Gatineau, Québec

2015 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION
ACCRUAL RATES APPLICABLE TO
PLANT IN SERVICE AS OF DECEMBER 31, 2013

Prepared by:



Excellence Delivered As Promised

GAZIFÈRE INC. Gatineau, Québec

2015 DEPRECIATION STUDY

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GANNETT FLEMING CANADA ULC

Calgary, Alberta





Excellence Delivered As Promised

May 11, 2015

Gazifère Inc. 706 Boulevard Gréber Gatineau, Québec J8V 3P8

Attention: Jean-Benoit Trahan

Ladies and Gentlemen:

Pursuant to your request, we have conducted a depreciation study of the gas distribution and general plant assets of Gazifère Inc. ("Gazifère" or the "Company") as of December 31, 2013. Our report presents a description of the methods used in the estimation of depreciation, the statistical analysis of service life and the summary and detailed tabulations of annual and accrued depreciation.

The calculated annual depreciation accrual rates presented in the report are applicable to plant in service as of December 31, 2013. The depreciation rates are based on the straight-line remaining life method using the average life group procedure. A periodic review of the depreciation rates using the same estimates and methods is recommended.

Respectfully submitted,

GANNETT FLEMING CANADA ULC

LARRY E. KENNEDY Vice President

LEK/hac Project #059713

Gannett Fleming Canada ULC

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GAZIFÈRE INC. DEPRECIATION STUDY

EXECUTIVE SUMMARY

Pursuant to Gazifère Inc. ("Gazifère" or the "Company") request, Gannett Fleming Canada ULC ("Gannett Fleming") conducted a depreciation study related to the gas distribution and general plant assets as of December 31, 2013. The purpose of this study was to determine the annual depreciation accrual rates and amounts for book and ratemaking objectives.

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 and estimated average service life, and forecasting net salvage characteristic for each depreciable group of assets.

Gazifère's accounting policy has not changed since the last depreciation study was prepared, nor were there any significant policy changes affecting the results of the study presented here within.

Gannett Fleming recommends the calculated annual depreciation accrual rates set forth herein apply specifically to gas plant in service as of December 31, 2013 as summarized by Table 1 of the study by account detail. Supporting data and calculations are provided as well within the study.

Finally, this study results in an annual depreciation expense accrual of \$4.5 million when applied to depreciable plant balances as of December 31, 2013. The report study results are summarized as follows:

SUMMARY OF ORIGINAL COST, ACCRUAL PERCENTAGES AND AMOUNTS

	ORIGINAL COST ANNUAL		ACCRUAL	
PLANT GROUP	\$'s	%'s	\$'s	
(1)	(2)	(3)	(4)	
DISTRIBUTION	124,857,388	3.18%	3,966,477	
GENERAL	10,777,956	13.92%	1,500,188	
TOTAL PLANT IN SERVICE	135,635,344	4.03%	5,466,665	



PART I. INTRODUCTION



GAZIFÈRE INC. DEPRECIATION STUDY PART I. INTRODUCTION

SCOPE

This report sets forth the results of the depreciation study for Gazifère, to determine the annual depreciation accrual rates and amounts for book purposes applicable to the original cost of gas distribution and general plant at December 31, 2013. The rates and amounts are based on the straight line remaining life method and calculated using the average service life ("ASL") procedure. 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, 2013.

The service life and net salvage estimates resulting from the study were based on: informed engineering judgment which incorporated analyses of historical plant retirement data as recorded through December 31, 2013; a review of Company practice and outlook as they relate to 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 Development of Depreciation Parameters, presents descriptions of the methods used in the service life and net salvage studies. Part III Calculation of Annual and Accrued Depreciation presents the methods and procedures used in the calculation of depreciation. Part IV Results of Study, presents summaries by depreciable group of annual and accrued depreciation. Part V presents the results of the Retirement Rate and Service Life Statistics and Part VI presents Net Salvage Analysis. Detailed tabulations of annual and accrued depreciation is presented in Part VII of this report. An overview of Iowa curves and the Retirement Rate Analysis are set forth in Appendix A of the report. An overview of the net salvage analysis is presented in Appendix B of this report.

BASIS OF THE STUDY

Depreciation

For most accounts, the annual and accrued depreciation were calculated by the straight line method using the average service life procedure. For certain General Plant accounts, the annual and accrued depreciation are based on amortization accounting. Both types of calculations were based on original cost, attained ages, and estimates of service lives and salvage. Variances between the calculated accrued depreciation or amortization and the book accumulated depreciation are amortized over the composite remaining life of each account.

Continued monitoring and maintenance of the accumulated depreciation reserve at the account level is recommended. Gannett Fleming has determined an amortization amount to correct the present variance of the booked accumulated depreciation to the calculated accrued depreciation amounts. This adjustment mechanism, whether determined separately as an amortization amount or incorporated in the calculation of remaining life accruals, is widely-accepted

The straight line method using the average service life procedure is a commonly used depreciation calculation procedure that has been widely accepted in jurisdictions throughout North America. Gannett Fleming recommends its continued use. Amortization accounting is used for certain General Plant accounts because of the disproportionate plant accounting effort required when compared to the minimal original cost of the large number of items in these accounts. Many gas utilities in North America have received approval to adopt amortization accounting for these accounts.

Service Life and Net Salvage Estimates

The service life and salvage estimates used in the depreciation and amortization calculations were based on informed judgment which incorporated a review of management's plans, policies and outlook, a general knowledge of the gas utility industry, and comparisons of 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.

The depreciation rates should be reviewed periodically to reflect the changes that result from plant and reserve account activity. A depreciation reserve deficiency or surplus will develop if future capital expenditures vary significantly from those anticipated in this study.

PART II. DEVELOPMENT OF DEPRECIATIONS PARAMETERS



PART II. DEVELOPMENT OF DEPRECIATION PARAMETERS

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

The calculation of annual and accrued depreciation based on the straight line method requires the estimation of survivor curves and is described in the following sections of this report. The development of the proposed depreciation rates also requires the selection of group depreciation procedures, as discussed in Part III of this report.

ESTIMATION OF SURVIVOR CURVES

Survivor Curves

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



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 in relationship to the average life and relative height of the modes. The left-moded curves are those in which the greatest frequency of retirement occurs to the left of, or prior to, average service life. The symmetrical-moded curves are those in which the greatest frequency of retirement occurs at average service life. The right-moded curves are those in which the greatest frequency occurs to the right of, or after, the average service life. The orgin-moded curves are those in which the greatest frequency of retirement occurs at the orgin, or immediately after age 0. The letter designation of each family of curves (L, S, R or O) represents the mode of the associated frequency curve with respect to the average service life. The numerical subscripts represent the relative heights of the modes of the frequency curves within each family.

A discussion of the general concept of survivor curves and retirement rate method is presented in Appendix A of this report. Also attached, as Appendix B to this report is a discussion of the net salvage estimation process followed by Gannett Fleming in this study.

Survivor Curve and Net Salvage Judgments

The survivor curve estimates were based on judgment which considered a number of factors. The primary factors were the statistical analysis of data; current policies and outlook as determined during conversations with management personnel and on the knowledge Gannett Fleming developed through the completion of numerous gas utility studies.

The estimates of net salvage were based in part on historical data related to actual retirement activity for the years 1996 through 2013 for most accounts. Gross salvage and cost of removal as recorded to the depreciation reserve account and related to experienced retirements were used. Percentages of the cost of plant retired were calculated for each component of net salvage on both annual and five-year moving average bases.



The net salvage estimates are expressed as percentages of the cost of plant. The net salvage estimates for transmission plant represent a weighting of the net salvage applicable to retirements prior to truncation and zero net salvage for retirements at truncation.

The following discussion, dealing with a number of accounts which comprise the majority of the investment analyzed, presents an overview of the factors considered by Gannett Fleming in the determination of the average service life and net salvage estimates. The survivor curve estimates for the remainder of the accounts not discussed in the following sections were based on similar considerations.

Account 473.00 - Services – The investment in Services accounts for 36% of the total depreciable plant studied. The currently approved average service life estimate is the lowa 50-R5. In a 2009 depreciation study, Gannett Fleming recommended a 39-S3 based on the actual retirement history of the Gazifère plant. However, in Decision D-2010-212, the Régie de l'énergie (the "Régie") considered that the depreciation study placed too much reliance on the historic retirements of copper piping which was the predominant cause of the observed retirement history. The Régie further noted that following the copper pipe replacement, the Gazifère distribution system is over 90% comprised of plastic piping and is more modern than most systems in North America. Given these considerations the Régie ruled that there was insufficient evidence to shorten the average service life for the assets remaining in service and ordered that Gazifère continue to use a 50-R5 lowa curve.

In this current depreciation study, a review of the retirement history indicated an lowa 40-R3. The retirement rate analysis prepared in this study reviewed the plant installed over the period of 1960 through 2013 and the retirement experience covering the period of 1996 through 2013. The plotted observed life table produced by the retirement rate analysis is presented at pages V-2 of this report. However, this retirement data is still predominately based on the copper piping replacement programs. Giving consideration to the comments of the Régie in D-2010-112, Gannett Fleming is proposing to retain the 50 year average service life estimate. However, Gannett Fleming is recommending a small change to the lowa curve shape to better reflect the Gannett Fleming experience that plastic pipe will retire with a lower moded retirement dispersion. As such, the lowa 50-R3 is recommended for this account.

The currently approved net salvage estimate for this account is negative 115 percent, as approved by the Régie in Decision D-2010-112. Gannett Fleming has reviewed the historic net salvage indications study as part of this depreciation study. As indicated at pages VI-2 and VI-3 of this report, the actual net salvage requirements of this account have become more negative over the past five years. Only in 2011 where a negative 128 percent is indicated is the net salvage indication below negative 174 percent, with three years indicating a requirement of at least negative 208 percent. The average indication over this most recent five-year period is negative 198 percent. Gannett Fleming noted that the negative 115 percent currently approved by the Régie is still within a common band of salvage estimates approved by regulators across the country, which generally range from negative 100 percent to negative 125 percent. As such, Gannett Fleming is recommending that the net salvage percentage be retained at negative 115 percent in this study. However, if further studies indicate the continuance of the trend towards more negative percentages, a significant increase in the net negative salvage requirement may be required. Therefore, continuation of the currently approved negative 115 percent is recommended in this study.

Account 475.00 – Mains - The investment in Mains accounts for 54% of the total depreciable plant studied. The currently approved average service life estimate is the lowa 75-R4. The retirement rate analysis prepared in this study reviewed the plant installed over the period of 1959 through 2013 and the retirement experience covering the period of 1996 through 2013. Over this period, over \$617,000 of plant has been retired, with a consistent level of investment retiring in most years. Additionally, the plotted observed life table presented at page V-5 indicates a small but consistent level of retirements occurring broadly across all age intervals. The retirement rate analysis is presented at pages V-6 and V-7 of this report and produced a good fit to the lowa 80-R3. This would represent a small life extension from 75 to 80 years which Gannett Fleming views as reasonable given the continuation of the trend of continual but small levels of investment being retired each year. Additionally the lowing of the mode of the lowa curve from the lowa R4 to the lowa R3 is consistent with the trend of broadly dispersed ages of retirements. Therefore, Gannett Fleming is recommending the lowa 80-R3 curve in this depreciation study.



