

Exhibit No.:
Issue(s): Revenue Requirement
Witness: Mitchell Lansford
Type of Exhibit: Direct Testimony
Sponsoring Party: Union Electric Company
File No.: GR-2021-0241
Date Testimony Prepared: March 31, 2021

MISSOURI PUBLIC SERVICE COMMISSION

FILE NO. GR-2021-0241

DIRECT TESTIMONY

OF

MITCHELL LANSFORD

ON

BEHALF OF

UNION ELECTRIC COMPANY

D/B/A AMEREN MISSOURI

**St. Louis, Missouri
March, 2021**

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	PURPOSE OF TESTIMONY	2
III.	REVENUE REQUIREMENT	5
IV.	CASH WORKING CAPITAL ANALYSIS	25
V.	CONCLUSION.....	36

DIRECT TESTIMONY
OF
MITCHELL LANSFORD
FILE NO. GR-2021-0241

I. INTRODUCTION

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19

Q. Please state your name and business address.

My name is Mitchell Lansford. My business address is One Ameren Plaza, 1901 Chouteau Ave., St. Louis, Missouri.

Q. By whom are you employed and what is your position?

A. I am employed by Union Electric Company d/b/a Ameren Missouri (“Ameren Missouri” or “Company”) as Director, Regulatory Accounting.

Q. Please describe your educational background and employment experience.

A. I received a Bachelor of Science degree and a Master's degree in Accountancy from the University of Missouri at Columbia in 2008. I am a licensed Certified Public Accountant in the State of Missouri and a member of the American Institute of Certified Public Accountants. From 2008 to 2017, I worked for PricewaterhouseCoopers LLP, most recently as a Senior Manager in its assurance practice. In that capacity, I provided auditing and accounting services to clients, primarily in the utility industry. From 2017 to 2019, I worked for Ameren Services Company as the Manager of Accounting Research, Policy, and Internal Controls. My primary duties and responsibilities included accounting analysis for non-standard transactions, overseeing the implementation of new accounting guidance, implementation of new accounting policies,

1 and assessments of the internal control environment. From 2019 to present, I have been
2 working for Ameren Missouri in multiple regulatory accounting roles, including my
3 current role as Director, Regulatory Accounting effective in April 2020.

4 II. PURPOSE OF TESTIMONY

5 Q. What is the purpose of your direct testimony?

6 A. The purpose of my direct testimony is to develop the revenue requirement
7 (cost of service) for the gas operations of Ameren Missouri. The revenue requirement
8 determines the level of gas revenues required to pay operating expenses, to provide for
9 depreciation and taxes, and to give investors an opportunity to earn a fair and reasonable
10 return on the Company's investment. Ameren Missouri witness Kelsey Klein uses this data
11 as the starting point for her class cost of service study. Also, I will discuss the lead/lag
12 study prepared for Ameren Missouri's gas business that I used to develop cash working
13 capital ("CWC") factors. The CWC factors were used to calculate the Company's cash
14 working capital requirements included in the revenue requirement.

15 Q. Are you sponsoring any schedules?

16 A. Yes. I am sponsoring Schedules MJL-D1 through MJL-D18.

17 Q. What is the subject matter of these schedules?

18 A. Schedules MJL-D1 through MJL-D16 develop the various elements of the
19 revenue requirement to be considered in arriving at the proper level of rates for the
20 Company's gas service based on the test year of the twelve months ended December 31,
21 2020, with pro forma adjustments and updates for known and measurable changes to be
22 trued-up through September 30, 2021. Schedule MJL-D18 reflects the results of the cash
23 working capital lead/lag study prepared as of the twelve months ended December 31, 2020.

1 **Q. Will you please briefly summarize the information provided on each of**
2 **the schedules you are presenting?**

3 A. Each schedule provides the following information:

- 4 • Schedule MJL-D1 – Original Cost of Gas Plant by functional classification at
5 December 31, 2020, per book and pro forma.
- 6 • Schedule MJL-D2 – Gas Plant Reserves for Depreciation and Amortization by
7 functional classification at December 31, 2020, per book and pro forma.
- 8 • Schedule MJL-D3 – Average Fuel Inventories and Average Materials and
9 Supplies Inventories at December 31, 2020, per book and pro forma applicable
10 to gas operations.
- 11 • Schedule MJL-D4 – Average Pre-payments at December 31, 2020, per book
12 and pro forma applicable to gas operations.
- 13 • Schedule MJL-D5 – Total Gas Cash Working Capital (per the Company’s
14 lead/lag study) for the twelve months ended December 31, 2020, applicable to
15 gas operations.
- 16 • Schedule MJL-D6 – Federal and State Income Tax Cash Requirement, City of
17 St. Louis Earnings Tax Cash Requirement and Interest Expense Cash
18 Requirement applicable to gas operations for the twelve months ended
19 December 31, 2020.
- 20 • Schedule MJL-D7 – Average Gas Customer Advances for Construction and
21 Average Gas Customer Deposit reductions to rate base at December 31, 2020.
- 22 • Schedule MJL-D8 –Regulatory Asset and Liability balances included in rate
23 base at December 31, 2020, per book and pro forma.

- 1 • Schedule MJL-D9 – Total Gas Accumulated Deferred Income Taxes at
2 December 31, 2020, per book and pro forma.
- 3 • Schedule MJL-D10 – Total Gas Operating Revenues for the twelve months
4 ended December 31, 2020, per book and pro forma.
- 5 • Schedule MJL-D11 – Total Gas Operations and Maintenance Expenses, by
6 functional classification, for the twelve months ended December 31, 2020,
7 updated for certain known items, per book and pro forma. A description of each
8 of the pro forma adjustments is included.
- 9 • Schedule MJL-D12 – Depreciation and Amortization Expenses applicable to
10 gas operations, by functional classification, for the twelve months ended
11 December 31, 2020, per book and pro forma. A description of each pro forma
12 adjustment is included.
- 13 • Schedule MJL-D13 – Gannett Fleming Valuation and Rate Consultants, LLC
14 Depreciation Study for the period ended December 31, 2019.
- 15 • Schedule MJL-D14 – Taxes Other Than Income Taxes, for the twelve months
16 ended December 31, 2020, per book and pro forma for the gas operations of the
17 Company. A description of each pro forma adjustment is included.
- 18 • Schedule MJL-D15 – Income Tax Calculation at the proposed rate of return and
19 statutory tax rates for the total gas operations of the Company.
- 20 • Schedule MJL-D16 – The pro forma Gas Net Original Cost Rate Base at
21 December 31, 2020, and the Gas Revenue Requirement including the pro forma
22 adjustments.

- 1 • Schedule MJL-D17 – The annual revenue increase required at a 6.943% return
2 on Net Original Cost Gas Rate Base, including pro forma adjustments.
- 3 • Schedule MJL-D18 – The cash working capital factors used by Ameren
4 Missouri to calculate the Company's cash working capital requirements.

