 212.06	24.25 25.06	0.8083 0.8353	3,454,899 5,320
2018	572,278.51	30.00	3.33	19,056.87	25.89	0.8630	493,876
2020 2021	14,375.90 10,801.85	30.00	3.33 3.33	478.72 359.70	27.64 28.55	0.9213 0.9517	13,245 10,280
	9,127,408.46			303,942.70			6,940,905

COMPOSITE REMAINING LIFE, YEARS..

22.84

ACCOUNT 392.00 TRANSPORTATION EQUIPMENT

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	ANNUAL RATE (4)	ACCRUAL AMOUNT (5)	REM. LIFE (6)	FUTURE FACTOR (7)	ACCRUALS AMOUNT (8)
SURVIVOR	CURVE IOWA	10-L2.	5				
2004	4,579.44	10.00	10.00	457.94	1.66	0.1660	760
2006	22,114.11	10.00	10.00	2,211.41	2.03	0.2030	4,489
2007	43,742.50	10.00	10.00	4,374.25	2.24	0.2240	9,798
2008	28,088.65	10.00	10.00	2,808.86	2.46	0.2460	6,910
2009	104,703.97	10.00	10.00	10,470.40	2.70	0.2700	28,270
2010	21,569.62	10.00	10.00	2,156.96	2.94	0.2940	6,341
2011	11,255.45	10.00	10.00	1,125.54	3.16	0.3160	3 , 557
2014	28,342.02	10.00	10.00	2,834.20	3.77	0.3770	10,685
2015	13,155.91	10.00	10.00	1,315.59	4.08	0.4080	5,368
2017	8,029.52	10.00	10.00	802.95	5.12	0.5120	4,111
2018	17,750.58	10.00	10.00	1,775.06	5.85	0.5850	10,384
	303,331.77			30,333.16			90,673
	COMPOSITE RE	MAINING	LIFE, YEAR	S		2.99	

ACCOUNT 392.10 TRANSPORTATION EQUIPMENT - AUTOS AND LIGHT TRUCKS

	ORIGINAL	AVG.	ANNUAL	ACCRUAL	REM.	FUTURE	ACCRUALS
YEAR	COST	LIFE	RATE	AMOUNT	LIFE	FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVO	R CURVE IOWA	9-S2					
2009	67,647.23	9.00	11.11	7,515.61	0.91	0.1011	6,840
2012	32,773.78	9.00	11.11	3,641.17	1.74	0.1933	6,336
2013	32,773.74	9.00	11.11	3,641.16	2.09	0.2322	7,611
2014	281,764.58	9.00	11.11	31,304.04	2.49	0.2767	77 , 956
2015	45,322.56	9.00	11.11	5,035.34	2.94	0.3267	14,806
2016	365,094.51	9.00	11.11	40,562.00	3.48	0.3867	141,171
2018	845,295.73	9.00	11.11	93,912.36	4.81	0.5344	451,760
2019	52,365.36	9.00	11.11	5,817.79	5.63	0.6256	32,758
	1,723,037.49			191,429.47			739,238
	COMPOSITE REN	MAINING	LIFE, YEAR	S		3.86	

ACCOUNT 392.20 TRANSPORTATION EQUIPMENT - SERVICE TRUCKS

YEAR	ORIGINAL COST	AVG. LIFE	ANNUAI RATE	ACCRUAL AMOUNT	REM. LIFE	FUTURE FACTOR	ACCRUALS AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVI	OR CURVE IOWA	10-L3					
2011	49,308.04	10.00	10.00	4,930.80	2.74	0.2740	13,510
2012	32,444.50	10.00	10.00	3,244.45	2.92	0.2920	9,474
2013	39,700.15	10.00	10.00	3,970.02	3.09	0.3090	12,267
2014	475,499.34	10.00	10.00	47,549.93	3.31	0.3310	157,390
2015	739,195.28	10.00	10.00	73,919.53	3.66	0.3660	270,545
2016	1,151,431.52	10.00	10.00	115,143.15	4.17	0.4170	480,147
2018	194,862.64	10.00	10.00	19,486.26	5.68	0.5680	110,682
2019	780,610.14	10.00	10.00	78,061.01	6.58	0.6580	513,641
2021	822,183.63	10.00	10.00	82,218.36	8.50	0.8500	698,856
2022	950,833.32	10.00	10.00	95,083.33	9.50	0.9500	903,292
	5,236,068.56			523,606.84			3,169,804
	COMPOSITE RE	MAINING	LIFE, YEAR	RS		6.05	

ACCOUNT 392.30 TRANSPORTATION EQUIPMENT - HEAVY TRUCKS

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	ANNUAL RATE (4)	ACCRUAL AMOUNT (5)	REM. LIFE (6)	FUTURE FACTOR (7)	ACCRUALS AMOUNT (8)
SURVIVOR	CURVE IOWA	13-L3					
2009 2010 2018	106,651.67 203,551.56 466,440.77	13.00 13.00 13.00	7.69 7.69 7.69	8,201.51 15,653.11 35,869.30	3.82 3.99 8.59	0.2939 0.3069 0.6608	31,340 62,474 308,210
	776,644.00			59,723.92			402,024
	COMPOSITE REN	MAINING I	LIFE, YEARS	S		6.73	

ACCOUNT 394.10 NATURAL GAS VEHICLE EQUIPMENT

	ORIGINAL	AVG.	ANNUA	L ACCRUAL	REM.	FUTURE	ACCRUALS
YEAR	COST	LIFE	RATE	AMOUNT	LIFE	FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIV	OR CURVE IOWA	20-S4					
2016	1,564,203.37	20.00	5.00	78,210.17	13.50	0.6750	1,055,837
	1,564,203.37			78,210.17			1,055,837
	COMPOSITE RE	MAINING	LIFE, YEA	RS		13.50	

ACCOUNT 396.00 POWER OPERATED EQUIPMENT

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	ANNUAL RATE (4)	ACCRUAL AMOUNT (5)	REM. LIFE (6)	FUTURE FACTOR (7)	ACCRUALS AMOUNT (8)
SURVIVOR	CURVE IOWA	15-L2.5					
2009	21,947.88	15.00	6.67	1,463.92	5.47	0.3647	8,004
2010	26,906.50	15.00	6.67	1,794.66	5.72	0.3813	10,260
2014	82,474.49	15.00	6.67	5,501.05	7.52	0.5013	41,347
2017	28,390.07	15.00	6.67	1,893.62	9.80	0.6533	18,548
2018	56,228.66	15.00	6.67	3,750.45	10.67	0.7113	39 , 997
2021	53,821.93	15.00	6.67	3,589.92	13.51	0.9007	48,476
	269,769.53			17,993.62			166,632
	COMPOSITE REN	MAINING I	JIFE, YEAR	S		9.26	

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PART X. DETAIL OF DISTRIBUTION AND GENERAL PLANT

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DISTRIBUTION PLANT



ACCOUNT 375: STRUCTURES AND IMPROVEMENTS

This account includes the cost of structures and improvements used in connection with gas distribution operations. This includes the cost of all buildings and fixtures permanently attached to structures.