The currently approved net salvage estimate for this account is negative 70 percent, approved by the Régie in Decision D-2010-112. Gannett Fleming has reviewed the historic net salvage indications study as part of this depreciation study. As indicated at pages VI-4 and VI-5 of this report the actual net salvage requirements of this account have become significantly more negative over the past five years. Only in 2013 where a negative 120 percent is indicated is the net salvage indication below negative 275 percent, with three years indicating a requirement of at least negative 347 percent. The average indication over this most recent five-year period is negative 268 percent. Given the significant indications that a more negative net salvage percentage is required, Gannett Fleming is proposing a change from the currently approved negative 70 percent to negative 100 percent at this time. It is specifically noted that this recommended change is moderated to provide an additional observation period through to the next depreciation study to determine if the most recent five-year trend continues. If this trend towards a much more negative salvage continues to be witnessed in future studies, the net salvage for this account will require further modification to a more negative salvage percentage. The depreciation calculations in this study have been based on a net salvage percentage of negative 100 percent.

Other Accounts – The investment in all other depreciable accounts, in total accounts for 10% of the depreciable plant studied. Based on the results of a retirement rate analysis prepared for the remaining accounts, the average service life estimates as approved by the Régie in Decision D-2010-112 remain to be reasonable. The retirement rate analysis for all accounts is presented in Part III of this report.

Gannett Fleming also reviewed the net salvage estimates of Account 477.00 – Regulating Equipment and Account 478.00 – Meters. Over the most recent two years, a small indication of net negative salvage requirements has become apparent in Account 477.00, resulting in the inclusion of a negative five percent in the depreciation calculations for Account 477.00. The net salvage recommendation of a positive 65 percent related to Account 478.00 and is consistent with the recommendations and Régie approval in the last depreciation study. This high level of positive salvage is indicative of the location life accounting practice followed by Gazifère and is reasonable given this practice.



PART III. CALCULATION OF ANNUAL AND ACCRUED DEPRECIATION

PART III. CALCULATION OF ANNUAL AND ACCRUED DEPRECIATION

Group Depreciation Procedures

When more than a single item of property is under consideration, a group procedure for depreciation is appropriate because normally all of 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, the average service life and equal life group procedures.

In the average service life procedure, the rate of annual depreciation is based on the average service 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 the average life is more than fully recouped. Over the entire life cycle, the portion of cost not recouped prior to average life is balanced by the cost recouped subsequent to average life.

In the equal life group procedure, also known as the unit summation procedure, the property group is subdivided according to service life. That is, each equal life group includes that portion of the property which experiences the life of that specific group. The relative size of each equal life group is determined from the property's life dispersion curve. The calculated depreciation for the property group is the summation of the calculated depreciation based on the service life of each equal life unit.

In the determination of the depreciation rates in this study, the use of the average service life procedure has been continued. While the equal life group procedure provides an enhanced matching of depreciation expense to the consumption of service value, the average service life procedure was used in order to conform to past Company practices and approvals by the Régie.

CALCULATION OF ANNUAL AND ACCRUED AMORTIZATION

Amortization is the gradual extinguishment of an amount in an account by distributing such amount over a fixed period, over the life of the asset or liability to which it applies, or over the period during which it is anticipated the benefit will be realized.



Normally, the distribution of the amount is in equal amounts to each year of the amortization period.

The calculation of annual and accrued amortization requires the selection of an amortization period. The amortization periods used in this report were based on judgment which incorporated a consideration of the period during which the assets will render most of their service, the amortization period and service lives used by other utilities, and the service life estimates previously used for the asset under depreciation accounting.

Amortization accounting is proposed for a number of accounts that represent numerous units of property, but a very small portion of depreciable plant in service. The accounts and their amortization periods are as follows:

		AMORTIZATION
		PERIOD,
<u>ACCOUNT</u>	<u>TITLE</u>	<u>YEARS</u>
483.00	Office Furniture and Equipment	15
486.00	Tools and Work Equipment	10
490.00	Computer Equipment	4
490.01	Computer Equipment – Post 2008	4
491.00	Other Intangible Assets – Software Other	4
491.00	Other Intangible Assets – CIS	7

For the purpose of calculating annual amortization amounts as of December 31, 2013 the book depreciation reserve for each plant account or subaccount is assigned or allocated to vintages. The book reserve assigned to vintages with an age greater than the amortization period is equal to the vintage's original cost. The remaining book reserve is allocated among vintages with an age less than the amortization period in proportion to the calculated accrued amortization. The calculated accrued amortization is equal to the original cost multiplied by the ratio of the vintage's age to its amortization period. The annual amortization amount is determined by dividing the future amortizations (original cost less allocated book reserve) by the remaining period of amortization for the vintage.

PART IV. RESULTS OF STUDY



PART IV. 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 salvage and for the change of the composition of property in service. The annual accrual rates and the accrued depreciation were calculated in accordance with the straight line method, using the average service life group procedure based on estimates which reflect considerations of current historical evidence and expected future conditions.

DESCRIPTION OF DETAILED TABULATIONS

The service life estimates were based on judgment that incorporated statistical analysis of retirement data, discussions with management and consideration of estimates made for other gas utilities. The results of the statistical analysis of service life are presented in Part V of this report beginning on page V2.

For each depreciable group analyzed by the retirement rate method, a chart depicting the original and estimated survivor curves is 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 band of retirement.

Table 1, at page IV-4 presents a summary of the results of this study. Table 1 provides a summary of the original cost of investment in each account, the current



balance of the accumulated depreciation accounts, the amount of future recovery required, the composite remaining life of each account and the required annual depreciation accrual amount and rate.

The tables of the detailed calculated annual depreciation applicable to depreciable assets as of December 31, 2013 are presented in account sequence starting on page VII-2 of Part VII of this report. The tables indicate the estimated average survivor curves and net salvage percentage used in the calculations. The tables set forth, for each installation year, the original cost, calculated accrued depreciation, composite remaining life and the calculated annual accrual.

GAZIFÈRE INC.

TABLE 1. ESTIMATED SURVIVOR CURVE, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO UTILITY PLANT AT DECEMBER 31, 2013

			!	ORIGINAL COST	BOOK	ļ	CALCULATED ANNUAL	ANNUAL	COMPOSITE
ACCOUNT	DESCRIPTION	SURVIVOR	NET SALVAGE	AS OF DECEMBER 31, 2013	DEPRECIATION RESERVE	FUTURE	ACCRUAL	ACCRUAL RATE	REMAINING LIFE
	(1)	(2)	(3)	(4)	(2)	(9)	(7)	(8)=(7)/(4)	(2)/(9)=(6)
	DEPRECIABLE PLANT STUDIED								
473.00	SERVICES	50-R3	(115)	46,927,470	23,276,295	77,617,954	2,052,077	4.37	37.8
475.00	MAINS	80-R3	(100)	69,522,396	26,697,322	112,347,470	1,729,629	2.49	65.0
477.00	REGULATING EQUIPMENT	30-R4	(2)	2,939,156	1,755,858	1,330,256	76,740	2.61	17.3
478.00	METERS	12-R0.5	92	5,468,365	909,550	1,004,378	108,031	1.98	9.3
483.00	OFFICE FURNITURE AND EQUIPMENT	15-SQ	0	693,028	249,937	443,091	51,459	7.43	8.6
484.01	TRANSPORTATION EQUIPMENT - POST 2005	9-83	0	1,160,148	486,503	673,645	127,638	11.00	5.3
485.00	HEAVY WORK EQUIPMENT	15-S3	0	52,605	53,355			00:0	3.6
485.01		15-S3	0	202,260	50,794	151,466	12,819	6.34	11.8
486.00	TOOLS AND WORK EQUIPMENT	10-SQ	0	237,622	91,249	146,373	24,159	10.00	6.1
488.00	COMMUNICATION EQUIPMENT	8-L3	0	433,485	13,153	420,332	26,995	13.84	7.0
490.00	COMPUTER EQUIPMENT	4-SQ	0	96,763	96,763			0.00	0.0
490.01	COMPUTER EQUIPMENT - POST 2008	4-SQ	0	328,316	148,936	179,380	73,733	25.00	4.0
491.00	OTHER INTANGIBLE ASSETS- SOFTWARE OTHER	4-SQ	0	629,364	537,947	91,417	157,341	25.00 *	2.0
491.00	OTHER INTANGIBLE ASSETS- CIS	7-SQ	0	6,944,365	3,903,578	3,040,787	993,044	14.30 *	4.0
	TOTAL DEPRECIABLE PLANT			135,635,345	58,271,241	197,446,549	5,466,665		
	CONTRIBUTIONS (**)								
473.00	SERVICES	50-SQ	0	(699,718)	(504,357)	(195,362)	(13,994)	2.00	14.0
475.00	MAINS	80-SQ	0	(3,396,175)	(3,384,369)	(11,806)	(42,452)	1.25	1.0
477.00	REGULATING EQUIPMENT	30-SQ	0	(149,160)	(92,383)	(26,777)	(4,967)	3.33	11.4
	TOTAL CONTRIBUTIONS			(4,245,053)	(3,981,108)	(263,945)	(61,414)		
				!	!				
401.00	OTHER GAS INSTALLATIONS I AND			189,473 64.351	189,473				
471.00				26,138					
482.50	LEASEHOLD IMPROVEMENTS			1,001,927	235,336				
	TOTAL NON - DEPRECIABLE PLANT			1,281,889	424,809		,		
	TOTAL PLANT			132,672,181	54,714,941	197,182,604	5,405,252		



^{*} Based on a Straight Line Amortization
** Contributions are amortized over the life of the account to which the contributions apply.

PART V. SERVICE LIFE STATISTICS

ORIGINAL CURVE = 1996-2013 EXPERIENCE 1960-2013 PLACEMENTS 90 80 70 ORIGINAL AND SMOOTH SURVIVOR CURVES ACCOUNT 473.00 - SERVICES 09 IOWA 50-R3 AGE IN YEARS GAZIFÈRE INC. 40 30 20 10 ا0 70 90 80 50 30 20 10 РЕВСЕИТ SURVIVING

100

ACCOUNT 473.00 - SERVICES

PLACEMENT 1	BAND 1960-2013		EXPER	RIENCE BAN	D 1996-2013
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	34,851,106 34,316,545 33,741,618 33,453,852 32,901,087 32,017,200 30,628,783 29,207,142 27,616,090 25,759,328	28,013 48,063 46,820 43,279 56,854 43,638 54,652 50,407 32,897 31,575	0.0008 0.0014 0.0014 0.0013 0.0017 0.0014 0.0018 0.0017 0.0012	0.9992 0.9986 0.9987 0.9983 0.9986 0.9982 0.9983 0.9988	100.00 99.92 99.78 99.64 99.51 99.34 99.20 99.03 98.86 98.74
9.5 10.5 11.5 12.5 13.5 14.5 15.5 16.5 17.5	23,792,842 22,563,624 21,311,680 20,107,779 18,405,222 16,837,836 15,033,257 13,522,990 12,223,216 10,744,514	46,716 41,212 44,185 47,790 73,318 63,571 40,705 30,355 51,506 47,530	0.0020 0.0018 0.0021 0.0024 0.0040 0.0038 0.0027 0.0022 0.0042	0.9980 0.9982 0.9979 0.9976 0.9960 0.9962 0.9973 0.9978 0.9958	98.62 98.42 98.24 98.04 97.81 97.42 97.05 96.79 96.57 96.16
19.5 20.5 21.5 22.5 23.5 24.5 25.5 26.5 27.5 28.5	9,107,894 7,793,560 6,472,874 5,442,077 4,951,004 4,577,783 4,274,868 3,977,919 3,558,206 2,900,846	34,164 29,723 53,333 38,405 37,667 44,012 44,496 69,437 44,393 66,860	0.0038 0.0038 0.0082 0.0071 0.0076 0.0096 0.0104 0.0175 0.0125 0.0230	0.9962 0.9962 0.9918 0.9929 0.9924 0.9904 0.9896 0.9825 0.9875	95.74 95.38 95.02 94.23 93.57 92.86 91.96 91.01 89.42 88.30
29.5 30.5 31.5 32.5 33.5 34.5 35.5 36.5 37.5 38.5	2,450,770 1,995,547 1,653,808 1,550,714 1,343,137 1,198,814 1,090,223 948,981 830,061 635,818	63,048 80,452 41,868 122,399 65,083 64,938 60,419 37,983 30,635 29,098	0.0257 0.0403 0.0253 0.0789 0.0485 0.0542 0.0554 0.0400 0.0369 0.0458	0.9743 0.9597 0.9747 0.9211 0.9515 0.9458 0.9446 0.9600 0.9631 0.9542	86.27 84.05 80.66 78.62 72.41 68.90 65.17 61.56 59.09 56.91