5 **III. REVENUE REQUIREMENT**

6 **Q. What do you mean by "revenue requirement"?**

7 A. The revenue requirement of a utility is the sum of operations and
8 maintenance expenses, depreciation and amortization expenses, taxes, and a fair and
9 reasonable return on the net value of property used and useful in serving its customers (and
10 other rate base amounts). The revenue requirement is based on a test year and it is necessary
11 to make certain "pro forma" adjustments in order to reflect conditions existing at the end
12 of the trued-up test year, as well as significant changes that are known or reasonably certain
13 to occur closer to when new rates would take effect.

14 The revenue requirement represents the total funds (revenues) that must be
15 collected by the Company if it is to pay employees and suppliers, satisfy tax liabilities, and
16 provide a fair return to investors. To the extent that current revenues are less than the
17 revenue requirement, as is true in this case, a rate increase is required.

18 **Q. What test year is the Company proposing to use to establish the revenue**
19 **requirement in this proceeding?**

20 A. The Company is proposing a test year consisting of the twelve months
21 ended December 31, 2020 ("test year"), with pro forma adjustments to account for the true-
22 up of various items through September 30, 2021 ("true-up date"), consistent with the
23 approach used in the Company's previous rate cases. The Company is proposing to true-

1 up the following items: plant-in-service, depreciation reserve, materials and supplies
2 (including gas inventories), prepayments, cash working capital (excluding CWC factors),
3 customer advances for construction, customer deposits, accumulated deferred income
4 taxes, pension and other post-employment benefits ("OPEB"), tracked regulatory
5 asset/liability balances, customer growth, compensation, number of employees, employee
6 benefits, insurance expense, Company Owned Life Insurance ("COLI") investment gains
7 and losses, COVID-19 deferrals, the Missouri Public Service Commission ("MPSC")
8 assessments, capital structure, depreciation expense, and various amortizations (such as the
9 pension, OPEB, and property tax tracker amortization). Finally, the Company proposes
10 that other significant items that may arise through the true-up date, both increases and
11 decreases, should be trued-up through September 30, 2021.

12 **Q. Why is it necessary to make pro forma adjustments to the test year**
13 **data?**

14 A. In ratemaking, rates are set for the future. It is often necessary to adjust the
15 test year data to be more representative of future operating conditions. Pro forma
16 adjustments allow for the newly-authorized rates to have the opportunity to produce the
17 allowed rate of return during the period they are in effect. This requires pro forma
18 adjustments to reflect known and measurable changes.

19 **Q. Please explain Schedule MJL-D1.**

20 A. Schedule MJL-D1 shows the recorded original cost of gas plant by
21 functional classification at December 31, 2020, along with the estimated plant additions
22 and other adjustments through September 30, 2021, which is the end of the Company's

1 proposed true-up period. The Company's plant accounts are recorded on the basis of
2 original cost as defined by the Uniform System of Accounts and prescribed by the MPSC.

3 **Q. Why is the Company including plant additions through September 30,**
4 **2021?**

5 A. The Company continues to spend significant amounts on infrastructure
6 replacements and improvements. In order to provide the Company an opportunity to earn
7 a fair and reasonable return on its total investment, it is necessary for the cost of service to
8 reflect, as closely as possible, the level of the Company's investment at the time new rates
9 will become effective. Adjustment 1 adds the estimated plant-in-service additions, offset
10 by retirements, of \$30,023,000 from January 2021 through September 30, 2021, which is
11 the end of the proposed true-up period.

12 **Q. Please explain the reduction in plant-in-service related to advanced**
13 **metering infrastructure ("AMI") software.**

14 A. During the test year, the Company invested in a software solution that
15 enables the use of AMI meters. Although AMI electric meters have been installed and the
16 software meets the definition of used and useful, no AMI gas meters are expected to be
17 installed by the true-up date. Adjustment 2 reflects the deferral of \$4,547,000 relating to
18 the Company's AMI software investment. Corresponding reductions in plant reserve and
19 amortization expense have also been made in this revenue requirement.

20 **Q. Specifically, how should a deferral of the Company's AMI software**
21 **investment be treated for regulatory purposes?**

22 A. The Company requests approval to defer any amortization relating to this
23 investment that occurs after new rates become effective in this case and include such

1 deferral in rate base in a future rate case. This treatment will better align the customers
2 benefiting from this investment with the customers who are paying rates that are based on
3 a revenue requirement that includes this investment.

4 **Q. Should carrying costs be applied to the AMI software deferral?**

5 A. Yes. This investment would otherwise be included in rate base. Carrying
6 costs equal to the Company's weighted-average-cost-of-capital should be applied to the
7 deferral.

8 **Q. Please explain the addition of General and Intangible Plant applicable**
9 **to gas operations.**

10 A. General and Intangible Plant assets, such as general office buildings, the
11 central warehouse, the central garage, software, computers and office equipment, are used
12 in both the electric and gas operations. For convenience, such facilities are accounted for
13 as electric plant. Adjustment 3 adds the portion of the multi-use General Plant and
14 Intangible Plant applicable to the Company's gas operations of \$14,461,000 and
15 \$19,290,000 respectively.

16 **Q. Why is Adjustment 4 to reduce the gas plant-in-service necessary?**

17 A. In past Ameren Missouri rate cases, a portion of the Company's incentive
18 compensation paid has either been disallowed or recovery was not requested. Within the
19 accounting records of the Company, a portion of the incentive compensation has been
20 capitalized and added to plant-in-service. Adjustment 4 reduces the plant-in-service
21 balance by \$1,639,000 for the accumulated amount of any previously disallowed and/or
22 not requested capitalized incentive compensation.

1 **Q. After reflecting the above pro forma adjustments, what amount of gas**
2 **plant-in-service is the Company proposing to include in rate base?**

3 A. As shown on Schedule MJL-D1, the total gas plant-in-service is
4 \$618,503,000.

5 **Q. Please explain Schedule MJL-D2.**

6 A. Schedule MJL-D2 shows the gas plant reserve for depreciation and
7 amortization at December 31, 2020, by functional group. It also indicates the pro forma
8 adjustments.

9 **Q. What pro forma adjustments were made to the reserve for**
10 **depreciation?**

11 A. The following adjustments were made to the reserve for depreciation on
12 Schedule MJL-D2:

13 Adjustment 1 increases the depreciation reserve by \$10,478,000 to reflect the
14 depreciation through the true-up date for plant-in-service existing at December 31, 2020.

15 Adjustment 2 decreases plant reserve by \$1,124,000 relating to the previously
16 discussed AMI software investment.

17 Adjustment 3 increases the depreciation reserve by \$642,000 for the pro forma
18 additions to plant-in-service from January 1, 2021, through September 30, 2021, the
19 proposed true-up date.