GENERAL INFORMATION:

FCG's regulator stations are above ground and most equipment is typically outside. Structures and improvements at these sites are generally assets like fencing, paving and small communications buildings rather than larger pre-fab or masonry buildings.

SERVICE LIFE ANALYSIS:

Discussion: The currently approved survivor curve estimate for

this account is the 32-R5, which was also the proposal in the 2017 Depreciation Study. The statistical analysis indicates a relatively similar service life but a lower mode curve. The 35-R4 survivor curve is a reasonable fit of the historical data once less consideration is given to larger retirements in

2017.

Recommendation: The recommendation is for a 35-R4 survivor curve.

NET SALVAGE ANALYSIS:

Discussion: The currently approved estimate for this account is

zero percent. There is limited data for this account, and therefore no statistical support for a change in the net salvage estimate. Estimates for many utilities are (5) or (10) percent, but zero percent is also common.

Recommendation: The recommendation is to continue to use zero

percent net salvage.



ACCOUNT 376.1: MAINS - STEEL

This account includes the cost of gas distribution steel mains.

GENERAL INFORMATION:

FCG has both plastic and steel mains. Plastic mains are used for pressures of 60 Pounds per Square Inch ("PSI") and below. Steel mains are generally coated and cathodically protected. The Company has a program to replace mains running through less accessible parts of customer property (e.g., backyards) with mains located in more accessible areas. Retirements also occur due to identified risk factors (such as service connections, shallow pipe or poor lining) as well as external factors such as damage or customer requested relocations.

Mains are typically retired in place. However, there are costs to retire due to the need to excavate, cut, cap and purge gas from the retired pipe.

SERVICE LIFE ANALYSIS:

Discussion: Account 376.1, Mains – Steel and Account 376.2,

Mains – Plastic, were analyzed together and are expected to have relatively similar life characteristics. The currently approved survivor curve for both accounts is the 55-S3, which is the same estimate as proposed in the 2017 Depreciation Study. The statistical analysis indicates a longer life and somewhat higher mode curve than the approved curve. The best fitting R4 curve has a longer service life than 55 years (around 65 years). The 65-R4 is a

reasonable fit of the historical data.

Recommendation: The recommendation is to use a 65-R4 survivor

curve.

NET SALVAGE ANALYSIS:

Discussion: The currently approved net salvage estimate is (50)

percent. The overall average net salvage is (222) percent and the most recent five-year average is (199) percent. The historical data supports a more

negative net salvage estimate.



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Recommendation: The recommendation is to use (75) percent net

salvage, which is a gradual change when compared

to the historical data.



ACCOUNT 376.2: MAINS - PLASTIC

This account includes the cost of gas distribution plastic mains.

GENERAL INFORMATION:

Plastic mains are used for pressures of 60 PSI and below. The Company has a program to replace mains running through less accessible parts of customer property (e.g., backyards) with mains located in more accessible areas. Retirements also occur due to identified risk factors (such as service connections, shallow pipe or poor lining) as well as external factors such as damage or customer requested relocations.

Mains are typically retired in place. However, there are costs to retire due to the need to excavate, cut, cap and purge gas from the retired pipe.

SERVICE LIFE ANALYSIS:

Discussion: This account, along with Account 376.1, Mains -

Steel, were analyzed together. As discussed for Account 376.1, the data supports a longer service life

estimate than the current 55-S3.

Recommendation: The recommendation is to use the 65-R4 survivor

curve, which is the same as Account 376.1.

NET SALVAGE ANALYSIS:

Discussion: The currently approved net salvage estimate is (40)

percent. The overall average net salvage is (103) and the most recent five-year average is (120) percent. The historical data supports a more negative net

salvage estimate.

Recommendation: The recommendation is to use the proposed (60)

percent net salvage estimate.



ACCOUNT 378: MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

This account includes the installed cost of meters, gauges and other equipment used in measuring and regulating gas in connection with distribution system operations other than the measurement of gas deliveries to customers.

GENERAL INFORMATION:

FCG's regulator stations are above ground stations. Stations located closer to the coast are more subject to corrosion and such assets may be replaced at earlier ages than stations located more inland. Many of the assets are similar to those in Account 379, Measuring and Regulating Station Equipment – City Gate, although they differ in size.

SERVICE LIFE ANALYSIS:

Discussion: This account, along with Account 379, Measuring and

Regulating Station Equipment – City Gate, were analyzed together. The currently approved survivor curve for this account is the 30-S3. However, a longer service life is consistent with the data and within the range of estimates typical for the industry.

Recommendation: The recommendation is to use the 35-S3 survivor

curve.

NET SALVAGE ANALYSIS:

This account, along with account 379: Measuring and Regulating Station Equipment – City Gate, were analyzed together. The currently approved net salvage estimate for this account is (5) percent. There has been limited retirement and net salvage data for this account, but there has been some cost of removal recorded. The overall net salvage is (143) percent but is based on a relatively small number of retirements. Many estimates for other utilities for this account are (5) percent.

Recommendation: The recommendation is to continue to use the

approved (5) percent net salvage.



ACCOUNT 379: MEASURING AND REGULATING STATION EQUIPMENT - CITY GATE

This account includes the installed cost of meters, gauges, and other equipment used in measuring and regulating the receipt of gas at entry points to distribution systems.

GENERAL INFORMATION:

Assets in this account are at locations where FCG interconnects and takes gas from transmission pipelines. Most equipment is outdoors rather than in buildings.

SERVICE LIFE ANALYSIS:

Discussion: This account was studied with Account 378,

Measuring and Regulating Station Equipment. Many of the assets are similar in function and life

expectations.

Recommendation: The recommendation is to use the 35-S3 survivor

curve, which is the same as Account 378.

NET SALVAGE ANALYSIS:

Discussion: This account was studied with Account 378,

Measuring and Regulating Station Equipment. The net salvage estimate is based on the same

considerations as for that account.

Recommendation: The recommendation is to continue to use the

approved (5) percent net salvage.



ACCOUNT 380.1: SERVICES - STEEL

This account includes the cost of steel service lines and accessories leading to the customer's premises.

GENERAL INFORMATION:

The Company has both steel and plastic services. Plastic services are most commonly installed today. Services are often replaced when mains are replaced. Programs such as the replacement of mains running through less accessible parts of customer property (e.g., backyards) will often result in retirements of services as well.

SERVICE LIFE ANALYSIS:

Discussion: This account, along with Account 380.2, Services –

Plastic, were analyzed together. The currently approved survivor curve estimate for this account is the 45-S6. The statistical analysis indicates a longer service life and a lower mode curve than the current estimate. Most service life estimates for similar property for other utilities are in the 40 to 55-year range, although a handful of estimates have been longer. The best fitting curves have higher modes than the approved estimate, but higher modes (such as the R4 and R5) are less common for this type of

property.