ACCOUNT 473.00 - SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1960-2013 EXPERIENCE BAND					D 1996-2013
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	498,198 368,189 291,463 272,262 240,857 204,535 172,441 151,230 132,270 53,607	22,723 19,684 17,935 11,879 15,540 10,401 7,027 7,847 19,509 8,700	0.0456 0.0535 0.0615 0.0436 0.0645 0.0509 0.0408 0.0519 0.1475 0.1623	0.9544 0.9465 0.9385 0.9564 0.9355 0.9491 0.9592 0.9481 0.8525 0.8377	54.31 51.83 49.06 46.04 44.03 41.19 39.10 37.50 35.56 30.31
49.5 50.5 51.5 52.5 53.5	41,786 5,402 2,787 580	16,362 2,614 2,207	0.3916 0.4840 0.7920 0.0000	0.6084 0.5160 0.2080 1.0000	25.39 15.45 7.97 1.66 1.66



ORIGINAL AND SMOOTH SURVIVOR CURVES ACCOUNT 475.00 - MAINS GAZIFÈRE INC. IOWA 80-R3

ORIGINAL CURVE = 1996-2013 EXPERIENCE 1959-2013 PLACEMENTS 120 100 AGE IN YEARS 40 20 ا0 70 20-10 90 80 50 30 РЕВСЕИТ SURVIVING

ACCOUNT 475.00 - MAINS

PLACEMENT :	BAND 1959-2013		EXPER	RIENCE BAN	D 1996-2013
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	49,503,864 49,173,385 47,624,444 44,373,467 43,340,029 42,995,089 41,236,223 39,760,518 37,938,803	24,900 16,434 5,062 42,514 32,413 25,728 20,683 26,277 2,271	0.0005 0.0003 0.0001 0.0010 0.0007 0.0006 0.0005 0.0007	0.9995 0.9997 0.9999 0.9990 0.9993 0.9994 0.9995 0.9993	100.00 99.95 99.92 99.91 99.81 99.74 99.68 99.63 99.56
8.5 9.5 10.5	36,124,843 34,104,487 33,535,103	34 34,526 6,246	0.0000 0.0010 0.0002	1.0000 0.9990 0.9998	99.55 99.55 99.45
11.5 12.5 13.5 14.5 15.5 16.5 17.5 18.5	32,983,901 32,583,322 30,993,660 29,049,624 24,358,169 20,815,456 14,686,904 12,701,159	3,013 2,430 2,829 19,501 13,569 1,121 248 35,792	0.0001 0.0001 0.0001 0.0007 0.0006 0.0001 0.0000 0.0028	0.9999 0.9999 0.9999 0.9993 0.9994 0.9999 1.0000 0.9972	99.43 99.43 99.42 99.41 99.34 99.29 99.28 99.28
19.5 20.5 21.5 22.5 23.5 24.5 25.5 26.5 27.5 28.5	11,478,231 10,307,085 9,016,489 8,358,264 7,697,272 7,236,747 6,894,446 6,541,685 5,850,663 4,281,900	6,865 16,419 1,816 6,095 12,723 7,434 4,543 1,334 7,568	0.0006 0.0016 0.0002 0.0007 0.0000 0.0018 0.0011 0.0007 0.0002 0.0018	0.9994 0.9984 0.9998 0.9993 1.0000 0.9982 0.9989 0.9998 0.9998	99.00 98.94 98.78 98.76 98.69 98.69 98.52 98.41 98.34 98.32
29.5 30.5 31.5 32.5 33.5 34.5 35.5 36.5 37.5 38.5	3,521,974 2,632,591 2,420,442 2,768,001 3,026,401 3,146,889 3,164,547 5,856,952 5,641,917 5,356,359	11,148 18,159 33,009 13,585 1,113 21,007 6,111 28,317 11,610 3,510	0.0032 0.0069 0.0136 0.0049 0.0004 0.0067 0.0019 0.0048 0.0021 0.0007	0.9968 0.9931 0.9864 0.9951 0.9996 0.9933 0.9981 0.9952 0.9979	98.15 97.84 97.16 95.84 95.37 95.33 94.69 94.51 94.05 93.86



ACCOUNT 475.00 - MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT 1	BAND 1959-2013		EXPER	RIENCE BAN	D 1996-2013
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	4,992,906 4,389,506 4,330,697 4,263,931 4,227,232 4,151,508 4,083,472 3,996,700 3,972,044 3,912,147	14,498 11,142 3,448 721 22,978 3,543 9,137 2,882 2,157 3,443	0.0029 0.0025 0.0008 0.0002 0.0054 0.0009 0.0022 0.0007 0.0005 0.0009	0.9971 0.9975 0.9992 0.9998 0.9946 0.9991 0.9978 0.9993 0.9995	93.80 93.53 93.29 93.22 93.20 92.69 92.61 92.41 92.34 92.29
49.5 50.5 51.5 52.5 53.5 54.5	3,865,569 3,409,886 3,035,085 2,838,006 2,837,614	4,193 9,803 788 392	0.0011 0.0029 0.0003 0.0001 0.0000	0.9989 0.9971 0.9997 0.9999 1.0000	92.21 92.11 91.84 91.82 91.81 91.81



ORIGINAL CURVE ■ 2008-2013 EXPERIENCE 1973-2013 PLACEMENTS 70 9 **IOWA 30-R4** ACCOUNT 477.00 - REGULATING EQUIPMENT ORIGINAL AND SMOOTH SURVIVOR CURVES 50 GAZIFÈRE INC. 30 20 10 اه 100 90 80 70 50 30 20 10

80

AGE IN YEARS

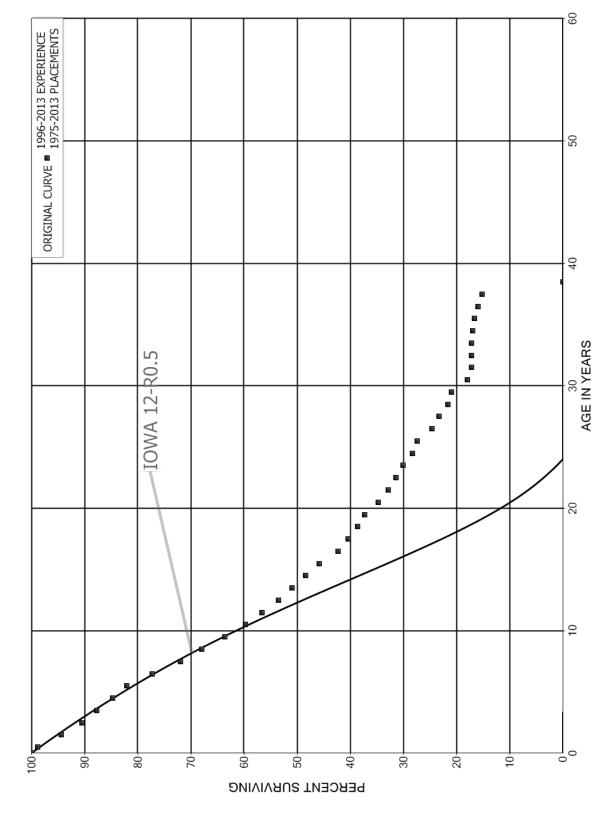
РЕВСЕИТ SURVIVING

ACCOUNT 477.00 - REGULATING EQUIPMENT

PLACEMENT I	BAND 1973-2013		EXPER	RIENCE BAN	D 2008-2013
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	496,316 267,974 297,934 261,638 235,373 293,077 295,837 436,972 525,690 612,925		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
9.5 10.5 11.5 12.5 13.5 14.5 15.5 16.5 17.5 18.5	810,291 832,379 1,224,481 1,044,862 995,493 955,386 801,926 836,230 507,446 568,000	28,771	0.0000 0.0000 0.0235 0.0000 0.0000 0.0000 0.0000 0.0000	1.0000 1.0000 0.9765 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	100.00 100.00 97.65 97.65 97.65 97.65 97.65 97.65
19.5 20.5 21.5 22.5 23.5 24.5 25.5 26.5 27.5 28.5	532,375 504,176 488,166 382,154 320,217 298,619 335,847 292,077 229,132 191,148		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	97.65 97.65 97.65 97.65 97.65 97.65 97.65 97.65
29.5 30.5 31.5 32.5 33.5 34.5 35.5 36.5 37.5 38.5	163,866 115,681 30,530 27,612 28,651 26,894 21,770 19,342 13,772 4,974		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	97.65 97.65 97.65 97.65 97.65 97.65 97.65 97.65
40.5					97.65



GAZIFÈRE INC. ACCOUNT 478.00 - METERS ORIGINAL AND SMOOTH SURVIVOR CURVES



ACCOUNT 478.00 - METERS

PLACEMENT I	BAND 1975-2013		EXPEF	RIENCE BAN	D 1996-2013
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	6,307,091 5,778,420 5,420,602 5,072,975 4,864,648 4,594,823 4,285,330 3,797,315 3,563,483	71,893 263,638 221,199 156,210 163,060 149,438 248,896 259,344 201,524	0.0114 0.0456 0.0408 0.0308 0.0335 0.0325 0.0581 0.0683 0.0566	0.9886 0.9544 0.9592 0.9692 0.9665 0.9675 0.9419 0.9317 0.9434	100.00 98.86 94.35 90.50 87.71 84.77 82.02 77.25 71.98
8.5 9.5 10.5 11.5 12.5 13.5 14.5 15.5 16.5 17.5	3,365,957 3,074,205 2,805,613 2,461,324 2,208,563 2,117,334 1,947,920 1,779,535 1,534,461 1,433,264	209,965 190,490 144,170 138,995 101,532 108,160 100,796 141,351 65,504 66,169	0.0624 0.0620 0.0514 0.0565 0.0460 0.0511 0.0517 0.0794 0.0427 0.0462	0.9376 0.9380 0.9486 0.9435 0.9540 0.9489 0.9483 0.9206 0.9573 0.9538	67.91 63.67 59.72 56.66 53.46 51.00 48.39 45.89 42.24 40.44
18.5 19.5 20.5 21.5 22.5 23.5 24.5 25.5 26.5 27.5 28.5	1,282,650 1,040,566 826,376 610,223 480,350 398,268 320,377 189,674 127,404 82,008 51,702	44,591 71,555 43,283 27,436 19,425 24,343 10,076 19,408 6,915 5,730 1,477	0.0348 0.0688 0.0524 0.0450 0.0404 0.0611 0.0315 0.1023 0.0543 0.0699 0.0286	0.9652 0.9312 0.9476 0.9550 0.9596 0.9389 0.9685 0.8977 0.9457 0.9301 0.9714	38.57 37.23 34.67 32.86 31.38 30.11 28.27 27.38 24.58 23.25 21.62
29.5 30.5 31.5 32.5 33.5 34.5 35.5 36.5 37.5 38.5	29,304 22,272 20,351 16,046 11,396 10,967 10,733 9,809 9,353	4,269 914 54 141 212 458 423 9,353	0.1457 0.0410 0.0027 0.0000 0.0124 0.0193 0.0427 0.0431 1.0000	0.8543 0.9590 0.9973 1.0000 0.9876 0.9807 0.9573 0.9569	21.00 17.94 17.21 17.16 17.16 16.95 16.62 15.91 15.23