20 Adjustment 4 increases the accumulated depreciation and amortization reserve of
21 \$3,852,000 for the multi-use general plant applicable to gas operations. Adjustment 4 also
22 increases the accumulated depreciation and amortization reserve of \$8,613,000 related to

1 Intangible Plant applicable to gas operations. These adjustments correspond to Adjustment
2 3 made to the plant accounts in Schedule MJL-D1.

3 The accumulated depreciation and amortization reserve is reduced by \$455,000 in
4 Adjustment 5 to reflect the accumulated depreciation and amortization applicable to a
5 portion of capitalized incentive compensation reflected in Adjustment 4 on Schedule MJL-
6 D1.

7 The pro forma accumulated provision for depreciation and amortization, as shown
8 on Schedule MJL-D2, applicable to total gas plant-in-service is \$228,319,000.

9 **Q. Please explain Schedule MJL-D3.**

10 A. Schedule MJL-D3 shows the average investment in fuel inventories and
11 materials and supplies at December 31, 2020. Fuel inventory is gas stored underground.
12 General materials and supplies include such items as pipe, valves, fittings, and general
13 supplies. A thirteen-month average is used for all of these items.

14 **Q. What is the amount of the pro forma fuel and materials and supplies**
15 **applicable to gas operations?**

16 A. The pro forma fuel and materials and supplies applicable to total gas
17 operations, as shown on Schedule MJL-D3, is \$6,500,000.

18 **Q. Please explain the average pre-payments shown on Schedule MJL-D4.**

19 A. Certain costs for items such as rent, insurance, service agreements, medical
20 and dental voluntary employee beneficiary association contributions, digital subscriptions,
21 and others are paid in advance. The thirteen-month total average balance of gas pre-
22 payments at December 31, 2020, after eliminating the portion applicable to electric
23 operations, is \$756,000.

1 **Q. Please explain Schedule MJL-D5.**

2 A. Schedule MJL-D5 shows the calculation of the gas cash working capital
3 requirement as a negative cash requirement of (\$1,984,000), which is based on a lead/lag
4 study for the twelve months ended December 31, 2020, including the pro forma
5 adjustments to the operating expenses. I will explain the details of the lead/lag study later
6 in this testimony.

7 **Q. What appears on Schedule MJL-D6?**

8 A. The federal income tax cash requirement, state income tax cash
9 requirement, city earnings tax cash requirement and interest expense cash requirement
10 applicable to the Company's gas operations are shown in Schedule MJL-D6. The payment
11 lead times for these items are based on actual or statutory due dates.

12 **Q. What is the cash requirement for federal income taxes, state income**
13 **taxes, the city earnings tax, and interest expense?**

14 A. Reflecting the payment lead times for each of these items compared to the
15 revenue lag results in cash requirements of \$16,000 for federal income taxes and \$3,000
16 for state income taxes, and a negative cash requirement of (\$13,000) for city earnings tax
17 and (\$805,000) for interest expense. The development of the various revenue and expense
18 lags are explained later in this testimony.

19 **Q. What items are shown in Schedule MJL-D7?**

20 A. The thirteen-month average balances at December 31, 2020, for gas
21 customer advances for construction and gas customer deposits are shown in Schedule MJL-
22 D7. These items represent cash provided by customers that can be used by the Company

1 until they are refunded. Therefore, the average balances for the customer advances for
2 construction and customer deposits are reductions to the Company's rate base.

3 Customer advances for construction are cash advances made by customers that are
4 subject to refund to the customer in whole or in part. These advances provide the Company
5 cash that offsets the cost of the construction until they are refunded. The thirteen-month
6 average balance of gas customer advances for construction at December 31, 2020, is
7 \$391,000.

8 Customer deposits are cash deposits made by customers which are subject to refund
9 to the customer if the customer develops a good payment record. The Company pays
10 interest on the deposits, which is shown as a customer account expense in Schedule MJL-
11 D12. The thirteen-month average balance of gas customer deposits at December 31, 2020,
12 is \$885,000.

13 **Q. What is shown on Schedule MJL-D8?**

14 A. Schedule MJL-D8 shows the pension and OPEB regulatory liability
15 balances. The pension and OPEB regulatory liability and asset balances shown are for the
16 period ended December 31, 2020, and further amortized through the true-up date. In File
17 No. GR-2019-0077 (Ameren Missouri's most recent gas rate case), the pension and OPEB
18 tracker expenses accumulated from October 1, 2010 through May 30, 2019 were set to
19 amortize over a 5-year period scheduled to end in August 2024. These pension and OPEB
20 liabilities originally established in File No. GR-2019-0077 were re-set to a new 5-year
21 amortization period in this revenue requirement. In addition, the estimated pension and
22 OPEB tracker expenses accumulated from June 1, 2019 through the true-up date, are also
23 included with one-fifth of the net regulatory asset and liability balance at September 30,

1 2021, being included in the revenue requirement in this case, reflecting amortization over
2 a period of five years. The pension and OPEB trackers are both estimated to have a
3 regulatory liability balance at September 30, 2021. The net balance of the pension tracker
4 and the OPEB tracker is a regulatory liability of \$1,537,000. This regulatory liability
5 reduces rate base by that amount.

6 **Q. Please explain Schedule MJL-D9.**

7 A. Schedule MJL-D9 lists the accumulated deferred income taxes applicable
8 to total gas operations at December 31, 2020, and the pro forma adjustments required to
9 project the balances forward to September 30, 2021, the end of the proposed true-up period.
10 Accumulated deferred income taxes are the net result of normalizing the tax benefits
11 resulting from timing differences between the period in which transactions affect taxable
12 income and the periods in which such transactions affect the determination of pre-tax
13 income.

14 Currently, the Company has deferred income taxes in Federal Energy Regulatory
15 Commission Accounts 190, 282, and 283. As shown on Schedule MJL-D9, the total gas
16 pro forma accumulated deferred income tax balance is a net liability balance of
17 \$81,383,000. Net deferred income tax liabilities are a deduction from rate base.

18 **Q. What is the Company's pro forma net original cost gas rate base at**
19 **December 31, 2020, including pro forma adjustments to adjust to the true-up date of**
20 **September 30, 2021?**

21 A. The Company's total gas rate base as shown in Schedule MJL-D15 is
22 \$310,461,000, consisting of:

	<u>In Thousands of \$</u>
1	
2	Original Cost of Plant-In-Service \$618,503
3	Less Reserve for Depreciation & Amortization <u>228,319</u>
4	Net Original Cost of Plant 390,184
5	Average Fuel and Materials & Supplies 6,500
6	Average Prepayments 756
7	Cash Working Capital (Lead/Lag) (1,984)
8	Federal Income Tax Cash Requirement 16
9	State Income Tax Cash Requirement 3
10	City Earnings Tax Cash Requirement (13)
11	Interest Expense Cash Requirement (805)
12	Average Customer Advances for Construction (391)
13	Average Customer Deposits (885)
14	Pension Tracker Regulatory Liability (579)
15	OPEB Tracker Regulatory Liability (958)
16	Accumulated Deferred Income Taxes <u>(81,383)</u>
17	Total Gas Rate Base <u>\$310,461</u>

18 **Q. Please explain Schedule MJL-D10.**

19 A. Schedule MJL-D10 shows total gas operating revenues per book and pro
20 forma for the twelve months ended December 31, 2020 with true-up through September
21 30, 2021, the end of the proposed true-up period.