Recommendation: The recommendation is for the 50-R2.5 survivor

curve. This estimate is more reflective of the Company's historical data than the approved

estimate.

NET SALVAGE ANALYSIS:

Discussion: The currently approved net salvage estimate is (100)

percent. The statistical analysis indicates an estimate at least as negative as (100) percent. The overall average net salvage is (301) percent. The most

recent five-year average is (766) percent.



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Recommendation: The recommendation is to continue to use the

approved (100) percent net salvage.



X-10

ACCOUNT 380.2: SERVICES - PLASTIC

This account includes the cost of plastic service lines and accessories leading to the customer's premises.

GENERAL INFORMATION:

The Company has both steel and plastic services. Plastic services are most commonly installed today. Services are often replaced when mains are replaced. Programs such as the replacement of mains running through less accessible parts of customer property (e.g., backyards) will often result in retirements of services as well. Retirements also occur due to identified risk factors (such as service connections, shallow pipe or poor lining) as well as external factors such as damage or customer requested relocations.

SERVICE LIFE ANALYSIS:

Discussion: This account, along with Account 380.1, Services –

Steel, were analyzed together. The currently approved survivor curve estimate for this account is the 54-R2.5, which was adopted in a settlement agreement. However, the same 45-S4 survivor curve as used for Account 380.1 was proposed in the 2017 Depreciation Study. Most estimates for similar property for other utilities are in the 40 to 55-year range. The service life expectations for this account

should be similar to Account 380.1.

Recommendation: The recommendation is to use the 50-R2.5 survivor

curve estimate, which is the same as Account 380.1.

NET SALVAGE ANALYSIS:

Discussion: The currently approved net salvage estimate is (45)

percent. The statistical analysis indicates a more negative net salvage estimate than the approved estimate. The overall average net salvage is (519) percent. The most recent five-year average is (589)

percent.

Recommendation: The recommendation is to use (60) percent net

salvage. This is more negative than the approved

estimate for this account.



ACCOUNT 381: METERS

This account includes the cost of house (including commercial) meters or devices and appurtenances thereto, for use in measuring gas delivered to users whether actually in service or held in reserve and the material cost of other meters in revolving stock.

GENERAL INFORMATION:

The Company's gas meters currently have encoder receiver transmitter (ERT) modules, which were installed in the 2009 timeframe. There is a proposed pilot project for Advanced Metering Infrastructure (AMI). Meters are often replaced when ERTs are replaced.

SERVICE LIFE ANALYSIS:

Discussion: This account, along with account 381.1 Meters -

ERT, were analyzed together. Analysis was also performed separately but given somewhat less consideration. The currently approved survivor curve for this account is the 20-R1.5. The statistical analysis indicates a shorter service life, which is true for each of the three bands considered. However, the 20-year average service life for the account is reasonable for these types of assets. The data does support a higher mode curve than the current

estimate.

Recommendation: The recommendation is to use the 20-S2.5 survivor

curve.

NET SALVAGE ANALYSIS:

Discussion: The currently approved net salvage for this account is

(5) percent. The net salvage data indicates limited net salvage for this account. The overall net salvage is (2) percent and the most recent five-year average is

0 percent.

Recommendation: The recommendation is to use 0 percent net salvage

for this account, which is consistent with the more

recent data.



ACCOUNT 381.1: METERS - ERT

This account includes ERT meter modules.

GENERAL INFORMATION:

ERTs were installed in the 2009 timeframe. There is a proposed pilot project for AMI modules.

SERVICE LIFE ANALYSIS:

Discussion: This account was analyzed with Account 381, Meters

and the same estimate is currently approved for both accounts. A 20-year average service life is common for these types of assets, although in some instances utilities have had to replace meter modules sooner

due to either new technologies or failures.

Recommendation: The recommendation is to use the 20-S2.5 survivor

curve, which is the same estimate as for Account 381.

NET SALVAGE ANALYSIS:

Discussion: The currently approved net salvage estimate for this

account is (5) percent. Similar to Account 381, the

historical data supports an estimate of 0 percent

Recommendation: The recommendation is to use 0 percent net salvage.

ACCOUNT 382: METER INSTALLATIONS

This account includes the costs associated with the installation and servicing of meters for both residential and commercial.

GENERAL INFORMATION

Meter installations are not necessarily retired when meters are retired, although in some instances the meter installation may be replaced with the meter (such as if there is corrosion). Service retirements may result in the retirements of meter installations

SERVICE LIFE ANALYSIS:

Discussion: The currently approved survivor curve estimate for

this account is the 34-S3, which has a longer life than the 30-S3 curve estimate recommended in the 2017 Depreciation Study. The historical data indicates a similar service life to the currently approved survivor curve estimate. The 35-R3 survivor curve is a good fit to the data and a better match than using an S3

survivor curve.

Recommended: The recommendation is to use the 35-R3 survivor

curve.

NET SALVAGE ANALYSIS:

Discussion: The currently approved estimate for this account is

(20) percent. The historical data indicates a less negative net salvage estimate. The overall net salvage is (7) percent and the most recent five-year

average is zero percent.

Discussion: The recommendation is to use an estimate of (5)

percent for this account, which is similar to the overall

average net salvage.



ACCOUNT 382.1: METER INSTALLATIONS - ERT

This account includes the costs associated with the installation and servicing of meters for both residential and commercial.

GENERAL INFORMATION:

This account includes costs associated with the installations of ERTs.

SERVICE LIFE ANALYSIS:

Discussion: The currently approved survivor curve estimate for

this account is the 20-R1.5, which is the same approved estimate as used for Account 381.1 Meters - ERT. The estimate is the same as what was proposed in the 2017 Depreciation Study. There is limited data for the statistical analysis, but it is still reasonable to expect a similar average service life to Account 381.1. The data does not support changing

the estimate at this time.

Recommendation: The recommendation is to continue to use the

approved 20-R1.5 survivor curve.

NET SALVAGE ANALYSIS:

Discussion: The currently approved estimate for this account is

zero percent. There has been limited data for the net

salvage analysis.

Recommendation: The recommendation is to continue to use the

approved estimate of 0 percent for this account.



ACCOUNT 383: HOUSE REGULATORS

This account includes the costs of house regulators.

GENERAL INFORMATION:

Each customer location typically has a house regulator as the Company does not have a low pressure system.

SERVICE LIFE ANALYSIS:

Discussion: The currently approved survivor curve estimate for

this account is the 30-S3. The statistical analysis indicates a longer service life and a somewhat lower mode curve. The 40-R2.5 survivor curve is an increase in service life when compared to the current estimate but is a better match than the current

survivor curve.

Recommendation: The recommendation is to use the 40-R2.5 survivor

curve.