GAZIFÈRE INC. ACCOUNT 484.01- TRANSPORTATION EQUIPMENT - POST 2005 ORIGINAL AND SMOOTH SURVIVOR CURVES

30 ORIGINAL CURVE ■ 2008-2013 EXPERIENCE 2006-2013 PLACEMENTS 25 20 IOWA 9-S\$ AGE IN YEARS 10 2 اه 70 90 80 50 30 20 10 РЕВСЕИТ SURVIVING

ACCOUNT 484.01- TRANSPORTATION EQUIPMENT - POST 2005

PLACEMENT	BAND 2006-2013		EXPER	RIENCE BAN	D 2008-2013
AGE AT	EXPOSURES AT	RETIREMENTS			PCT SURV
BEGIN OF	BEGINNING OF	DURING AGE	RETMT	SURV	BEGIN OF
INTERVAL	AGE INTERVAL	INTERVAL	RATIO	RATIO	INTERVAL
0.0	854,058		0.0000	1.0000	100.00
0.5	880,943		0.0000	1.0000	100.00
1.5	861,005		0.0000	1.0000	100.00
2.5	780,669		0.0000	1.0000	100.00
3.5	551,685		0.0000	1.0000	100.00
4.5	505,207		0.0000	1.0000	100.00
5.5	306,090	0	0.0000	1.0000	100.00
6.5	60,986		0.0000	1.0000	100.00
7.5					100.00



ORIGINAL CURVE = 2002-2013 EXPERIENCE 1981-2000 PLACEMENTS 20 ACCOUNT 485.00 - HEAVY WORK EQUIPMENT 40 ORIGINAL AND SMOOTH SURVIVOR CURVES IOWA 15-53 GAZIFÈRE INC. 20 10 ا₀ 100 70 20-90 80 50 30 10

9

AGE IN YEARS

РЕВСЕИТ SURVIVING

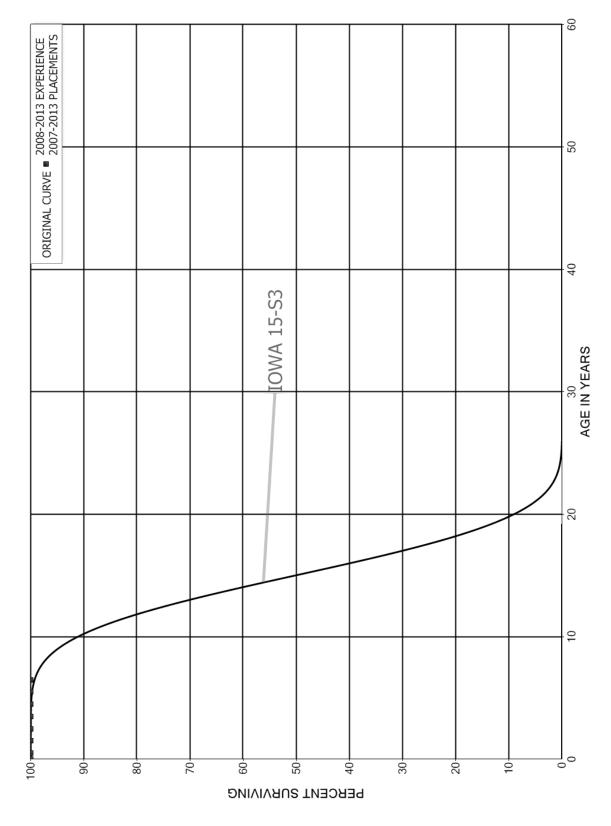
ACCOUNT 485.00 - HEAVY WORK EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT E	BAND 1981-2000	EXPERIENCE BAND 2002-2013			
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	44.222				100.00
1.5 2.5 3.5 4.5 5.5 6.5 7.5 8.5	44,338 44,338 44,338 46,766 46,766 46,766 46,766 46,766		0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000		
9.5 10.5 11.5 12.5 13.5 14.5	54,227 77,711 63,794 63,794 19,456 19,456	13,917	0.0000 0.1791 0.0000 0.0000 0.0000 0.0000		
16.5 17.5 18.5	17,027 7,567 7,567	9,460	0.5556 0.0000 0.0000		
19.5 20.5 21.5 22.5 23.5 24.5 25.5 26.5	7,567 8,733 1,272 1,165 1,165 1,165 1,165 1,165	1,165	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 1.0000		
27.5					



GAZIFÈRE INC. ACCOUNT 485.01 - HEAVY WORK EQUIPMENT - POST 2006 ORIGINAL AND SMOOTH SURVIVOR CURVES



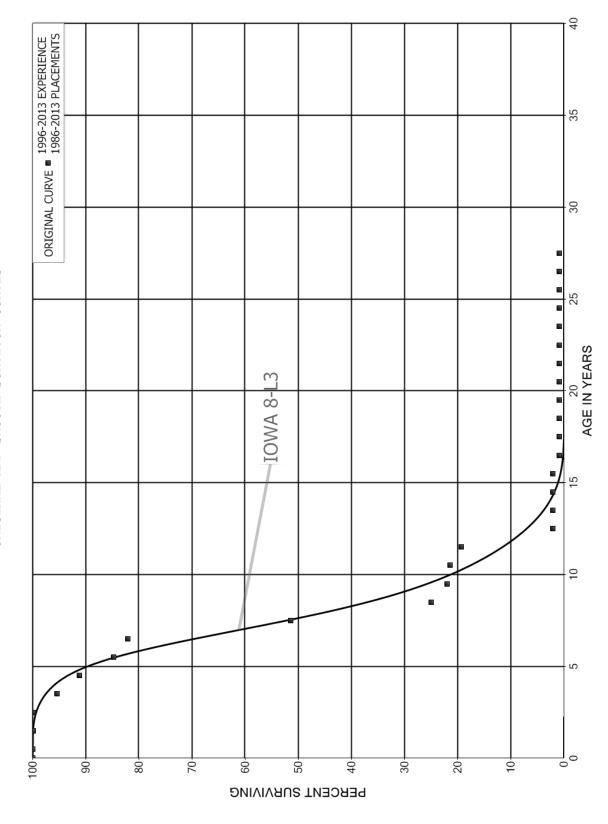
ACCOUNT 485.01 - HEAVY WORK EQUIPMENT - POST 2006

ORIGINAL LIFE TABLE

PLACEMENT	PLACEMENT BAND 2007-2013 EXPERIENCE BAND 2008-2013								
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	162,210 180,265 180,265 58,209 58,209 43,209 40,051		0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	100.00 100.00 100.00 100.00 100.00 100.00				
6.5	·				100.00				



GAZIFÈRE INC. ACCOUNT 488.00 - COMMUNICATION EQUIPMENT ORIGINAL AND SMOOTH SURVIVOR CURVES



ACCOUNT 488.00 - COMMUNICATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT E	BAND 1986-2013		EXPE	RIENCE BAN	D 1996-2013
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	705,098 301,165 299,127 358,991 344,049 309,303 287,472 282,515	501 16,008 15,117 21,831 9,184 105,673	0.0000 0.0017 0.0000 0.0446 0.0439 0.0706 0.0319 0.3740	1.0000 0.9983 1.0000 0.9554 0.9561 0.9294 0.9681 0.6260	100.00 100.00 99.83 99.83 95.38 91.19 84.75 82.05
7.5 8.5	178,558 85,739	92,009 10,244	0.5153	0.4847	51.36 24.89
9.5 10.5 11.5 12.5 13.5 14.5 15.5 16.5 17.5	76,082 74,100 66,925 7,061 6,989 6,989 6,989 2,761 2,761 587	1,982 7,175 59,864 72 4,228	0.0261 0.0968 0.8945 0.0102 0.0000 0.0000 0.6049 0.0000 0.0000	0.9739 0.9032 0.1055 0.9898 1.0000 1.0000 0.3951 1.0000 1.0000	21.92 21.35 19.28 2.03 2.01 2.01 2.01 0.80 0.80 0.80
19.5 20.5 21.5 22.5 23.5 24.5 25.5 26.5 27.5	587 587 587 587 587 587 587		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	0.80 0.80 0.80 0.80 0.80 0.80 0.80 0.80



PART VI. NET SALVAGE STATISTICS



ACCOUNT 473.00 - SERVICES

	REGULAR	COST OF REMOVAI		GROSS REUSE	S A L V A G E FINAL	NET SALVAGE
YEAR	RETIREMENTS	AMOUNT	PCT	AMOUNT PCT	AMOUNT PCT	AMOUNT PCT
1996	82,789		0	0	0	0
1997	55,846		0	0	0	0
1998	91,068		0	0	0	0
1999	87,719		0	0	0	0
2000	91,665	82,489	90	0	0	82,489- 90-
2001	86,249	71,689	83	0	0	71,689- 83-
2002	143,611	109,895	77	0	0	109,895- 77-
2003	109,694	89,839	82	0	0	89,839- 82-
2004	172,348	145,420	84	0	0	145,420- 84-
2005	126,383	112,676	89	0	0	112,676- 89-
2006	147,452	129,382	88	0	0	129,382- 88-
2007	160,133	279,581	175	0	0	279,581- 175-
2008	127,402	168,777	132	0	0	168,777- 132-
2009	110,523	192,157	174	0	0	192,157- 174-
2010	71,250	156,634	220	0	0	156,634- 220-
2011	163,772	209,827	128	0	0	209,827- 128-
2012	139,657	383,519	275	0	0	383,519- 275-
2013	176,362	366,814	208	0	0	366,814- 208-
TOTAL	2,143,925	2,498,699	117	0	0	2,498,699- 117-
THREE-Y	YEAR MOVING AVE	RAGES				
96-98	76,568		0	0	0	0
97-99	78,211		0	0	0	0
98-00	90,151	27,496	31	0	0	27,496- 31-
99-01	88,544	51,393	58	0	0	51,393- 58-
00-02	107,175	88,024	82	0	0	88,024- 82-
01-03	113,185	90,474	80	0	0	90,474- 80-
02-04	141,885	115,051	81	0	0	115,051- 81-
03-05	136,142	115,978	85	0	0	115,978- 85-
04-06	148,728	129,159	87	0	0	129,159- 87-
05-07	144,656	173,880	120	0	0	173,880- 120-
06-08	144,996	192,580	133	0	0	192,580- 133-
07-09	132,686	213,505	161	0	0	213,505- 161-
08-10	103,058	172,523	167	0	0	172,523- 167-
09-11	115,182	186,206	162	0	0	186,206- 162-



ACCOUNT 473.00 - SERVICES

	REGULAR	COST OF REMOVAL		G R O S REUSE	S S S A	L V A G E FINAL		NET SALVAGE	
YEAR	RETIREMENTS	AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
THREE-Y	EAR MOVING AVERA	GES							
10-12	124,893	249,993	200		0		0	249,993-	200-
11-13	159,930	320,053	200		0		0	320,053-	200-
FIVE-YE	AR AVERAGE								
09-13	132,313	261,790	198		0		0	261,790-	198-