22 **Q. Please explain the pro forma adjustments to the gas operating revenues**
23 **shown in Schedule MJL-D10.**

1 A. The following pro forma adjustments are shown in Schedule MJL-D10:
2 Adjustment 1 eliminates revenue add-on taxes of \$5,764,000, as they are directly
3 passed through to customers by the Company. Adjustment 2 increases revenues by
4 \$2,732,000 to reflect normal weather because the sales and revenues for the twelve months
5 ended December 31, 2020, were lower than normal as a result of warmer than normal
6 weather. Adjustment 3 eliminates the PGA revenues of \$42,475,000, as they are collected
7 through the PGA Rider, rather than through the base rates. Since the Company uses cycle
8 and window billing, revenues are decreased by \$2,013,000 to reflect the twelve month
9 billing year as a twelve month, 365 day, calendar year in Adjustment 4. Adjustment 5
10 eliminates unbilled revenues of \$1,385,000 to reflect the book revenues on a bill cycle
11 basis. Other gas revenues were increased by \$161,000 in Adjustment 6 to annualize the
12 amount of rental costs paid by other Ameren affiliates for software owned by Ameren
13 Missouri. Adjustment 7 reduces other revenues by \$72,000 to reflect the cancellation of
14 the Bank of America lease, which is expected by the true-up date. Adjustment 8 increases
15 revenues by \$585,000 due to expected customer growth through September 30, 2021.
16 Adjustment 9 decreases revenues by \$151,000 to normalize revenues for the number of
17 days in the test year. Adjustment 10 increases revenues by \$689,000 to normalize the initial
18 impact of COVID-19 pandemic to revenues in the test year. Finally, during the test year
19 the Company implemented a temporary policy to waive late fee payments and
20 disconnections to ease customers' burden during the COVID-19 pandemic. Adjustment 11
21 increases other revenues by \$172,000 to normalize these fee revenues to 2019 levels (the
22 most recently completed calendar year unaffected by the COVID-19 pandemic). Further

1 discussion of revenue Adjustments 2, 4, 8, 9, and 10 can be found in the direct testimony
2 of Ameren Missouri witness Kelsey Klein.

3 **Q. What are the pro forma gas operating revenues for the twelve months**
4 **ended December 31, 2020?**

5 A. The pro forma gas operating revenues for the twelve months ended
6 December 31, 2020 are \$77,065,000.

7 **Q. Please describe what is shown in Schedule MJL-D11.**

8 A. Total gas operations and maintenance expense ("O&M") for the twelve
9 months ended December 31, 2020 (per books by functional classification) and a listing of
10 the pro forma adjustments to O&M are shown in Schedule MJL-D11.

11 **Q. Please explain the pro forma adjustments to gas O&M for the twelve**
12 **months ended December 31, 2020.**

13 A. A summary of the pro forma adjustments to O&M appears in Schedule
14 MJL-D11-4. Adjustment 1 reflects the increased labor expense from annualizing the 2.5%
15 wage increase for the Company's union employees effective January 1, 2021, per the labor
16 contracts. In addition, management employees' average wage increase of 1.83% effective
17 January 1, 2021 has also been reflected. The annualized increase in the total gas operating
18 labor resulting from the above increases is \$347,000. These wage increases reflect known
19 and measurable changes that occurred subsequent to the test year. Incentive compensation
20 was excluded from the calculation of the wage increases as wage increases only apply to
21 base wages.

22 Test year short-term incentive compensation is reduced by \$282,000 in Adjustment
23 2 to eliminate the incentive compensation related to earnings of the Ameren Services

1 Company officers allocated to Ameren Missouri and Ameren Missouri officers, as well as
2 to represent the amounts paid, rather than expensed, in the test year.

3 Consistent with prior cases, long-term incentive compensation related to Ameren
4 Corporation's financial performance of \$381,000 applicable to Ameren Missouri, including
5 the allocated Ameren Services Company amount, is eliminated from O&M in Adjustment
6 3. Beginning in 2018, Ameren's long-term incentive compensation plan called for each
7 award to be payable approximately 70% in Performance Share Units that are related to
8 financial performance of Ameren Corporation and 30% payable in Restricted Share Units,
9 which are not related to financial performance. Restricted Share Units represent the right
10 to receive stock depending solely on an employees continued employment with Ameren
11 through a defined vesting period. Restricted Share Unit costs relating to compensation paid
12 out in March 2021 are included in this pro forma adjustment, partially offsetting the noted
13 reduction.

14 Adjustment 4 decreases O&M to a normal level of bad debt write-offs. Unusually
15 high uncollectible expense was recorded in the test year, as a result of the COVID-19
16 pandemic. As the COVID-19 pandemic impacted bad debt expense during the test year, it
17 also impacted test year write-off levels making them not representative of normal levels.
18 The adjustment reflects 2019 write-off levels, as the most recently complete and unaffected
19 calendar year, and decreases O&M by \$104,000.

20 Adjustment 5 increases O&M by \$581,000 to reflect expected staffing increases of
21 232 full-time equivalents through September 30, 2021, the proposed true-up period. This
22 adjustment is consistent with the past practice of adjusting for the on-going employment

1 levels experienced through the true-up date and allows for newly-authorized rates to most
2 closely align with the Company's costs.

3 Adjustment 6 eliminates O&M expense related to the cost of purchased gas and
4 other related costs and expenses of \$42,944,000 that are collected through the PGA Rider.

5 Adjustment 7 is an increase to O&M expenses to reflect interest expense at 4.25%
6 on the average customer deposit balance. The average customer deposit balance at
7 December 31, 2020 is deducted from rate base. The interest expense added to the customer
8 accounting expense is \$38,000.

9 The various insurance policies of the Company are renewable at different times
10 during the test year. Adjustment 8 increases O&M expense by \$418,000 to annualize the
11 premiums of the various insurance policies in effect, or expected to be in effect, at the time
12 new rates are expected to be implemented in this case.

13 Adjustment 9 decreases O&M by \$231,000 to reflect increases in the other
14 employee benefits expense to annualize the employee benefits expense through September
15 30, 2021, the proposed true-up period.