NET SALVAGE ANALYSIS:

Discussion: The currently approved estimate is (5) percent net

salvage. The overall net salvage is (4) percent and

the most recent five-year average is (2).

Recommendation: The recommendation is to continue to use the

approved (5) percent estimate, which is similar to the

overall average net salvage.



ACCOUNT 384: HOUSE REGULATOR INSTALLATIONS

This account includes the costs of installation and servicing of house regulators for both residential and commercial.

GENERAL INFORMATION:

This account currently has the same service life estimate as Account 383.

SERVICE LIFE ANALYSIS:

Discussion: The currently approved survivor curve estimate for

this account is the 30-S3, which is the same estimate as used for Account 383 House Regulators. The statistical analysis does not provide definitive results, but it is reasonable to continue to align the service life

for this account with Account 383.

Recommendation: The recommendation is to use the 40-R2.5 survivor

curve, which is the same estimate as for Account 383.

NET SALVAGE ANALYSIS:

Discussion: There has been limited data for the net salvage

analysis. The currently approved estimate is 0

percent net salvage.

Recommendation: The recommendation is to continue to use the

approved estimate.



ACCOUNT 385: INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT

This account includes the costs of industrial measuring and regulating station equipment.

GENERAL INFORMATION:

This account includes meter sets for larger customers and many of the assets are similar to those in Account 378, Measuring and Regulating Station Equipment.

SERVICE LIFE ANALYSIS:

Discussion: The currently approved survivor curve estimate for

this account is the 37-R2, although the 30-R3 survivor curve was recommended in the 2017 Depreciation Study. The statistical results are not definitive. However, it is reasonable to expect similar life characteristics for this account as for Account 378.

Recommendation: The recommendation is to use the 35-S3 survivor.

curve, which is the same estimate as for Accounts

378 and 379.

NET SALVAGE ANALYSIS:

Discussion: There has been limited data for the net salvage

analysis. The currently approved estimate is 0

percent net salvage.

Recommendation: The recommendation is to continue to use the

X-18

approved estimate.



ACCOUNT 387: OTHER EQUIPMENT

This account includes the installed cost of all other distribution system equipment not addressed in the foregoing accounts, including street lighting equipment

GENERAL INFORMATION:

The assets in this account are miscellaneous distribution assets not included in other plant accounts.

SERVICE LIFE ANALYSIS:

Discussion: The currently approved survivor curve estimate for

this account is the 30-S5. The statistical analysis indicates a longer service life than the current estimate. The 35-R3 survivor curve is a good fit of

the historical data.

Recommendation: The recommendation is to use the 35-R3 survivor.

curve.

NET SALVAGE ANALYSIS:

Discussion: There has been limited data for the net salvage

analysis. The currently approved estimate is 0

percent net salvage.

Recommendation: The recommendation is to continue to use the

approved estimate.



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GENERAL PLANT



ACCOUNT 390: STRUCTURES AND IMPROVEMENTS

This account includes costs associated with structures and improvements used in connection with general plant. This includes the cost of all buildings and fixtures permanently attached to the structures.

GENERAL INFORMATION:

The Company has service centers in Brevard, Port St. Lucie and Miami-Dade Counties. The Port St. Lucie facility is a leased facility. The Company's Hialeah service center was sold in 2016. This transaction was not included as a retirement in the life and net salvage analyses.

SERVICE LIFE ANALYSIS:

Discussion: The currently approved survivor curve for this account

is the 40-R1. The statistical analysis indicates a shorter service life than the current estimate. The recommended 30-S0.5 survivor curve is a reasonable

fit of the historical data.

Recommendation: The recommendation is to use a 30-S0.5 survivor

curve, which is a good fit of the historical data.

NET SALVAGE ANALYSIS:

Discussion: The currently approved net salvage estimate for this

account is zero percent. The overall average net salvage is (5) percent. However, there are several

years with retirements and no cost of removal.

Recommendation: The recommendation is to continue to use the

approved zero percent net salvage estimate.



ACCOUNT 392: TRANSPORTATION EQUIPMENT

This account includes the cost of transportation vehicles used for utility purposes.

GENERAL INFORMATION:

This account includes transportation equipment that is not included in other subaccounts of Account 392.

SERVICE LIFE ANALYSIS:

Discussion: The currently approved survivor curve for this account

is the 12-L2.5. The statistical analysis indicates the data supports a slightly shorter average service life. The 10-L2.5 survivor curve is a good fit of the

historical data.

Recommendation: The recommendation is to use the proposed 10-L2.5

estimate.

NET SALVAGE ANALYSIS:

Discussion: Each of the subaccounts of Account 392 were

analyzed together for the net salvage analysis. The currently approved net salvage for this account is positive 12 percent. The overall average net salvage is 9 percent and the most recent five-year average is

13 percent.

Recommendation: The recommendation is to use a positive 10 percent

net salvage estimate for this account, which is



ACCOUNT 392.1: TRANSPORTATION EQUIPMENT - AUTOS AND LIGHT TRUCKS

This account includes the cost of transportation vehicles used for utility purposes including automobiles and light trucks.

GENERAL INFORMATION:

This account includes automobiles, SUVs and light trucks.

SERVICE LIFE ANALYSIS:

Discussion: The currently approved survivor curve for this account

is the 8-L3. The statistical analysis indicates a slightly longer service life. The 9-S2 survivor curve is a good

fit based on the historical data.

Recommendation: The recommendation is to use the proposed 9-S2

estimate.

NET SALVAGE ANALYSIS:

Discussion: Each of the subaccounts of Account 392 were

analyzed together for the net salvage analysis. The currently approved net salvage for this account is positive 12 percent. The overall average net salvage is 9 percent and the most recent five-year average is

13 percent.

Recommendation: The recommendation is to use a positive 10 percent

net salvage estimate for this account, which is



ACCOUNT 392.2: TRANSPORTATION EQUIPMENT - SERVICE TRUCKS

This account includes the cost of transportation vehicles used for utility purposes including service trucks.

GENERAL INFORMATION:

This account includes larger trucks such as service trucks.

SERVICE LIFE ANALYSIS:

Discussion: The currently approved survivor curve for this account

is the 8-L3. The statistical analysis indicates a slightly longer service life. The 10-L3 curve fits the historical

data well.

Recommendation: The recommendation is to use the proposed 10-L3

estimate.

NET SALVAGE ANALYSIS:

Discussion: Each of the subaccounts of Account 392 were

analyzed together for the net salvage analysis. The currently approved net salvage for this account is positive 12 percent. The overall average net salvage is 9 percent and the most recent five-year average is

13 percent.

Recommendation: The recommendation is to use a positive 10 percent

net salvage estimate for this account, which is



ACCOUNT 392.3: TRANSPORTATION EQUIPMENT - HEAVY TRUCKS

This account includes the cost of transportation vehicles used for utility purposes including heavy trucks.

GENERAL INFORMATION:

This account includes heavy trucks.