ACCOUNT 475.00 - MAINS

	REGULAR	COST OF REMOVAL		GROSS S REUSE	ALVAGE FINAL	NET SALVAGE
YEAR	RETIREMENTS	AMOUNT	PCT	AMOUNT PCT	AMOUNT PCT	AMOUNT PCT
1996	2,942		0	0	0	0
1997	28,209		0	0	0	0
1998	25,991		0	0	0	0
1999	1,000		0	0	0	0
2000	73,950	18,203	25	0	0	18,203- 25-
2001	76,773	8,244	11	0	0	8,244- 11-
2002	226	8,947		0	0	8,947-
2003	29,480	14,219	48	0	0	14,219- 48-
2004	62,962	22,878	36	0	0	22,878- 36-
2005	26,135	9,332	36	0	0	9,332- 36-
2006	45,213	55,424	123	0	0	55,424- 123-
2007	7,610	44,588	586	0	0	44,588- 586-
2008	93,268	79,622	85	0	0	79,622- 85-
2009	30,147	104,499	347	0	0	104,499- 347-
2010	16,650	67,651	406	0	0	67,651- 406-
2011	29,031	79,962	275	0	0	79,962- 275-
2012	16,508	70,333	426	0	0	70,333- 426-
2013	50,985	61,381	120	0	0	61,381- 120-
TOTAL	617,079	645,283	105	0	0	645,283- 105-
THREE-Y	YEAR MOVING AVE	RAGES				
96-98	19,047		0	0	0	0
97-99	18,400		0	0	0	0
98-00	33,647	6,068	18	0	0	6,068- 18-
99-01	50,574	8,816	17	0	0	8,816- 17-
00-02	50,316	11,798	23	0	0	11,798- 23-
01-03	35,493	10,470	29	0	0	10,470- 29-
02-04	30,889	15,348	50	0	0	15,348- 50-
03-05	39,525	15,476	39	0	0	15,476- 39-
04-06	44,770	29,211	65	0	0	29,211- 65-
05-07	26,319	36,448	138	0	0	36,448- 138-
06-08	48,697	59,878	123	0	0	59,878- 123-
07-09	43,675	76,236	175	0	0	76,236- 175-
08-10	46,688	83,924	180	0	0	83,924- 180-
09-11	25,276	84,037	332	0	0	84,037- 332-



ACCOUNT 475.00 - MAINS

	REGULAR	COST OF REMOVAL		G R O REUSE	SSS.	A L V A G E FINAL	1	NET SALVAGE]
YEAR	RETIREMENTS	AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
THREE-Y	EAR MOVING AVERA	GES							
10-12	20,730	72,649	350		0		0	72,649-	350-
11-13	32,174	70,559	219		0		0	70,559-	219-
FIVE-YE	AR AVERAGE								
09-13	28,664	76,765	268		0		0	76,765-	268-



ACCOUNT 477.00 - REGULATING EQUIPMENT

REGULAR	COST OF REMOVAL				-		NET SALVAGE	
RETIREMENTS	AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
	636						636-	
28,771	2,263	8		0		0	2,263-	8 –
28 . 771	2.899	10		0		0	2 899-	10-
	RETIREMENTS 28,771	REGULAR REMOVAL RETIREMENTS AMOUNT 636	REGULAR REMOVAL RETIREMENTS AMOUNT PCT 636 28,771 2,263 8	REGULAR REMOVAL REUSE RETIREMENTS AMOUNT PCT AMOUNT 636 28,771 2,263 8	REGULAR REMOVAL REUSE RETIREMENTS AMOUNT PCT AMOUNT PCT 636 28,771 2,263 8 0	REGULAR REMOVAL REUSE FINAL RETIREMENTS AMOUNT PCT AMOUNT PCT AMOUNT 636 28,771 2,263 8 0	REGULAR REMOVAL REUSE FINAL RETIREMENTS AMOUNT PCT AMOUNT PCT 636 28,771 2,263 8 0 0	REGULAR REMOVAL REUSE FINAL SALVAGE RETIREMENTS AMOUNT PCT AMOUNT



PART VII.	DETAILED	DEPRECI	ATION CA	LCULATI	ONS

ACCOUNT 473.00 - SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL AS OF DECEMBER 31, 2013

MAD	ORIGINAL	CALCULATED	ALLOC. BOOK	FUTURE BOOK	REM.	ANNUAL
YEAR	COST	ACCRUED	RESERVE	ACCRUALS	LIFE	ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)
SURVIVO	R CURVE IOWA	50-R3				
NET SAL	VAGE PERCENT	-115				
1960	579.79	1,033	989	258	8.56	30
1963	20,021.90	34,567	33,082	9,965	9.85	1,012
1964	3,120.96	5,325	5,096	1,614	10.32	156
1965	59,154.96	99,686	95,405	31,778	10.81	2,940
1966	11,113.10	18,484	17,690	6,203	11.32	548
1967	14,183.33	23,267	22,268	8,226	11.85	694
1968	21,692.99	35,083	33,576	13,064	12.39	1,054
1969	20,782.35	33,100	31,678	13,004	12.96	1,003
1970	19,526.27	30,613	29,298	12,683	13.54	937
1971	1,266.01	1,952	1,868	854	14.14	60
1972	57,042.02	86,461	82,748	39,892	14.75	2,705
1973	107,286.06	159,666	152,808	77,857	15.39	5,059
1974	108,521.95	158,519	151,711	81,611	16.03	5,091
1975	163,608.06	234,270	224,208	127,549	16.70	7,638
1976	80,936.69	113,527	108,651	65,363	17.38	3,761
1977	80,822.89	110,969	106,203	67,566	18.07	3,739
1978	66,824.25	89,738	85,884	57,788	18.77	3,079
1979	110,961.54	145,574	139,322	99,245	19.49	5,092
1980	134,336.71	172,024	164,636	124,188	20.22	6,142
1981	174,120.14	217,352	208,017	166,341	20.97	7,932
1982	303,842.99	369,485	353,616	299,646	21.72	13,796
1983	474,301.84	561,066	536,968	482,781	22.49	21,466
1984	420,788.89	483,831	463,051	441,645	23.26	18,987
1985	648,450.00	723,573	692,496	701,672	24.05	29,176
1986	387,405.88	418,960	400,966	431,957	24.85	17,383
1987	305,943.09	320,206	306,453	351,325	25.66	13,692
1988	298,897.30	302,293	289,310	353,319	26.48	13,343
1989	461,681.43	450,449	431,102	561,513	27.31	20,561
1990	610,486.83	573,583	548,948	763,599	28.15	27,126
1991	1,217,482.46	1,099,387	1,052,169	1,565,418	29.00	53,980
1992	1,468,403.35	1,271,667	1,217,049	1,940,018	29.86	64,970
1993	1,537,798.77	1,274,235	1,219,507	2,086,760	30.73	67,906
1994	1,705,587.14	1,349,461	1,291,502	2,375,510	31.60	75,174
1995	1,516,672.18	1,141,948	1,092,902	2,167,943	32.49	66,726
1996	1,359,263.26	971,411	929,689	1,992,727	33.38	59,698
1997	1,593,574.51	1,077,193	1,030,928	2,395,257	34.28	69,873
1998	1,896,373.41	1,207,667	1,155,798	2,921,405	35.19	83,018
1999	1,698,514.14	1,014,472	970,901	2,680,904	36.11	74,243
2000	2,001,987.13	1,116,528	1,068,574	3,235,698	37.03	87,380
2001	1,667,321.10	863,205	826,131	2,758,609	37.96	72,671
2002	1,667,482.66	796,606	762,392	2,822,696	38.89	72,582
2003	1,882,961.98	822,628	787,297	3,261,071	39.84	81,854
2004	2,374,992.44	941,590	901,149	4,205,085	40.78	103,116
2005	2,153,026.16	764,712	731,868	3,897,138	41.74	93,367
2006	1,873,958.87	589,041	563,742	3,465,270	42.69	81,173



ACCOUNT 473.00 - SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL AS OF DECEMBER 31, 2013

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIV	OR CURVE IOWA	50-R3				
NET SA	LVAGE PERCENT	-115				
2007	1,858,770.10	506,738	484,974	3,511,382	43.66	80,426
2008	1,994,722.85	461,459	441,640	3,847,014	44.62	86,217
2009	2,088,683.32	396,077	379,066	4,111,603	45.59	90,187
2010	2,026,175.91	298,841	286,006	4,070,272	46.57	87,401
2011	1,820,663.57	192,590	184,318	3,730,109	47.54	78,463
2012	2,278,189.59	144,984	138,757	4,759,351	48.52	98,090
2013	2,077,252.69	43,768	41,888	4,424,205	49.51	89,360
	46,927,557.81	24,320,864	23,276,295	77,617,954		2,052,077

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 37.8 4.37



ACCOUNT 475.00 - MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL AS OF DECEMBER 31, 2013

	ORIGINAL	CALCULATED	ALLOC. BOOK	FUTURE BOOK	REM.	ANNUAL
YEAR	COST	ACCRUED	RESERVE	ACCRUALS	LIFE	ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)
SURVIVO	R CURVE IOWA	80-R3				
NET SAL	VAGE PERCENT	-100				
1959	2,837,613.78	3,426,419	3,483,527	2,191,701	31.70	69,139
1961	196,292.01	229,811	233,641	158,943	33.17	4,792
1962	364,996.94	420,476	427,484	302,510	33.92	8,918
1963	451,490.01	511,538	520,064	382,916	34.68	11,041
1964	43,134.94	48,052	48,853	37,417	35.44	1,056
1965	57,740.08	63,212	64,266	51,214	36.21	1,414
1966	21,774.00	23,412	23,802	19,746	36.99	534
1967	77,635.08	81,964	83,330	71,940	37.77	1,905
1968	64,492.69	66,799	67,912	61,073	38.57	1,583
1969	52,746.91	53,591	54,484	51,010	39.36	1,296
1970	35,978.23	35,826	36,423	35,533	40.17	885
1971	63,317.74	61,766	62,795	63,840	40.98	1,558
1972	47,666.89	45,522	46,281	49,053	41.80	1,174
1973	588,901.81	550,329	559,501	618,303	42.62	14,507
1974	359,943.39	328,902	334,384	385,503	43.45	8,872
1975	273,948.24	244,570	248,646	299,250	44.29	6,757
1976	186,717.71	162,773	165,486	207,949	45.13	4,608
1977	140,079.00	119,137	121,123	159,035	45.98	3,459
1978	63,557.40	52,704	53,582	73,533	46.83	1,570
1979	77,803.77	62,847	63,894	91,714	47.69	1,923
1980	104,134.17	81,874	83,239	125,029	48.55	2,575
1981	85,086.14	65,048	66,132	104,040	49.42	2,105
1982	237,125.27	176,066	179,000	295,251	50.30	5,870
1983	940,347.70	677,521	688,813	1,191,882	51.18	23,288
1984	777,781.98	543,078	552,129	1,003,435	52.07	19,271
1985	1,645,749.78	1,112,527	1,131,069	2,160,431	52.96	40,794
1986	751,207.61	490,914	499,096	1,003,319	53.86	18,628
1987	408,914.12	258,025	262,326	555,502	54.76	10,144
1988	378,285.25	230,088	233,923	522,648	55.67	9,388
1989	544,699.95	318,922	324,237	765,163	56.58	13,524
1990	704,082.63	396,230	402,834	1,005,331	57.49	17,487
1991	1,249,241.37	674,291	685,529	1,812,954	58.41	31,038
1992	1,638,534.89	846,303	860,408	2,416,662	59.34	40,726
1993	1,446,423.70	713,434	725,325	2,167,522	60.27	35,964
1994	1,414,776.82	664,945	676,028	2,153,526	61.20	35,188
1995	2,125,576.53	949,070	964,888	3,286,265	62.14	52,885
1996	6,194,163.48	2,620,131	2,663,801	9,724,526	63.08	154,162
1997	3,612,411.26	1,443,158	1,467,211	5,757,612	64.02	89,935
1998	4,776,088.14	1,794,663	1,824,575	7,727,601	64.97	118,941
1999	2,048,172.60	720,957	732,973	3,363,372	65.92	51,022
2000	1,828,999.54	600,351	610,357	3,047,642	66.87	45,576
2001	1,340,336.42	407,784	414,581	2,266,092	67.83	33,408
2002	1,322,986.33	370,754	376,933	2,269,040	68.79	32,985
2003	2,191,306.35	561,500	570,859	3,811,754	69.75	54,649
2004	2,783,170.42	645,696	656,458	4,909,883	70.72	69,427