16 Adjustment 10 decreases O&M expense to normal levels for expenses directly
17 impacted by the COVID-19 pandemic during the test year. Certain cost increases and cost
18 savings were ordered to be deferred to a regulatory asset for the period ended March 1,
19 2020 through March 31, 2021 in File No. GU-2021-0112. The Order in File No. GU-2021-
20 0112¹ was received subsequent to the test year and, therefore, not reflected in test year
21 results. This adjustment reduces O&M expense by \$136,000 for the net, non-normal,
22 deferred amount applicable to the test year.

¹ File No. GU-2021-0112, Order Approving Stipulation and Agreement, issued March 10, 2021.

1 O&M expenses were increased by \$11,000 in Adjustment 11 to account for the
2 new on-going cleaning procedures to be implemented subsequent to the COVID-19
3 pandemic. These costs are not representative of all incremental costs associated with
4 cleaning during the height of the pandemic, but rather the continued incremental costs
5 associated with permanent changes in cleaning protocols subsequent to the pandemic.

6 Adjustment 12 is an increase of \$19,000 to O&M expenses to reflect the annualized
7 costs of the non-qualified pension plan, which is no longer in the pension tracker, through
8 September 30, 2021, the proposed true-up period.

9 Adjustment 13 increases O&M expenses by \$105,000 to rebase the pension and
10 OPEB tracker to reflect the annualized cost levels expected at the true-up date.

11 Adjustment 14 is an increase in O&M of \$133,000 to reflect the annualized
12 amortization of the pension and OPEB net regulatory balances, and the estimated net
13 regulatory liability balances at September 30, 2021, the end of the proposed true-up period.

14 Adjustment 15 increases rate case expense by \$213,000 to reflect the average rate
15 case expense incurred by the Company in the last two general rate cases and recovery of
16 these costs over a two-year period. The depreciation study expense will be recovered over
17 five years based on the requirement for a study to be completed every five years. Ameren
18 Missouri witness Tom Byrne further discusses this adjustment in his direct testimony.

19 O&M expense decreases by \$110,000 in Adjustment 16 to remove the costs
20 associated with the Bank of America lease. This lease is expected to be cancelled prior to
21 the true-up date.

22 Adjustment 17 removes \$14,000 in O&M expenses which relate to electric
23 operations.

1 Adjustment 18 removes \$46,000 in O&M expense for changes in depreciation
2 charged to O&M expense for transportation and heavy duty equipment.

3 Adjustment 19 increases O&M expense by \$40,000 to adjust the allocation factors
4 to the 2021 levels. 2021 levels represent the latest known levels prior to the true-up date.

5 Adjustment 20 decreases O&M expense by \$340,000 to normalize the COLI gains
6 or expenses using a five-year average. COLI contracts contain a net cash surrender value
7 that is invested in debt and equity securities. Variability exists in the returns related to these
8 debt and equity security investments, such that gains or losses may be experienced in any
9 given test year. A five-year normalization period is most appropriate, in this instance,
10 because of the significant volatility experienced in 2018, 2019, and 2020.

11 Adjustment 21 reduces O&M expense by \$1,000 to remove alcohol purchases made
12 during the test year.

13 Adjustment 22 removes \$17,000 from O&M expense related to certain Board of
14 Directors costs for travel and chartered flights.

15 Adjustment 23 reduces O&M expense by \$20,000 to normalize software rental
16 expense expected to be paid to other Ameren affiliates that are allocated to gas operations
17 through the true-up date.

18 Adjustment 24 decreases O&M by \$1,000 to remove elective vehicle incentives
19 charged to gas operations.

20 Adjustment 25 increases O&M expense by \$503,000 for the Company's proposed
21 waiver of customer-facing convenience charges and inclusion of such charges in this
22 revenue requirement. Customers electing to pay via credit card or at walk-in locations
23 currently pay convenience charges of \$1.85 and \$1.10 per payment, respectively. Some of

1 Ameren Missouri's peer utilities – Evergy Metro, Inc. d/b/a Evergy Missouri Metro, Evergy
2 Missouri West, Inc. d/b/a Evergy Missouri West, and Spire Missouri, Inc. – discontinued
3 the assessment of credit card fees for customers using that payment method. Ameren
4 Missouri wishes to follow suit. The biggest benefit accrues to our residential customers,
5 who are the most likely to use credit cards, and for whom the fees represent a larger
6 percentage of their payments. Waiving these fees takes financial pressure off of these
7 customers. Additionally, credit card payments shift the risk of nonpayment from the utility
8 to the financial institution, which could put downward pressure on bad debt expense. As
9 the MPSC noted in its Spire Missouri, Inc. Order, the utility "would get its money sooner
10 and without the risk of taking a bad check [footnote omitted], and it might see a reduction
11 in its level of bad debt."² Ameren Missouri would continue to incur these charges and, via
12 this adjustment, is requesting recovery in this rate case for the fees expected to be incurred.
13 This expectation is based on current contracted fees, 2019 payment levels (2020 payment
14 levels were significantly impacted by the COVID-19 pandemic), and evidence from our
15 third-party service provider suggesting such a change has resulted in a 15% to 30%
16 (midpoint 22.5% utilized in calculating this adjustment) increase in the number of credit
17 card payments made.

18 Finally, adjustment 26 decreases O&M expense by \$11,000 to annualize the MPSC
19 assessment fees to the most recent Ameren Missouri gas operations commission
20 assessment.

21 **Q. What is the impact on total gas operations and maintenance expense**
22 **from the above pro forma adjustments?**

² *Report and Order* issued February 21, 2018, File Nos. GR-2017-0215 and GR-2017-0216, p. 68

1 A. As shown in Schedule MJL-D11, the total gas operations and maintenance
2 expenses are decreased from \$77,896,000 to \$36,128,000, or a total net decrease of
3 \$41,768,000 by the above pro forma adjustments.

4 **Q. What is shown in Schedule MJL-D12?**

5 A. Schedule MJL-D12 shows the total gas depreciation and amortization
6 expense by functional classifications for the twelve months ended December 31, 2020, per
7 book and pro forma through the true-up date.

8 **Q. What pro forma adjustments apply to the depreciation and**
9 **amortization expenses?**

10 A. Schedule MJL-D12 details the following pro forma adjustments to the
11 depreciation and amortization expenses:

12 Adjustment 1 increases depreciation and plant amortization by \$3,646,000 to reflect
13 the book depreciation annualized for the plant-in-service depreciable balances at December
14 31, 2020, and plant additions through the true-up period, based on current depreciation
15 rates approved in File No. GR-2019-0077.

16 Adjustment 2 decreases the depreciation expense by \$1,895,165 to reflect the
17 change in depreciation rates reflected in the depreciation study conducted by John J.
18 Spanos from Gannett Fleming Valuation and Rate Consultants, LLC and submitted to the
19 Staff and the Office of the Public Counsel on July 9, 2020, pursuant to the requirements of
20 20 CSR 4240-40.090. The depreciation study report is also included with this testimony as
21 Schedule MJL-D13.