SERVICE LIFE ANALYSIS:

Discussion: The currently approved survivor curve for this account

is the 13-L3. The statistical analysis does not provide

a reason to modify the current estimate.

Recommendation: The recommendation is to continue to use the 13-L3

survivor curve estimate.

NET SALVAGE ANALYSIS:

Discussion: Each of the subaccounts of Account 392 were

analyzed together for the net salvage analysis. The currently approved net salvage for this account is positive 12 percent. The overall average net salvage is 9 percent and the most recent five-year average is

13 percent.

Recommendation: The recommendation is to use a positive 10 percent

net salvage estimate for this account, which is



ACCOUNT 394.1: NATURAL GAS VEHICLE EQUIPMENT

This account includes the cost of natural gas vehicle equipment.

GENERAL INFORMATION:

Assets in this account are equipment for natural gas vehicles.

SERVICE LIFE ANALYSIS:

Discussion: The currently approved survivor curve for this account

is the 20-S4. The assets in this account are relatively new and the statistical analysis does not provide a

reason to modify the current estimate.

Recommendation: The recommendation is to continue to use the 20-S4

survivor curve estimate.

NET SALVAGE ANALYSIS:

Discussion: The currently approved net salvage for this account is

zero percent.

Recommendation: This estimate continues to be reasonable for this

account.



ACCOUNT 396: POWER OPERATED EQUIPMENT

This account includes the cost of power operated equipment used in construction or repair work exclusive of equipment includible in other accounts. Also included are the tools and accessories acquired for use with such equipment and the vehicle on which such equipment is mounted.

GENERAL INFORMATION:

This account includes non-road power operated equipment.

SERVICE LIFE ANALYSIS:

Discussion: The currently approved survivor curve for this account

is the 15-SQ. The 15-L2.5 survivor curve is a reasonable fit of the available data, has the same average service life as the current estimate and a curve type that is typical for this type of property.

Recommendation: The recommendation is to use the 15-L2.5 survivor

curve.

NET SALVAGE ANALYSIS:

Discussion: The currently approved net salvage for this account is

positive 10 percent, which is the same as what was

proposed in the 2017 Depreciation Study.

Recommendation: The current 10 percent estimate continues to be

reasonable for this account and is the same estimate

as recommended for Account 392.



Accounts Not Included in the Depreciation Study

Consistent with current practices for FCG and other Florida utilities, many of the intangible and general plant accounts are amortizable accounts. While these accounts were not included in the depreciation study, Gannett Fleming reviewed the current amortization periods for each account. The continued use of the current amortization periods is reasonable. These amortization periods are as follows:

Accour	<u>nt</u>	Amortization Period
303	Miscellaneous Intangible Plant	20
303.02	Computer Software	12
303.2	Software as a Service	20
391	Office Furniture	15
391.1	Software Non-Enterprise	10
391.11	Computer Software	12
391.12	Computer Hardware	5
391.5	Individual Equipment	5
393	Stores Equipment	25
394	Tools, Shop and Garage Equipment	15
395	Laboratory Equipment	20
397	Communication Equipment	12
398	Miscellaneous Equipment	20

Additionally, the Company's Liquefied Natural Gas (LNG) plant, which is expected to be placed in service in March of 2023, was not included in the study. The currently approved depreciation rate for these assets is 2.00%, which corresponds to a 50-year service life. No changes are proposed to this depreciation rate or related depreciation parameters, which are within the range of estimates used for other LNG facilities.