ACCOUNT 475.00 - MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL AS OF DECEMBER 31, 2013

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	R CURVE IOWA VAGE PERCENT	80-R3 -100				
2005	2,220,603.35	461,353	469,042	3,972,165	71.69	55,408
2006	2,186,044.09	401,139	407,825	3,964,263	72.66	54,559
2007	1,779,988.10	283,445	288,169	3,271,807	73.63	44,436
2008	2,452,713.64	330,528	336,037	4,569,390	74.61	61,244
2009	1,573,146.55	173,833	176,730	2,969,563	75.58	39,290
2010	2,635,141.58	226,622	230,399	5,039,884	76.56	65,829
2011	4,718,053.24	290,160	294,996	9,141,110	77.54	117,889
2012	2,967,844.99	109,810	111,640	5,824,050	78.52	74,173
2013	2,433,427.34	29,785	30,282	4,836,573	79.51	60,830
	69,522,395.95	26,259,655	26,697,322	112,347,470		1,729,629

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 65.0 2.49



ACCOUNT 477.00 - REGULATING EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL AS OF DECEMBER 31, 2013

YEAR	ORIGINAL COST	CALCULATED ACCRUED	ALLOC. BOOK RESERVE	FUTURE BOOK ACCRUALS	REM. LIFE	ANNUAL ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)
SURVIVO	R CURVE IOWA	30-R4				
NET SAL	VAGE PERCENT	-5				
1973	3,934.93	3,975	4,132			
1973	1,038.86	1,041	1,091			
1975	8,798.07	8,736	9,238			
1976	5,570.31	5,478	5,849			
1977	2,428.05	2,366	2,549			
1978	5,123.71	4,942	5,380			
1979	5,692.35	5,433	5,977			
1981	11,715.19	10,915	12,301			
1982	90,722.06	83,351	95,258			
1983	50,612.87	45,774	52,798	346	4.16	83
1984	32,405.98	28,775	33,191	835	4.63	180
1985	43,675.83	37,987	43,816	2,044	5.15	397
1986	62,944.61	53,490	61,698	4,394	5.72	768
1987	55,485.27	45,948	52,999	5,261	6.34	830
1988	53,494.02	43,063	49,671	6,498	7.00	928
1989	72,211.64	56,412	65,069	10,753	7.68	1,400
1990	94,342.75	71,356	82,306	16,754	8.39	1,997
1991	149,687.30	109,391	126,178	30,994	9.12	3,398
1992	78,955.12	55,628	64,165	18,738	9.87	1,898
1993	83,684.50	56,675	65,372	22,497	10.65	2,112
1994	89,118.90	57,829	66,703	26,872	11.46	2,345
1995	11,657.68	7,226	8,335	3,906	12.29	318
1996	423,126.00	249,687	288,004	156,278	13.14	11,893
1997	115,384.00	64,575	74,485	46,668	14.01	3,331
1998	232,415.00	122,750	141,587	102,449	14.91	6,871
1999	123,791.00	61,438	70,866	59,115	15.82	3,737
2000	138,488.00	64,224	74,079	71,333	16.75	4,259
2001	100,499.78	43,300	49,945	55,580	17.69	3,142
2002	31,024.00	12,335	14,228	18,347	18.64	984
2003	93,295.16	33,960	39,171	58,789	19.60	2,999
2004	35,049.55	11,568	13,343	23,459	20.57	1,140
2005	36,556.25	10,812	12,471	25,913	21.55	1,202
2006	49,769.84	12,995	14,989	37,269	22.54	1,653
2007	50,142.07	11,355	13,098	39,551	23.53	1,681
2008	28,263.98	5,421	6,253	23,424	24.52	955
2009	35,591.08	5,593	6,451	30,920	25.51	1,212
2010	61,314.55	7,489	8,638	55,742	26.51	2,103
2011	72,852.38	6,374	7,352	69,143	27.50	2,514
2012	19,809.87	1,040	1,200	19,600	28.50	688
2013	278,483.86	4,874	5,622	286,786	29.50	9,722
	2,939,156.37	1,525,581	1,755,858	1,330,256		76,740

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 17.3 2.61



ACCOUNT 478.00 - METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL AS OF DECEMBER 31, 2013

YEAR	ORIGINAL COST	CALCULATED ACCRUED	ALLOC. BOOK RESERVE	FUTURE BOOK ACCRUALS	REM. LIFE	ANNUAL ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)
	R CURVE IOWA					
NEI SALV	AGE PERCENT	105				
1976	33.83	12	12			
1977	465.75	163	163			
1978	22.07	8	8			
1979	288.09	101	101			
1980	4,650.21	1,628	1,628			
1981	4,250.53	1,488	1,488			
1982	1,006.63	352	352			
1983	2,763.42	967	967			
1984	20,920.84	7,322	7,322			
1985	24,574.96	8,601	8,601			
1986	38,481.22	13,468	13,468			
1987	42,862.64	15,002	15,002			
1988	120,626.10	42,219	42,219			
1989	53,547.95	18,742	18,742			
1990	62,656.95	21,473	21,930			
1991	102,437.03	33,702	35,853			
1992	172,870.19	54,605	60,505			
1993	153,221.96	46,478	53,628			
1994	202,323.70	59,011	70,813			
1995	88,240.30	24,707	30,884			
1996	43,168.70	11,584	14,806	303	2.80	108
1997	105,491.43	27,076	34,608	2,314	3.20	723
1998	80,416.73	19,679	25,153	2,993	3.61	829
1999	76,703.41	17,808	22,762	4,084	4.04	1,011
2000	50,851.24	11,153	14,256	3,542	4.48	791
2001	140,692.64	28,971	37,030	12,212	4.94	2,472
2002	238,839.09	45,837	58,588	25,006	5.42	4,614
2003	156,184.17	27,697	35,402	19,262	5.92	3,254
2004	165,050.24	26,765	34,210	23,558	6.44	3,658
2005	72,325.75	10,590	13,536	11,778	6.98	1,687
2006	141,494.52	18,447	23,579	25,944	7.53	3,445
2007	371,159.31	42,219	53,963	75,943	8.10	9,376
2008	340,162.48	32,939	42,102	76,955	8.68	8,866
2009	326,095.37	25,965	33,188	80,945	9.27	8,732
2010	399,559.68	24,823	31,728	108,118	9.87	10,954
2011	418,142.35	18,660	23,851	122,499	10.47	11,700
2012	558,633.02	14,991	19,161	176,361	11.08	15,917
2013	687,150.87	6,212	7,941	232,562	11.69	19,894
	5,468,365.37	761,465	909,550	1,004,378		108,031

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 9.3 1.98



ACCOUNT 483.00 - OFFICE FURNITURE AND EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL AS OF DECEMBER 31, 2013

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	R CURVE 15-SQU VAGE PERCENT (
1975	44.23	44	44			
1976	83.27	83	83			
1977	993.02	993	993			
1978	828.58	829	829			
1979	463.96	464	464			
1980	1,197.09	1,197	1,197			
1981	2,064.00	2,064	2,064			
1983	1,020.32	1,020	1,020			
1984	3,352.88	3,353	3,353			
1987	2,808.30	2,808	2,808			
1989	587.28	587	587			
1991	568.01	568	568			
1993	124.08	124	124			
1994	516.12	516	516			
1995	1,214.58	1,215	1,215			
1998	696.71	697	697			
2000	0.05					
2002	25,263.00	19,368	16,170	9,093	3.50	2,598
2003	2,259.98	1,582	1,321	939	4.50	209
2005	1,410.00	799	667	743	6.50	114
2006	412,376.49	206,188	172,139	240,237	7.50	32,032
2007	32,316.40	14,004	11,692	20,624	8.50	2,426
2008	26,996.71	9,899	8,264	18,733	9.50	1,972
2009	22,995.08	6,899	5,760	17,235	10.50	1,641
2010	31,399.67	7,326	6,116	25,284	11.50	2,199
2011	45,962.36	7,661	6,396	39,566	12.50	3,165
2012	49,387.32	4,939	4,124	45,263	13.50	3,353
2013	26,098.50	870	726	25,372	14.50	1,750
	693,027.98	296,097	249,937	443,091		51,459

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 8.6 7.43



ACCOUNT 484.01 - TRANSPORTATION EQUIPMENT - POST 2005

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL AS OF DECEMBER 31, 2013

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVO	R CURVE IOWA !	9-S3				
NET SALV	VAGE PERCENT	0				
0006	60 005 50	44 04 5	44 740	4.6 00.7	0.46	
2006	60,985.78	44,317	44,749	16,237	2.46	6,600
2007	245,104.06	162,313	163,896	81,208	3.04	26,713
2008	199,117.25	115,930	117,061	82,056	3.76	21,823
2009	46,477.47	22,774	22,996	23,481	4.59	5,116
2010	228,984.04	88,541	89,405	139,579	5.52	25,286
2011	80,336.00	22,316	22,534	57,802	6.50	8,893
2012	80,923.90	13,488	13,620	67,304	7.50	8,974
2013	218,219.28	12,124	12,242	205,978	8.50	24,233
	1,160,147.78	481,803	486,503	673,645		127,638

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 5.3 11.00



ACCOUNT 485.00 - HEAVY WORK EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL AS OF DECEMBER 31, 2013

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	CURVE IOWA					
1991	106.67	99	107			
1992	7,460.73	6,854	7,461			
1997	2,428.92	2,034	2,429			
2000	42,609.00	32,383	43,358	749-		
	52,605.32	41,370	53,355	750-		

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



ACCOUNT 485.01 - HEAVY WORK EQUIPMENT - POST 2006

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL AS OF DECEMBER 31, 2013

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	CURVE IOWA					
2007 2008 2009 2011 2013	40,050.79 3,158.40 15,000.00 122,056.30 21,995.00	17,169 1,152 4,490 20,343 733	19,871 1,333 5,197 23,545 848	20,180 1,825 9,803 98,511 21,147	8.57 9.53 10.51 12.50 14.50	2,355 192 933 7,881 1,458
	202,260.49	43,887	50,794	151,466		12,819

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 11.8 6.34



ACCOUNT 486.00 - TOOLS AND WORK EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL AS OF DECEMBER 31, 2013

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR	CURVE 10-SQU	JARE				
NET SALV	AGE PERCENT ()				
2002	0.20					
2002	16,882.74	16,039	15,539	1,344	0.50	1,344
2005	11,343.22	9,642	9,342	2,001	1.50	1,334
2006	26,826.79	20,120	19,493	7,334	2.50	2,934
2007	23,923.51	15,550	15,066	8,858	3.50	2,531
2008	8,062.31	4,434	4,296	3,766	4.50	837
2009	1,305.70	588	570	736	5.50	134
2010	28,117.67	9,841	9,534	18,584	6.50	2,859
2011	40,643.85	10,161	9,844	30,800	7.50	4,107
2012	37,820.94	5,673	5,496	32,325	8.50	3,803
2013	42,694.89	2,135	2,069	40,626	9.50	4,276
	237,621.82	94,183	91,249	146,373		24,159

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 6.1 10.17

ACCOUNT 488.00 - COMMUNICATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL AS OF DECEMBER 31, 2013

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	CURVE IOWA					
NET SALV	AGE PERCENT (J				
1986	587.01	587	587			
1995	2,174.12	2,136	673	1,501	0.14	1,501
2005	809.89	575	181	629	2.32	271
2006	1,445.71	996	314	1,132	2.49	455
2009	19,629.56	10,256	3,234	16,396	3.82	4,292
2012	2,731.00	512	161	2,570	6.50	395
2013	406,107.68	25,382	8,003	398,105	7.50	53,081
	433,484.97	40,444	13,153	420,332		59,995

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 7.0 13.84



ACCOUNT 490.00 - COMPUTER EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL AS OF DECEMBER 31, 2013

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	CURVE 4-SQUAGE PERCENT					
2006	96,762.78	96,763	96,763			
	96,762.78	96,763	96,763			

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

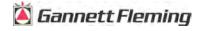


ACCOUNT 490.01 - COMPUTER EQUIPMENT - POST 2008

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL AS OF DECEMBER 31, 2013

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
	CURVE 4-SQUA					
NET SALV	AGE PERCENT ()				
2009	27,988.51	27,989	27,989			
2010	34,914.51	30,550	29,345	5,570	0.50	5,570
2011	52,354.74	32,722	31,432	20,923	1.50	13,949
2012	144,034.54	54,013	51,883	92,152	2.50	36,861
2013	69,023.99	8,628	8,287	60,737	3.50	17,353
	328,316.29	153,902	148,936	179,380		73,733

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 2.4 22.46



APPENDIX A ESTIMATION OF SURIVOR CURVES

ESTIMATION OF SURVIVOR CURVES

Average Service Life

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. A discussion of the general concept of survivor curves is presented. Also, the lowa type survivor curves are reviewed.