22 The depreciation expense for transportation equipment (Account 392) and heavy
23 duty equipment (Account 396) are not charged to depreciation expense. Adjustment 3

1 reduces depreciation expense by \$756,000 to eliminate depreciation expense on these
2 accounts.

3 Adjustment 4 decreases depreciation expense by \$48,000 for the depreciation
4 related to the capitalized incentive compensation reduction of rate base.

5 Adjustment 5 increases amortization expense by \$18,000 to recover the COVID-
6 19 Accounting Authority Order deferral resulting from File No. GU-2021-0112 over a
7 three-year period.

8 Adjustment 6 increases amortization expense by \$42,000 for amortization of the
9 accumulated balance related to the Excess Deferred Tracker through December 31, 2020
10 over a three-year period.

11 Adjustment 7 increases amortization expense by \$700,000 to annualize the
12 amortization related to the Low Income Weatherization program. Ameren Missouri
13 witness Jeff Berg further discusses this amount.

14 **Q. What are the total gas pro forma depreciation and amortization**
15 **expenses?**

16 A. As reported in Schedule MJL-D12, the total gas pro forma depreciation and
17 amortization expenses are \$15,720,000.

18 **Q. Please explain Schedule MJL-D14.**

19 A. Schedule MJL-D14 shows the taxes other than income taxes for the twelve
20 months ended December 31, 2020, per book and pro forma.

21 **Q. Please list the pro forma adjustments required to arrive at the total gas**
22 **pro forma taxes other than income taxes as detailed in Schedule MJL-D14.**

1 A. The following pro forma adjustments detailed in Schedule MJL-D14 are
2 required to arrive at the total gas pro forma taxes other than income taxes.

3 Adjustment 1 increases F.I.C.A taxes by \$13,000 to reflect the pro forma wage
4 adjustments.

5 Adjustment 2 decreases taxes other than income taxes to remove Missouri gross
6 receipts taxes of \$5,812,000, as they are add-on taxes that are directly passed through from
7 customers. The pro forma book revenues also reflect the removal of the add-on revenue
8 taxes.

9 **Q. How much are pro forma taxes other than income taxes for the twelve**
10 **months ended December 31, 2020 for total gas?**

11 A. As reflected on Schedule MJL-D14, the pro forma total gas taxes other than
12 income taxes are \$9,231,000.

13 **Q. What is shown in Schedule MJL-D15?**

14 A. Schedule MJL-D15 shows the derivation of the income tax calculation at
15 the requested 6.943% rate of return for total gas operations reflecting statutory tax rates.
16 Refer to the direct testimony of Ameren Missouri witness Darryl T. Sagel for the
17 development of the 6.943% rate of return.

18 **Q. As shown in Schedule MJL-D15 what are the income taxes at the**
19 **requested rate of return for total gas operations?**

20 A. The total current federal, state, and city earnings income taxes using the
21 statutory tax rates at the requested rate of return are \$4,609,000 for total gas operations, as
22 shown in Schedule MJL-D15. Deferred income taxes for total gas operations of \$775,000

1 are also shown in Schedule MJL-D15. Net current and deferred income taxes for gas
2 operations are \$3,834,000.

3 **Q. Please explain Schedule MJL-D16.**

4 A. Schedule MJL-D16 shows the total gas rate base of \$310,461,000 and the
5 total gas revenue requirement of \$86,468,000 at the requested rate of return of 6.943%.

6 **Q. What does Schedule MJL-D17 reflect?**

7 A. Schedule MJL-D17 compares the total gas revenue requirement of
8 \$86,468,000 with the total gas pro forma operating revenues under the present rates of
9 \$77,065,000. It shows that the revenue requirement for the test year is \$9,403,000 more
10 than the pro forma operating revenues at present rates. This is the amount of additional
11 revenues Ameren Missouri needs to collect each year to recover its cost of service,
12 including an opportunity to recover its cost of capital.

13 **IV. CASH WORKING CAPITAL ANALYSIS**

14 **Q. For what period was the cash working capital lead/lag study**
15 **performed?**

16 A. The lead/lag study analyzed the Company's cash transactions and invoices
17 for the twelve months ended December 31, 2020.

18 **Q. Please define what you mean by the phrase “cash working capital.”**

19 A. Cash working capital is the amount of funds required to finance the day-to-
20 day operations of the Company.

21 **Q. What is a lead/lag study?**

22 A. A lead/lag study is an analysis of revenue lags and expense leads. CWC
23 requirements are generally determined by lead/lag studies that are used to analyze the lag

1 time between the date customers receive service and the date that customers' payments are
2 available to the Company (i.e., the revenue lag). This lag is offset by a lead time during
3 which the Company receives goods and services, but pays for them at a later date (i.e., the
4 expense lead). The "lead" and "lag" are both measured in days. The dollar-weighted lead
5 and lag days are then divided by 365 to determine a daily CWC factor. This CWC factor
6 is then multiplied by the annual test year cash expenses to determine the amount of cash
7 working capital required for operations. The resulting amount of cash working capital is
8 then included in the Company's rate base.

9 **Q. Please explain the revenue lag in more detail.**

10 A. As noted, the revenue lag refers to the elapsed time between the delivery of
11 the Company's product (i.e., gas) and its ability to use the funds received as payment for
12 the delivery of the product. The revenue lag actually consists of three components, as
13 follows: the service lag, which is the number of days from the mid-point of the service
14 period to the meter reading date; the billing lag, which is the time between when the meter
15 is read and the bill is sent; and the collections lag, which is the time between when the bill
16 is sent to the customer and when the customer's payment is received by the Company.

17 **Q. Please explain the expense lead in more detail.**

18 A. An expense lead refers to the elapsed time from when a good or service is
19 provided to the Company to the point in time when the Company pays for the good or
20 service and the funds are no longer available to the Company. There are a number of
21 different expense leads, since the Company acquires goods and services from a number of
22 different sources.

1 **Q. What sources of information are employed to determine the leads and**
2 **lags in a CWC analysis for Ameren Missouri?**

3 A. Information from the Accounts Payable, Customer Service, Human
4 Resources, Payroll, Treasury Management, and Tax systems are utilized. The information
5 derived from these sources, together with analyses of specific invoices, is used to determine
6 the appropriate number of lead/lag days for Ameren Missouri's gas business.

7 **Q. How should the results of the CWC analysis be treated for ratemaking**
8 **purposes?**

9 A. The CWC requirement should be included as part of Ameren Missouri's
10 rate base for ratemaking purposes, and I have included it in my calculation of the revenue
11 requirement as previously discussed.

12 **Q. Was one revenue lag applied to all of Ameren Missouri's revenues?**

13 A. No. The Company calculated a base revenue lag that was applied to all cash
14 operating revenues with the exception of pass-through taxes. A separate revenue lag was
15 calculated and applied to all revenues associated with pass-through taxes.