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LIST OF CASES IN WHICH NED W. ALLIS HAS SUBMITTED TESTIMONY

1 2013	No.	Year	Jurisdiction	Docket	Client/Utility	Subject
2 2013 NY						
3 2013 DC Case No. 1103 Pepco Depreciation				13-E-0030, 13-G-	1 2	•
5 2014 NY 14-E-0493 Orange and Rockland - Electric Depreciation 6 2014 NY 15-E-0050 Consolidated Edison Company of New York - Electric Depreciation 7 2015 FERC ER15-2294-000 Pacific Gas & Electric Company TO17 Depreciation 8 2015 NY 16-E-0060 Consolidated Edison Company of New York - Depreciation 9 2015 NY 16-G-0061 Consolidated Edison Company of New York - Depreciation 10 2016 FL 160021-ET Florida Power & Light Company Depreciation 11 2016 NV 16-60008 Sierra Pacific Power Company - Electric Depreciation 12 2016 NV 16-60009 Sierra Pacific Power Company - Gas Depreciation 12 2016 NV 16-60099 Sierra Pacific Power Company - Gas Depreciation 14 2016 FERC ER16-2320-000 Pacific Gas & Electric Company Depreciation 15 2016 DC Case No. 1139 Pepco Depreciation </td <td>3</td> <td>2013</td> <td>DC</td> <td></td> <td>Pepco</td> <td>Depreciation</td>	3	2013	DC		Pepco	Depreciation
6 2014 NY 15-E-0050 Consolidated Edison Company of New York - Electric Depreciation 7 2015 FERC ER15-2294-000 Pacific Gas & Electric Company TO17 Depreciation 8 2015 NY 16-E-0060 Consolidated Edison Company of New York - Depreciation Depreciation 9 2015 NY 16-G-0061 Consolidated Edison Company of New York - Depreciation Depreciation 10 2016 FL 160021-EI Florida Power & Light Company Depreciation 11 2016 NV 16-06009 Sierra Pacific Power Company - Electric Depreciation 12 2016 NV 16-06009 Sierra Pacific Gos & Electric Company Depreciation 14 2016 FERC E816-2320-000 Pacific Gas & Electric Company Depreciation 15 2016 DC Case No. 1139 Pepco Depreciation 16 2017 NV 17-06004 Nevada Power Company Electric 17 2017 FERC ER17-2154-000 Transmissi	4	2014	NY	14-G-0494	Orange and Rockland - Gas	Depreciation
February February	5	2014	NY	14-E-0493		Depreciation
8 2015 NY 16-E-0060 Consolidated Edison Company of New York - Electric Consolidated Edison Company of New York - Consolidated Edison Company of New York - Consolidated Edison Company of New York - Depreciation Gas Depreciation Depreciation Depreciation Company - Electric Depreciation Sierra Pacific Power Company - Electric Depreciation Depreciation NV 16-06008 Sierra Pacific Power Company - Electric Depreciation Depreciation NV 16-06009 Sierra Pacific Power Company - Electric Depreciation Transmission 14 2016 FERC ER16-2320-000 Ease No. 1139 Pepco Depreciation De	6	2014	NY	15-E-0050	2 2	Depreciation
S	7	2015	FERC	ER15-2294-000		Depreciation
Post	8	2015	NY	16-E-0060	• •	Depreciation
10	9	2015	NY	16-G-0061	Consolidated Edison Company of New York -	Depreciation
11 2016 NV 16-06008 Sierra Pacific Power Company - Electric Depreciation 12 2016 NV 16-06009 Sierra Pacific Power Company - Gas Depreciation 13 2016 NJ ER 16050428 Rockland Electric Company Depreciation 14 2016 FERC ER16-2320-000 Pacific Gas & Electric Company - Electric Depreciation 15 2016 DC Case No. 1139 Pepco Depreciation 16 2017 NV 17-06004 Nevada Power Company Depreciation 17 2017 FERC ER17-2154-000 Pacific Gas & Electric Company - Electric Depreciation 18 2017 CT 17-10-46 Connecticut Light & Power Depreciation 19 2017 CA A.17-11-009 Pacific Gas & Electric Company - Electric Depreciation 20 2017 RI 4770 Narragansett Electric Company Depreciation 21 2017 DC Case No. 1150 Pepco Depreciation	10	2016	FL	160021-EI		Depreciation
13 2016 NJ ER 16050428 Rockland Electric Company Depreciation	11	2016	NV	16-06008		Depreciation
13 2016 NJ ER 16050428 Rockland Electric Company Depreciation	12	2016	NV	16-06009		
Pacific Gas & Electric Company - Electric Depreciation	13	2016	NJ	ER 16050428	Rockland Electric Company	
15 2016 DC Case No. 1139 Pepco Depreciation 16 2017 NV 17-06004 Nevada Power Company Depreciation 17 2017 FERC ER17-2154-000 Pacific Gas & Electric Company – Electric Depreciation 18 2017 CT 17-10-46 Connecticut Light & Power Depreciation 19 2017 CA A.17-11-009 Pacific Gas & Electric – Gas Transmission and Storage Depreciation 20 2017 RI 4770 Narragansett Electric Company Depreciation 21 2017 DC Case No. 1150 Pepco Depreciation 22 2018 CT 18-05-10 Yankee Gas Services Company Depreciation 22 2018 NY 18-E-0067 Orange and Rockland – Electric Depreciation 24 2018 NY 18-G-0068 Orange and Rockland – Gas Depreciation 25 2018 FERC ER19-13-000 Pacific Gas & Electric Company Depreciation 26 <td>14</td> <td>2016</td> <td>FERC</td> <td>ER16-2320-000</td> <td>Pacific Gas & Electric Company – Electric</td> <td></td>	14	2016	FERC	ER16-2320-000	Pacific Gas & Electric Company – Electric	
16 2017 NV 17-06004 Nevada Power Company Depreciation	15	2016	DC	Case No. 1139		Depreciation
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25 2018 NJ ER18080925 Atlantic City Electric Company Depreciation	24		NY			-
Pacific Gas & Electric Company – Electric Depreciation	25				2	
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30 2018 NY 19-G-0065 Consolidated Edison Company of New York - Gas Depreciation 31 2019 MA D.P.U. 18-150 Massachusetts Electric Company PBR / Depreciation 32 2019 MD 9610 Baltimore Gas & Electric Company Depreciation 33 2019 KS 19-ATMG-525-RTS Atmos Energy Depreciation 34 2020 FERC ER21-83-000 Pepco Depreciation 35 2020 MA D.P.U. 20-120 Boston Gas Company Depreciation 36 2020 FERC ER20-2878-00 PG&E - Wholesale Distribution Depreciation	29	1 1		19-E-0065	Consolidated Edison Company of New York -	Depreciation
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36 2020 FERC ER20-2878-00 PG&E – Wholesale Distribution Depreciation					•	
						Depreciation

LIST OF CASES IN WHICH NED W. ALLIS HAS SUBMITTED TESTIMONY

No.	Year	Jurisdiction	Docket	Client/Utility	Subject
38	2021	FERC	RP21-100-000	National Grid Liquified Natural Gas	Depreciation
39	2021	FL	20210016-EI	Duke Energy Florida	Depreciation
40	2021	NY	21-E-0074	Orange and Rockland – Electric	Depreciation
41	2021	NY	21-G-0073	Orange and Rockland – Gas	Depreciation
42	2021	NH	DE 21-030	Until Energy Systems, Inc.	Depreciation
43	2021	FL	20210015-EI	Florida Power & Light Company	Depreciation
44	2021	FERC	ER21-1822-000	GridLiance High Plains	Depreciation
45	2021	NH	DG 21-104	Northern Utilities, Inc.	Depreciation
46	2021	NJ	ER2105823	Rockland Electric Company	Depreciation
47	2021	MD	9670	Delmarva Power and Light	Depreciation
48	2021	CA	A. 21-06-021	Pacific Gas & Electric Company	Depreciation
49	2021	FERC	ER22-306	Duke Energy Florida	Depreciation
50	2021	FERC	ER22-2-000	ITC Transmission	Depreciation
51	2021	FERC	ER22-3-000	ITC Midwest	Depreciation
52	2021	FERC	ER22-4-000	Michigan Electric Transmission Company	Depreciation
53	2022	NY	22-E-0064	Consolidated Edison Company of New York - Electric	Depreciation
54	2022	NY	22-G-0065	Consolidated Edison Company of New York - Gas	Depreciation
55	2022	WA	UE-220066 / UG-	Puget Sound Energy	Depreciation
56	2022	MD	9680	Columbia Gas of Maryland	Depreciation

FLORIDA CITY GAS

SCHEDULE 1B. SUMMARY OF ESTIMATED DEPRECIATION ACCRUALS UTILIZING BALANCES AS OF DECEMBER 31, 2022 AND PROPOSED DEPRECIATION RATES