SURVIVOR CURVES

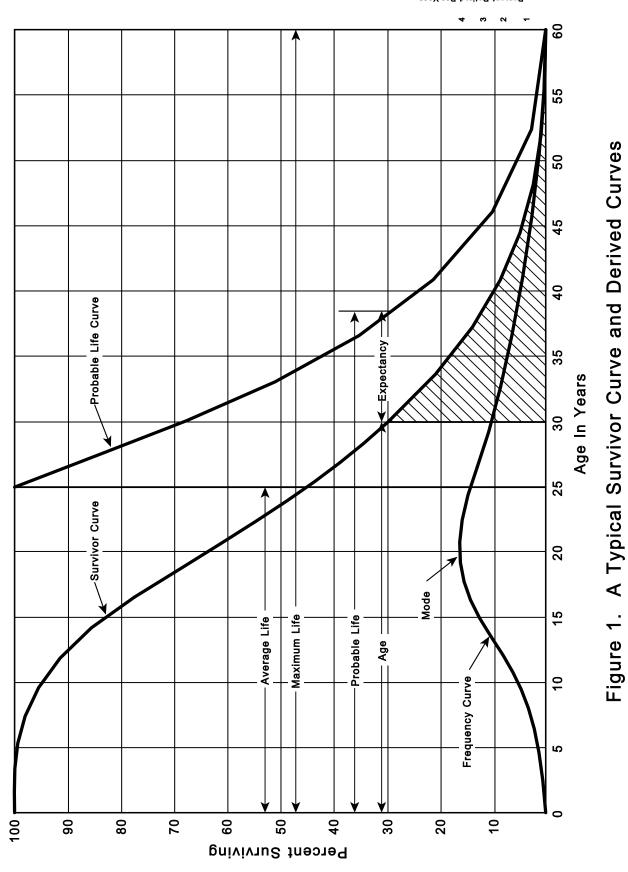
The survivor curve graphically depicts the amount of property existing at each age throughout the life of an original group. From the survivor curve, the average life of the group, the remaining life expectancy, the probable life, and the frequency curve can be calculated. In Figure 1, a typical smooth 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.

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







🙇 Gannett Fleming

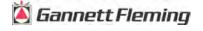
lowa type curves. There are four families in the lowa system, labeled in accordance with the location of the modes of the retirements in relationship to the average life and the relative height of the modes. The left moded curves, presented in Figure 2, are those in which the greatest frequency of retirement occurs to the left of, or prior to, average service life. The symmetrical moded curves, presented in Figure 3, are those in which the greatest frequency of retirement occurs at average service life. The right moded curves, presented in Figure 4, are those in which the greatest frequency occurs to the right of, or after, average service life. The origin moded curves, presented in Figure 5, are those in which the greatest frequency of retirement occurs at the origin, or immediately after age zero. The letter designation of each family of curves (L, S, R or O) represents the location of the mode of the associated frequency curve with respect to the average service life. The numbers represent the relative heights of the modes of the frequency curves within each family.

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 125.¹ 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 lowa State College graduate student, submitted a thesis presenting his development of the fourth family consisting of the four O type survivor curves.

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

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

³Couch, Frank V. B., Jr. "Classification of Type O Retirement Characteristics of Industrial Property." Unpublished M.S. thesis (Engineering Valuation). Library, Iowa State College, Ames, Iowa. 1957.



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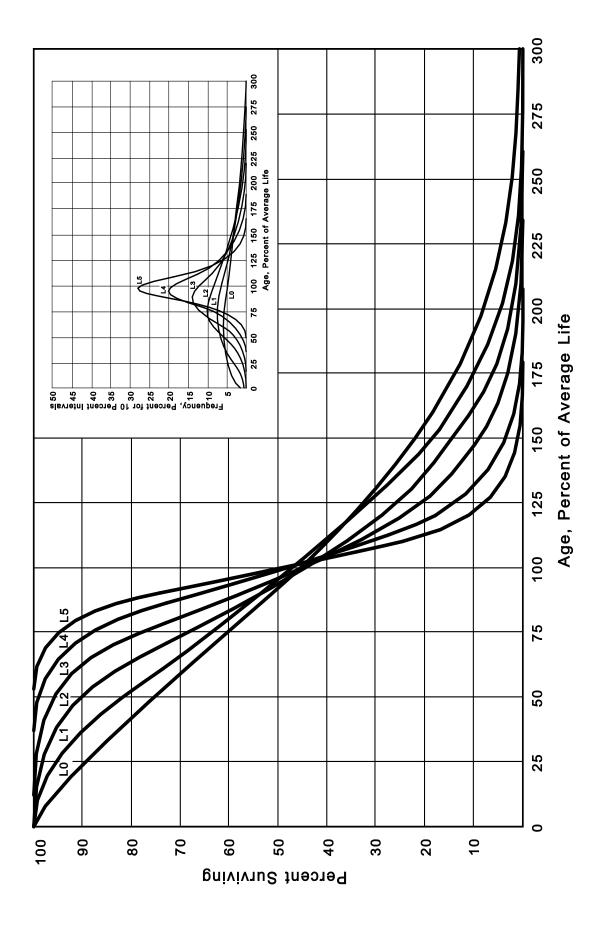
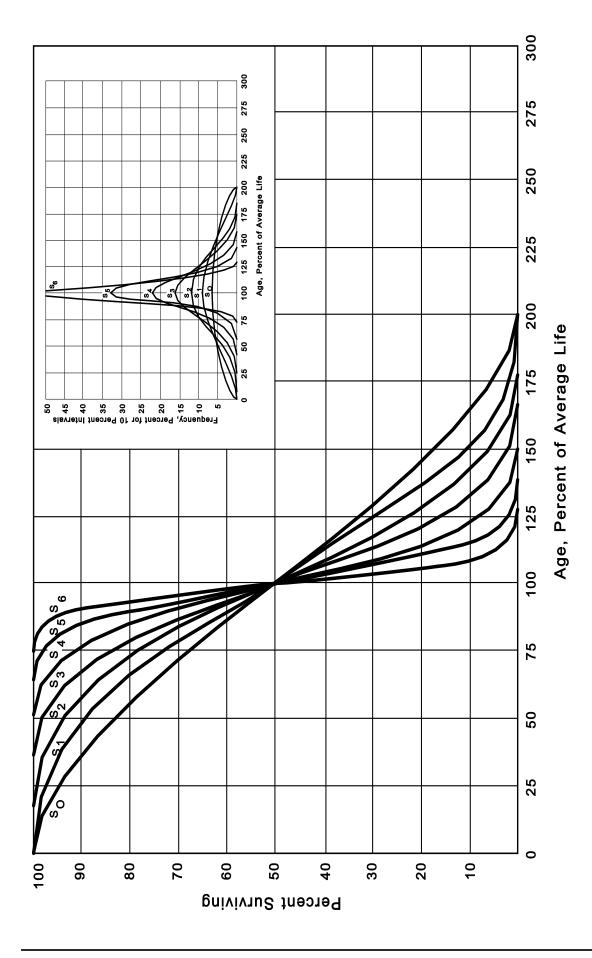
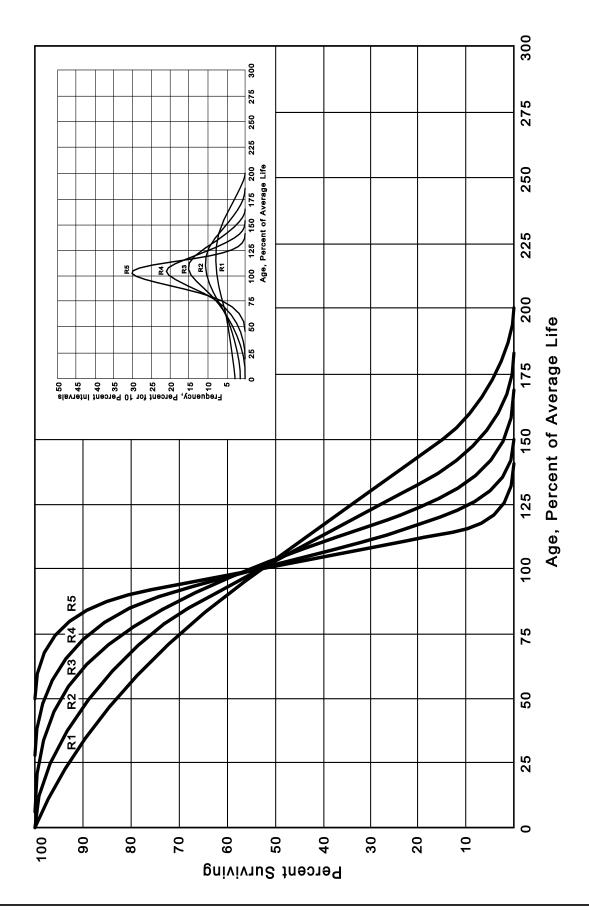


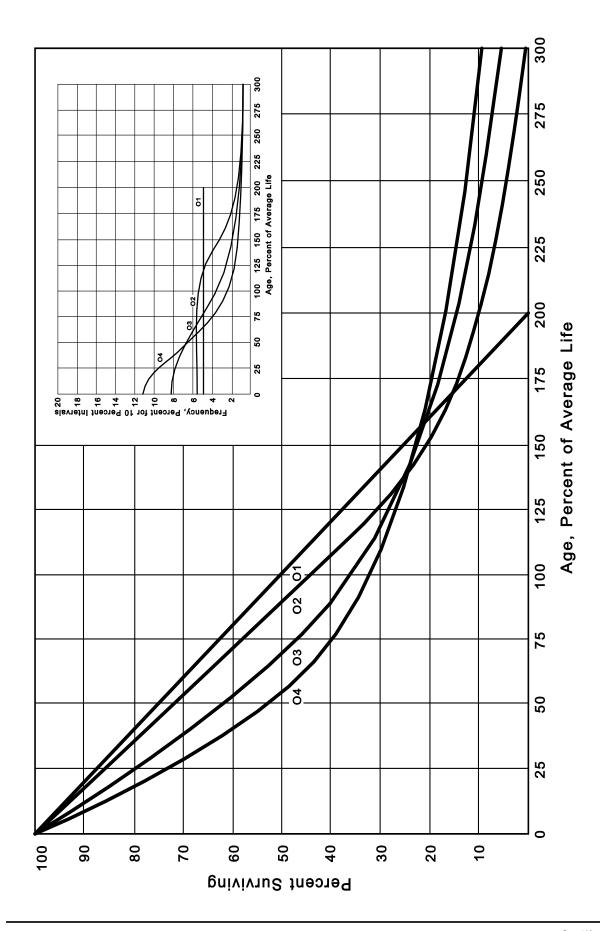
Figure 2. Left Modal or "L" lowa Type Survivor Curves



Symmetrical or "S" lowa Type Survivor Curves რ Figure



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



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

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, "5 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>, and the band of years which represent the installation dates of the property exposed to retirement during the experience band is referred to as the <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.