16 **Q. How was the base revenue lag determined?**

17 A. The base revenue lag measures the average number of days from the date
18 service was rendered by the Company until the date payment was received from customers
19 and such funds were deposited by the Company. In the calculation, the revenue lag was
20 divided into three distinct components: 1) service lag; 2) billing lag; and 3) collections lag.
21 Considered together, these three components of the base revenue lag totaled 39.5 lag days.
22 An explanation of each component of the base revenue lag follows.

23 **Q. What is meant by service lag?**

1 A. The service lag refers to the number of days from the mid-point of the
2 service period to the meter reading date for that service period. Using the mid-point
3 methodology, the average lag associated with the provisioning of service was 15.21 days
4 (365 days in the year divided by 12 months divided by 2).

5 **Q. What is meant by billing lag?**

6 A. Billing lag refers to the average number of days from the date on which the
7 meter was read until the customer was billed. The billing lag was determined by analyzing
8 the Company's monthly billing schedules and meter reading records. The average billing
9 lag was determined to be 0.93 days.

10 **Q. What is meant by collections lag?**

11 A. The collections lag refers to the average amount of time from the date when
12 the customer received a bill to the date that the Company received payment from its
13 customers. Based on weighted average data from the Company's Customer Service System,
14 the average collection lag was determined to be 23.36 days.

15 **Q. What data was used to calculate the collections lag?**

16 A. The Company used data from the bill payment report which was created to
17 support the calculation of the collections lag.

18 **Q. Please describe the bill payment report used in the collections lag**
19 **calculation.**

20 A. The Company developed a bill payment report to aggregate actual customer
21 payments. This allows us to better understand customer payment behavior. The bill
22 payment report compares the date a customer is billed to the date the bill was paid to arrive
23 at the lag days. The bill payment report summarizes the dollar amounts collected per lag

1 day. The lag days for each line item are capped at 150 days. Each line item is then weighted
2 to calculate the weighted lag days. The bill payment report was run monthly for the period
3 from September 2019 to August 2020. This 12-month period was used instead of the 2020
4 calendar year due to the limitation of the 150 days of complete data beyond August 2020
5 relative to the date of filing the case.

6 **Q. How were uncollectible revenues treated in your analysis?**

7 A. The bill payment report aggregates actual customer payments. Therefore,
8 an adjustment for uncollectible revenues is not needed in the analysis.

9 **Q. Please summarize the calculation of base revenue lag days.**

10 A. The calculation of the overall base revenue lag, by lag component is
11 summarized in the following table:

Base Revenue Lag Component	Lag Days
Service	15.21
Billing	0.93
Collections	23.36
Total Revenue Lag	39.50

12 **Q. How does the revenue lag applied to pass-through taxes differ from the**
13 **base revenue lag?**

14 A. The only difference between the base revenue lag and the revenue lag which
15 is applied to pass-through taxes is that the revenue lag applied to pass-through taxes
16 excludes the service lag. Therefore, the revenue lag applied to pass-through taxes is 24.29
17 days.

1 **Q. Why should a different revenue lag be applied to the pass-through tax**
2 **revenues?**

3 A. In prior cases,³ the Staff has argued that pass-through taxes are not
4 generated as a result of the provisioning of a service by the utility. Therefore, in these
5 proceedings a revenue lag which excludes a lag associated with the provisioning of utility
6 service has been applied to the pass-through tax revenues.

7 **Q. Are the revenues attributable to pass-through taxes collected in the**
8 **same manner and at the same time as all other revenues?**

9 A. Yes. The Company's customers pay one bill. That bill (and thus the
10 payment) includes both operating revenues associated with the provisioning of gas service
11 as well as revenues associated with pass-through taxes.

12 **Q. What impact does the exclusion of the service lag from the revenue lag**
13 **associated with pass-through taxes have on the CWC calculation?**

14 A. The service lag represents the period of time during which the Company has
15 provided a service for which it has not yet been compensated. Since the Company serves
16 primarily as a collect and remit agent for the various taxing bodies, by excluding the service
17 lag from the revenue lag applied to the pass-through taxes, the Company is reflecting that
18 it has no out-of-pocket expense for which it is awaiting payment.

19 **Q. What expense-related leads were considered in the lead/lag analysis?**

20 A. Lead times associated with the following expense categories were
21 considered in the lead/lag study: (a) employee pensions and benefits; (b) base payroll; (c)

³ Such proceedings include Case Nos. ER-2010-0036 (AmerenUE), ER-2008-0318 (AmerenUE), ER2007-0291 (Kansas City Power & Light Company), ER-2008-0093 (The Empire District Electric Company), GR-2007-0208 (Laclede Gas Company), GR-2006-0422 (Missouri Gas Energy).

1 payroll taxes (i.e. FICA, Medicare) and other withholdings; (d) cost of gas; (e) other
2 operations and maintenance expenses; (f) general taxes other than income taxes excluding
3 pass-through taxes; (g) pass-through taxes; (h) federal income taxes; (i) state income taxes;
4 (j) interest on long-term debt; and (k) incentive compensation.

5 **Q. What types of leads associated with the Company's employee benefit**
6 **programs were considered in the analysis?**

7 A. The estimated lead times associated with the following major categories of
8 the Company's employee benefit programs were considered: (a) group life insurance; (b)
9 group health insurance including claims processing, claims payment, and administration
10 costs; (c) contributions to the Company's pension fund; (d) OPEB costs; and (e) the
11 Company's 401-K plan. Taken together, these programs had a dollar-weighted lead time of
12 18.41 days.

13 **Q. Provide an explanation of the leads associated with the Company's**
14 **payroll expenses.**

15 A. Payroll lead days were determined by calculating the nominal and weighted
16 lead time by pay period and weighting the resulting lead days by the amounts paid by the
17 Company to cover its payroll obligations. The resulting total on a dollar-weighted basis
18 was 10.15 days.

19 **Q. Please explain the lead effects associated with payroll taxes.**

20 A. The Company has outsourced its payroll tax processing to a third-party
21 provider, Ceridian. The payroll taxes outsourced to Ceridian include: (a) Federal and State
22 Withholding Taxes; (b) Federal and State Unemployment Taxes; (c) FICA (Social
23 Security) Taxes and Medicare Taxes for both employee and employer; and (d) St. Louis

1 Employee Withholding Tax and St. Louis Employer Expense. Ceridian pulls all payroll
2 taxes out of the Company's bank account on the same date employees are paid. Therefore,
3 the payroll taxes lead time is equal to the base payroll lead time of 9.38 days.