							RECOMMEN	RECOMMENDED RATES		
ACCOUNT	ORIGINAL COST AS OF DECEMBER 31, 2022	BOOK DEPRECIATION RESERVE	RESERVE	AVERA SERVICE	AVERAGE LIFE VICE REMAINING FF	NET SALVAGE	DEPRECIATION WHOLE	DEPRECIATION RATES WHOLE REMAINING	ESTIMATED ANNUAL ACCRIMA	CHANGE IN ANNUAL ACCRITAL
(1)	(2)	(3)	(4)=(3)/(2)	(2)	(9)	(7)	(8)	(6)	(10)	(11)
GAS PLANT										
DISTRIBUTION PLANT	ı									
					i i		6			
375.00 STRUCTURES AND IMPROVEMENTS 376.10 MAINS - STFFI	ZU9,6Z1.1Z	19,014 76,811,351	9.07	34.97	31.72	O (75)	2.86	2.87	9009	(489)
	192,615,831.33	54,566,030	28.33	65.04	54.39	(09) (09)	2.46	2.42	4,662,977	(152,419)
378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL	2,715,949.96	370,403	13.64	35.00	31.11	(2)	3.00	2.94	79,760	(15,298)
	19,606,557.02	2,568,998	28.40	35.00	25.28	(2)	3.00	3.03	594,062	64,685
380.10 SERVICES - STEEL	15,577,540.35	13,940,822	89.49	50.00	22.47	(100)	9 30	4.92	766,100	345,506
	21 907 440 91	6.597.386	30.11	20.00	12.59	000	5.00	5.55	1 2 16 049	(120,305)
	1,791,692.69	380,269	21.22	20.00	14.78	0	5.00	5.33	95,495	(13,798)
382.00 METER INSTALLATIONS	5,818,610.99	1,660,136	28.53	35.00	23.28	(2)	3.00	3.28	191,126	(16,598)
	533,909.26	176,606	33.08	20.00	11.86	0	5.00	5.64	30,127	13,576
383.00 HOUSE REGULATORS	7,565,636.28	1,885,273	24.92	39.92	30.84	(2)	2.63	2.60	196,454	(30,515)
	3,725,562.98	2,269,526	60.92	34.97	15.46	000	2.86	2.53	94,181	39,043
387.00 OTHER EQUIPMENT	1,961,516.55	398,885	20.34	34.97	28.49	>	7.80	7.80	94,44	(3,997)
IO IAL DISTRIBUTION PLANT	529,328,282.93	191,409,904	36.16				2.87	2.93	15,488,552	1,171,921
GENERAL PLANT	ĺ									
OTIVE OF DIA OTHER CANA OTHER CANA OTHER CANADA	400 400	00 1 100 1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	000	600	c	c	c c	00000	90
390.00 STRUCTURES AND IMPROVEMENTS 390.00 TRANSPORTATION FOLIDMENT	303 331 77	1,007,746	33.68	30.03	22.84	> 5	3.33 9.00	3.58	326,605	31,653
392.10 TRANSPORTATION EQUIPMENT - AUTOS AND LIGHT TRUCKS	1,723,037.49	1,098,401	63.75	00.6	3.86	10	10.00	6.80	117,185	(72,349)
392.20 TRANSPORTATION EQUIPMENT - SERVICE TRUCKS	5,236,068.56	2,572,619	49.13	10.00	6.05	10	9.00	6.75	353,693	(279,871)
392.30 TRANSPORTATION EQUIPMENT - HEAVY TRUCKS	776,644.00	355,716	45.80	13.01	6.73	9 9	6.92	6.57	51,005	12,949
396.00 POWER OPERATED EQUIPMENT	1,564,203.37	941,298	34.54	15.00	13.50 9.26	- 6	9:00	5.99	46,141 16,156	(1,379)
F14 4 11 14 14 14 14 14 14 14 14 14 14 14	40 000 462 40	000 4 440					Š	8	0.00	(1907.054)
IOIAL GENERAL PLANI	19,000,463.18	6,831,142	35.95				5.91	5.09	967,918	(237,954)
TOTAL DEPRECIABLE PLANT	548,328,746.11	198,241,045	36.15				2.97	3.00	16,456,470	933,967
NONDEPRECIABLE PLANT AND ACCOUNTS NOT STUDIED										
OF AND COMPTENTS	1	920 20								
	76.60+,1 +7	(116)								
	11,395,601.52	1,730,483								
303.20 SOFTWARE AS A SERVICE - 20 YEARS	5,969,168.10	728,746								
	72,440.56	01+'21								
	11,132.18									
387.98 UNKEGULATED MISC ASSETS	9,694.38	(3,139)								
	96,507.92									
391.00 OFFICE FURNITURE	761,398.32	295,150								
	813,347.74	447,431								
	992,183.11	210,024								
397.00 COMMUNICATION EQUIPMENT 398.00 MISCELLANEOUS EQUIPMENT	702,382.32 224,541.67	272,389 (170,170)								
TOTAL NONDEPRECIABLE PLANT AND ACCOUNTS NOT STUDIED	25,046,738.19	3,762,990								
TOTAL GAS PLANT	573,375,484.30	202,004,035								

NOTES:
FOG HAS NOT INCLUDED AMORTIZABLE ACCOUNTS IN THE 2022 DEPRECIATION STUDY. THERE ARE NO PROPOSED CHANGES TO AMORTIZATION PERIODS.

Summary of Depreciation Based on Current Service Life and Net Salvage Estimates

Exhibit NWA-4, Page 1 of 1

TABLE 1. SUMMARY OF PROBABLE RETIREMENT DATE, ESTIMATED SURVIVOR CURVE, NET SALVAGE PERCENT, ORIGINAL COST, BOOK DEPRECIATION RESERVE
AND CALCULATED ANNUAL DEPRECIATION ACCRUAL RATES RELATED TO GAS PLANT AS OF DECEMBER 31, 2022

BASED ON CURRENT SERVICE LIFE AND NET SALVAGE ESTIMATES

		PASED ON CO.		VICE LIFE AND NET SALVAGE ES					
	PROBABLE RETIREMENT	SURVIVOR	NET SALVAGE	ORIGINAL COST AS OF	BOOK DEPRECIATION	FUTURE	CALCULATED ANNUAL ACCRUAL	ATED SCRUAL	COMPOSITE
DEPRECIABLE GROUP (1)	DATE (2)	CURVE (3)	PERCENT (4)	DECEMBER 31, 2022 (5)	RESERVE (6)	ACCRUALS (7)=(100%-(4))x(5)-(6)	AMOUNT (8)=(7)/(10)	RATE (9)=(8)/(5)	(10)
GAS PLANT									
DISTRIBUTION PLANT									
		32-R5	0 (209,627	20,126	189,501	6,568	3.13	28.85
		55-53 55-53	(ac) (40)	149,385,025 192,615,831	76,811,351	147,266,186 215,096,134	3,963,030	2.65 2.51	37.16 44.43
378.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL		30-83	(G)	2,715,950	370,403	2,481,344	94,816	3.49	26.17
379,00 MEASURING AND REGULATING STATION EQUIPMENT - CITY GATE 380,10 SERVICES - STEEL		35-84 45-86	(5) (100)	19,606,557	5,567,886	15,018,999 15,540,980	603,173	3.08	24.90 12.84
		54-R2.5	(45)	103,791,092	26,655,757	123,841,326	2,789,219	2.69	44.40
381.00 METERS 38110 METERS - FRT		20-R1.5	9 (9)	21,907,441	4,967,876	18,034,937		5.95	13.84
		34-83	(30)	5,818,611	1,739,294	5,243,039	239,081	4.11	21.93
		20-R1.5	o (533,909	152,309	381,601		6.03	11.86
383.00 HOUSE REGULATORS		30-83	(2)	7,565,636	1,885,273	6,058,645	293,397	3.88	20.65
		37-R2	00	3,725,563	2,269,526	1,456,037	73,873	9.50	19.71
387.00 OTHER EQUIPMENT		30-85	0	1,961,519	398,885	1,562,634	67,268	3.43	23.23
TOTAL DISTRIBUTION PLANT				529,328,283	191,409,904	555,783,841	15,742,703	2.97	35.30
GENERAL PLANT									
		40-R1	0	9,127,408	1,667,746	7,459,663	220,049	2.41	33.90
392.00 TRANSPORTATION EQUIPMENT		12-L2.5 8-1 3	5 5	303,332	102,172	164,760	38,950	12.84 7.67	4.23
392.20 TRANSPORTATION EQUIPMENT - SERVICE TRUCKS		8-L3	1 2	5,236,069	2,572,619	2,035,122		8.79	4.42
392.30 TRANSPORTATION EQUIPMENT - HEAVY TRUCKS 394 10 NATURAL GAS VEHICLE FOLIPMENT		13-L3 20-S4	5 c	776,644	355,716	327,731	48,697 46,141	6.27	6.73
396.00 POWER OPERATED EQUIPMENT		15-SQ	10	269,770	93,191	149,601		6.73	8.24
TOTAL GENERAL PLANT				19,000,463	6,831,142	11,177,655	964,665	5.08	11.59
TOTAL DEPRECIABLE PLANT				548,328,746	198,241,045	566,961,496	16,707,368	3.05	33.93
NONDEPRECIABLE PLANT AND ACCOUNTS NOT STUDIED									
302.00 FRANCHISE AND CONSENTS				241.490	97.976				
					(116)				
303.02 COMPUTER SOFTWARE				11,395,602	1,730,483				
				1,277,708	13,416				
374.10 LAND 374.30 RIGHT-OF-WAY				72,441					
				4,694	(3,139)				Εx
389.00 LAND 81GHTS				2,225,561					κh
				761,398	295,150				ib
391.12 COMPUTER HARDWARE				258,582	140,799				it
				992,183	210,024				N
397.00 COMMUNICATION EQUIPMENT 398.00 MISCELLANEOUS EQUIPMENT				702,382 224,542	272,389 (170,170)				W
TOTAL NONDEPRECIABLE PLANT AND ACCOUNTS NOT STUDIED				25.046.738	3.762.990				'A-
									-4
TOTAL GAS PLANT				573,375,484	202,004,035				,