Schedules of Annual Transactions in Plant Records

The property group used to illustrate the retirement rate method is observed for the experience band 2004-2013 during which there were placements during the years 1999-2013. 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 the following pages. 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 1999 were

⁶Wolf, Frank K. and W. Chester Fitch. <u>Depreciation Systems</u>. Iowa State University Press. 1994.



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⁴Winfrey, Robley, Supra Note 1.

⁵Marston, Anson, Robley Winfrey, and Jean C. Hempstead, Supra Note 2.

17 19 21 14 16 17 13 14 15 14 15 15 16 17 15 16 17 18 20 9 20 11
18 20 21 13 14 15 14 16 17 15 16 17 15 16 17 15 16 17 8 18 20 9 20
13 14 15 16 13 14 15 16 14 15 16 18 15 16 17 19 17 19 8 18 20 22 9 20 22 9 20 22 11 23
14 15 16 18 15 16 17 19 14 16 17 19 8 18 20 22 9 20 22 11 23
15 16 17 19 14 16 17 19 8 18 20 22 9 20 22 11 23
18 20 22 9 20 22 11 23
11 24



SCHEDULE 2. OTHER TRANSACTIONS FOR EACH YEAR 2004-2013 SUMMARIZED BY AGE INTERVAL

Experience Band 2004-2013

Placement Band 1999-2013

		Age	Interval	(13)	13½-14½	12½-13½	11½-12½	10½-11½	91/2-101/2	81/2-91/2	7½-8½	61/2-71/2	51/2-61/2	41/2-51/2	3½-4½	21/2-31/2	11/2-21/2	1/2-11/2	0-1/2			
		Total During	Age Interval	(12)	ı	,	ı	09		(5)	ı	1	1	ı	10	ı	(121)	1		į	(20)	
Acquisitions, Transfers and Sales, Thousands of Dollars	During Year		2013	(11)			•		•				•	•	•	•	$(102)^{c}$	•			(102)	
			2012	(10)			•		,				•	22 ^a	,	•	,			;	22	
			2011	(6)			•	(2) _p	e _a				(12) ^b	•	(19) ^b	•	,			;	(30)	
			2010	(8)	60 ^a	•					•		•	•		•				;	09	
			2009	(-)			,		ı						ı							
sfers and			2008	(9)	,	,	,		i		•		•	1								
ions, Tran			2007	(2)	٠	•			•		•		•									
Acquisiti			2006	(4)			•		,													
			2005	(3)			•		,													
			2004	(2)	,	,	,	,	,	,												
	!	Year	Placed	(1)	1999	2000	2001	2002	2003	2004	2002	2006	2007	2008	2009	2010	2011	2012	2013	1	Total	

^a Transfer Affecting Exposures at Beginning of Year

Parentheses Denote Credit Amount.

^b Transfer Affecting Exposures at End of Year

^c Sale with Continued Use

retired in 2004. The \$10,000 retirement occurred during the age interval between 4½ and 5½ years on the basis that approximately one-half of the amount of property was installed prior to and subsequent to July 1 of each year. That is, on the average, property installed during a year is placed in service at the midpoint of the year for the purpose of the analysis. All retirements also are stated as occurring at the midpoint of a one-year age interval of time, except the first age interval which encompasses only one-half year.

The total retirements occurring in each age interval in a band are determined by summing the amounts for each transaction year-installation year combination for that age interval. For example, the total of \$143,000 retired for age interval 4½-5½ is the sum of the retirements entered on Schedule 1 immediately above the stair step line drawn on the table beginning with the 2004 retirements of 1999 installations and ending with the 2013 retirements of the 2008 installations. Thus, the total amount of 143 for age interval 4½-5½ equals the sum of:

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

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

Schedule 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 the following page. The surviving plant at the beginning of each year from 2004 through 2013 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



SCHEDULE 3. PLANT EXPOSED TO RETIREMENT JANUARY 1
OF EACH YEAR 2004-2013
SUMMARIZED BY AGE INTERVAL

	Age Interval (13)	131/2-141/2	111/2-121/2	101/2-111/	91/2-101/2	81/2-91/2	71/2-81/2	61/2-71/2	51/2-61/2		31/2-41/2		11/2-21/2	1/2-11/2	0-1%	
Total at Beginning	of Age Interval (12)	167	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
	<u>2013</u> (11)	167	162	226	261	316	356	412	482	609	663	799	923	1,069	1,220 ^a	7 799
	<u>2012</u> (10)	192	184	242	280	332	374	431	501	628	685	821	949	1,080 ^a		6 852
ar	(9)	216	205	262	267	347	330	448	530	623	724	841	_e 096			6.017
Thousands of Dollars at the Beginning of the Year	<u>2010</u> (8)	239	224	276	307	361	405	464	546	639	742	850^{a}				5,247
usands of l e Beginnin	2009	195	241	289	321	374	419	479	561	653	750 ^a					4 494
	<u>2008</u> (6)	209	257	300	334	386	432	492	574	e009						3.872
nus	<u>2007</u> (5)	222	271	311	346	397	444	504	580^{a}							3.318
An	<u>2006</u> (4)	234		321	257	407	455	510^{a}								2,824
	2005 (3)	245 7 268	296	330	367	416	460^{a}									2,382
	(2)	255	307	338	376	420^{a}										1,975
	Year <u>Placed</u> (1)	1999	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total

^a Additions during the year.



shown on Schedules 1 and 2. For the purpose of determining the plant exposed to retirement, transfers-in are considered as being <u>exposed</u> to retirement in this group <u>at the beginning of the year</u> in which they occurred, and the sales and transfers-out are considered to be removed from the plant exposed to retirement at the <u>beginning of the following year</u>. 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 2006 are calculated in the following manner:

```
Exposures at age 0 = amount of addition = $750,000 

Exposures at age \frac{1}{2} = $750,000 - $8,000 = $742,000 

Exposures at age \frac{1}{2} = $742,000 - $18,000 = $724,000 

Exposures at age \frac{2}{2} = $724,000 - $20,000 - $19,000 = $685,000 

Exposures at age \frac{3}{2} = $685,000 - $22,000 = $663,000
```

For the entire experience band 2001-2010, 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 4½-5½, is obtained by summing:

Original Life Table

The original life table, illustrated in Schedule 4 on the following page, 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



SCHEDULE 4. ORIGINAL LIFE TABLE

CALCULATED BY THE RETIREMENT RATE METHOD

Experience Band 2004-2013

Placement Band 1999-2013

(Exposure and Retirement Amounts are in Thousands of Dollars)

Age at	Exposures at	Retirements	Datinamant	Com do com	Percent Surviving at
Beginning of	Beginning of	During Age	Retirement	Survivor	Beginning of
<u>Interval</u>	Age Interval	<u>Interval</u>	Ratio	<u>Ratio</u>	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>			

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.



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 $4\frac{1}{2}$ = 88.15 Exposures at age $4\frac{1}{2}$ = 3,789,000 Retirements from age $4\frac{1}{2}$ to $5\frac{1}{2}$ = 143,000 Retirement Ratio = 143,000 ÷ 3,789,000

Retirement Ratio = $143,000 \div 3,789,000 = 0.0377$ Survivor Ratio = 1.000 - 0.0377 = 0.9623Percent surviving at age $5\frac{1}{2}$ = $(88.15) \times (0.9623) = 84.83$

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. 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

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.

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

45 ORIGINAL CURVE ■ 2004-2013 EXPERIENCE: 1999-2013 PLACEMENTS 40 35 30 IOWA 12-L IOWA 13-L1 20 25 AGE IN YEARS 15 10 2 80 70-50 30 20-10 90 РЕВСЕИТ SURVIVING

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

45 ORIGINAL CURVE ■ 2004-2013 EXPERIENCE: 1999-2013 PLACEMENTS 40 35 30 20 25 AGE IN YEARS IOWA 13-S0 15 10 2 IOWA 80 70-50 30 20-10 8 РЕВСЕИТ SURVIVING

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

45 ORIGINAL CURVE ■ 2004-2013 EXPERIENCE: 1999-2013 PLACEMENTS 40 35 30 20 25 AGE IN YEARS IOWA 13-R1 15 IOWA 12-R1 10 IOWA 11-R1 2 80 70-50 30 20-10 8 РЕВСЕИТ SURVIVING

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

45 ORIGINAL CURVE ■ 2004-2013 EXPERIENCE: 1999-2013 PLACEMENTS 40 35 30 20 25 AGE IN YEARS 15 10 2 IOWA 70-80 50 30 20-10 8 РЕВСЕИТ SURVIVING

APPENDIX B ESTIMATION OF NET SALVAGE



ESTIMATION OF NET SALVAGE

The estimates of net salvage were based primarily on the professional judgment of Gannett Fleming, in part on historical data, and in part through a comparison to peer companies. Gross salvage and cost of removal as recorded to the depreciation reserve account and related to experienced retirements are used. Percentages of the cost of plant retired are calculated for each component of net salvage on both annual and three-year moving average bases.

The net salvage percentages estimated is usually determined using the "Traditional Approach" for net salvage estimation. When a utility retires plant, the plant may be: (1) sold to a third party; (2) reused by the utility for additional service; (3) abandoned in place; or (4) physically removed. In the circumstances where the plant is sold or re-used, a salvage proceed (or positive salvage amount) is normally recognized. In circumstances where the plant is abandoned in place or physically removed, a cost of removal expenditure (or negative salvage) is incurred. The net of these estimated gross salvage proceeds and the estimated costs of removal are expressed as a percentage of the account's original cost to determine a net salvage percentage. In the circumstances where the salvage proceeds exceed the costs of retirement, a net positive salvage percentage exists. In the circumstances where the costs of removal exceed the salvage proceeds, a net negative salvage percentage results.

The estimation of the net salvage percentages developed using the traditional approach, includes the following steps:

- 1. The annual retirement, gross salvage and cost of removal transactions for the period of analysis are extracted from the plant accounting systems.
- A net salvage amount (gross salvage proceeds less cost of retirement) is calculated for each historic year. Additionally, a net salvage amount is also calculated for each historic three-year rolling band and the most recent five-year rolling band.
- 3. The net salvage amount determined above is compared to the original booked costs retired for each period in the manner described, which results in a net salvage percentage of original costs retired for each year, in addition to three-year rolling bands and the most recent five-year rolling band.



- 4. The annual, the three-year rolling average, and the most recent five-year rolling average net salvage percentages are analyzed to determine a reasonable estimated net salvage percentage. At this point the net salvage percentage is based purely upon statistical analysis.
- 5. Each account is then compared to the net salvage percentage currently approved, compared to peer companies, and discussed with company engineering staff. Based on the statistical analysis, the review of current and peer company net salvage percentages, and with the professional judgment of Gannett Fleming, a net salvage percentage is determined for each account.
- 6. The net salvage percentage is then used in the depreciation rate calculations in the technical update.



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