TABLE 1. SUMMARY OF PROBABLE RETIREMENT DATE, ESTIMATED SURVIVOR CURVE, NET SALVAGE PERCENT, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUAL RATES RELATED TO GAS PLANT AS OF DECEMBER 31, 2022

	BASED O	N PROPOSED SE	RVICE LIFE EST	BASED ON PROPOSED SERVICE LIFE ESTIMATES AND CURRENT NET SALVAGE ESTIMATES	ALVAGE ESTIMATES				
aliva v alavivada	PROBABLE RETIREMENT	SURVIVOR	NET SALVAGE	ORIGINAL COST AS OF	BOOK DEPRECIATION	FUTURE	CALCULATED ANNUAL ACCRUAL	TED CRUAL BATE	COMPOSITE REMAINING
DEFRICUABLE GROUP (1)	(2)	(3)	(4)	DECEMBER 31, 2022 (5)	(6)	$(7)=(100\%-(4))\times(5)-(6)$	(8)=(7)/(10)	(9)=(8)/(5)	(10)
GAS PLANT									
DISTRIBUTION PLANT									
		35-R4	0	209,627	19,014	190,613	6,009	2.87	31.72
		65-R4	(20)	149,385,025	76,811,351	147,266,186	3,169,741	2.12	46.46
		65-K4	(5)	192,615,831	54,566,030	215,096,134	3,954,700	2.05	34.39
379.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERALE		35-83	(9)	19,606,557	5,568,998	15,017,887	594.062	3.03	25.28
		50-R2.5	(100)	15,577,540	13,590,800	17,564,281	781,677	5.02	22.47
380.20 SERVICES - PLASTIC		50-R2.5	(45)	103,791,092	26,655,757	123,841,326	3,063,863	2.95	40.42
381.00 MELERS 38110 METERS - ERT		20-52.5	9 (2)	21,907,441	6,753,328	16,249,485	1,290,666	5.89	12.59
		35-R3	(3)	5,818,611	1,849,661	5,132,673	220,476	3.79	23.28
		20-R1.5	0	533,909	172,172	361,738	30,501	5.71	11.86
383.00 HOUSE REGULATORS		40-R2.5	(2)	7,565,636	1,885,273	6,058,645	196,454	2.60	30.84
		35-83	0	3,725,563	2,269,526	1,456,037	94,181	2.53	15.46
387.00 OTHER EQUIPMENT		35-R3	0	1,961,519	398,885	1,562,634	54,849	2.80	28.49
TOTAL DISTRIBUTION PLANT				529,328,283	191,409,904	555,783,842	13,716,637	2.59	40.52
GENERAL PLANT									
		0	ď	007	07 1	00000		c c	000
390.00 STRUCTURES AND IMPROVEMENTS 390.00 TRANSPORTATION FOLIPMENT		30-50.5	o C	9,127,408	1,007,746	1,459,663	326,605	3.38	2 99
392.10 TRANSPORTATION EQUIPMENT - AUTOS AND LIGHT TRUCKS		9-S2	12	1,723,037	1,098,401	417,872	108,257	6.28	3.86
392.20 TRANSPORTATION EQUIPMENT - SERVICE TRUCKS		10-L3	27 9	5,236,069	2,572,619	2,035,122	336,384	6.42	6.05
392.30 IRANSPORTATION EQUIPMENT - HEAVY IRUCKS 394.10 NATITRAL GAS VEHICLE FOLIEMENT		13-L3 20-S4	Z c	7/6,644	355,716	327,731	48,697	6.27	6.73
396.00 POWER OPERATED EQUIPMENT		15-L2.5	, C	269,770	93,191	149,601	16,156	5.99	9.26
TOTAL GENERAL PLANT				19,000,463	6,831,142	11,177,655	937,344	4.93	11.92
TOTAL DEPOSICIABLE DLANT				548 328 746	198 241 045	566 961 497	14 653 981	79.6	38 60
				040,026,046	130,141,043	164,106,000	106,500,41	70.7	60.00
NONDEPRECIABLE PLANT AND ACCOUNTS NOT STUDIED									
				241,490	97,976				
				200 100	(116)				
303.20 SOFTWARE AS A SERVICE - 20 YEARS				5,969,168	728,746				
				1,277,708	13,416				
374.10 LAND 374.30 PICHT-OE-WAV				72,441					
				4,694	(3,139)				E2
389.00 LAND				2,225,561					XII
				96,508 761,398	295,150				IJι
				258,582	140,799)1t
391.50 INDIVIDUAL EQUIPMENI 394 OO TOOLS SHOD AND GARAGE FOLIIDMENT				813,348	210,024				1
				702,382	272,389				N V
398.00 MISCELLANEOUS EQUIPMENT				224,542	(170,170)				V F
TOTAL NONDEPRECIABLE PLANT AND ACCOUNTS NOT STUDIED				25,046,738	3,762,990				1-,
TOTAL GAS PLANT				573,375,484	202,004,035),