4 **Q. What are the lead times associated with other operations and**
5 **maintenance expenses?**

6 A. The Company engages in transactions with other vendors (not associated
7 with pensions, benefits, payroll, fuel, or taxes) for a variety of purposes including facility
8 maintenance, system maintenance, and customer service. Invoices from providers of such
9 services were analyzed in order to estimate a lead time associated with payment for services
10 related to other operations and maintenance activities. The analysis indicates that on
11 average, invoices were paid by the Company 43.85 days after receipt.

12 **Q. What is the expense lead time associated with the Company's purchases**
13 **of natural gas?**

14 A. Based on an examination of invoices of the commodity and pipeline
15 suppliers to the Company, a weighted expense lead time of 35.02 days was determined.
16 This lead time includes a half month of service lead time.

17 **Q. What are the various general taxes considered in the analysis?**

18 A. The following general taxes were considered in the study: (a) Real Estate
19 and Property Taxes; (b) Missouri Sales Tax; (c) St. Louis Corporate Earnings Taxes; d)
20 Self Procured Insurance Tax; and (e) Gross Receipts Taxes. When taxes were required to
21 be paid to a single taxing authority pursuant to a set schedule, the statutory payment dates
22 were considered in the analysis.

1 **Q. Explain the leads that were calculated for each type of general taxes**
2 **considered in the analysis.**

3 A. The treatment of each category of general taxes in the study is described
4 below:

5 a) Real Estate and Property Taxes: All current-year property taxes in Missouri
6 are due on December 31st of the current year. Taking this schedule into consideration, a
7 dollar-weighted expense lead of 183.00 days was calculated.

8 b) Missouri Sales Tax: Missouri sales tax is payable to the Missouri
9 Department of Revenue and is calculated as a percent of billings less a 2 percent timely
10 payment allowance. Estimated payments are made weekly with the tax return and
11 remaining balance due by the 20th of the month following except for the last month at the
12 end of the quarter for which the tax return and payment are due on the last day of the month
13 following. Taking this information into account, a weighted expense lead time of 9.31 days
14 was determined.

15 c) St. Louis Corporate Earnings Tax: The Company pays corporate earnings
16 taxes to the City of St. Louis. This tax is paid by check to the City of St. Louis annually on
17 April 1st for the previous year. Taking this information into account, the expense lead time
18 associated with corporate earnings taxes was determined to be 274.50 days.

19 d) Self-Procured Insurance Tax: The self-procured insurance tax is paid
20 annually to the federal government each year. Taking this information into account, the
21 expense lead time associated with self-procured insurance taxes was determined to be
22 241.50 days.

23 **Q. What pass-through taxes are included in the CWC analysis?**

1 A. The only pass-through tax considered in the CWC analysis was Gross
2 Receipts Taxes.

3 **Q. Please describe the timing of the payment of the Gross Receipt Taxes.**

4 A. Gross receipts taxes are payable to municipalities and counties and are paid
5 as a percent of billings to customers within the taxing authority. These taxes are paid on
6 the last day of the month following the end of a month, with the exception of Cape
7 Girardeau, Dexter, Jefferson City, Moberly, and Wentzville that are paid on the 20th day
8 of the month. Based on the specific tax periods of the various taxing authorities, a dollar-
9 weighted gross receipts tax expense lead time of 26.14 days was calculated.

10 **Q. Does the lead time for gross receipts taxes include a service lead?**

11 A. No. Since no service lag was included in the revenue lag assigned to pass-
12 through taxes, there has been no service lead attributed to the gross receipts taxes.

13 **Q. Please explain.**

14 A. Both the service lag and the service lead are associated with the timing of
15 the provisioning of service. If there is no service lag on the revenue side there can be no
16 service lead on the expense side. Therefore, for consistency purposes, I have excluded both
17 the service lag and service lead from the analysis of the pass-through taxes.

18 **Q. How did your study address federal income taxes?**

19 A. The lead time associated with federal income tax payments was based on
20 the provisions of the Internal Revenue Code that requires estimated tax payments of 25
21 percent of total income taxes due on April 15, June 15, September 15, and December 15 of
22 the current year. Taking this schedule into consideration, a lead time of 38.00 days for
23 federal income tax payments made by the Company was determined.

1 **Q. How did the study address state income taxes?**

2 A. State income taxes follow a pattern similar to federal taxes. Thus, assuming
3 quarterly payments due on April 15, June 15, September 15, and December 15 of the
4 current year, an expense lead time of 38.00 days was determined.

5 **Q. Provide a description of how lead times associated with the Company's**
6 **interest expenses were addressed by the study.**

7 A. The Company's interest payments on its long-term bonds were made from
8 current revenues. Thus, there was a lead (or lag) between the date the interest payments
9 were collected from customers and the date when such amounts were paid to financial
10 institutions. The Company generally made interest payments on its fixed rate long-term
11 debt twice a year at varying times. Using actual due dates on interest payments, a dollar-
12 weighted lead of 91.37 days for interest payments were determined.

13 **Q. How did the study address contributions to the incentive compensation**
14 **plans?**

15 A. The Company made an annual contribution to incentive compensation
16 programs for both the executive incentive plan and the management/bargaining unit plans
17 during the test year. The executive incentive plan contribution is made the last date in
18 February while the management/bargaining unit contributions are made during the first pay
19 period in March. Based on an examination of the contributions to the incentive
20 compensation plans, a weighted average lead time of 250.29 days was determined.

21 **Q. Please describe Schedule MJL-D17.**

1 A. Schedule MJL-D17 summarizes the leads and lags discussed in my direct
2 testimony that I used to develop the CWC factors. These CWC factors are used to calculate
3 the Company's cash working capital requirements.

4 **V. CONCLUSION**

5 **Q. Please summarize your testimony and conclusions.**

6 A. My testimony and attached schedules have developed the Company's total
7 gas rate base and revenue requirement, which include continuation of the existing pension
8 and OPEB expense trackers and the excess deferred tax amortization tracker. Further, the
9 Company requests to defer costs associated with AMI software incurred subsequent to this
10 rate case. The testimony also includes the amortization of existing regulatory assets and
11 liabilities. As summarized in Schedule MJL-D17, the Company's total gas revenue
12 requirement, including the Company's proposed 6.943% return on rate base is more than
13 the pro forma operating revenues at the present rates by \$9,403,000. Rates should be
14 designed to increase revenues by \$9,403,000, subject to the true-up in this case.

15 **Q. Does this conclude your direct testimony?**

16 A. Yes, it does.

Schedules MJL-D1 through MJL D-12

filed as separate attachment



2019 DEPRECIATION STUDY

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

Prepared by:



*Excellence Delivered **As Promised***

AMEREN MISSOURI - GAS
ST. LOUIS, MISSOURI

2019 DEPRECIATION STUDY

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

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



*Excellence Delivered **As Promised***

June 30, 2020

Ameren Corporation
1901 Choteau Boulevard
St. Louis, MO 63103

Attention Wendy K. Tatro, Esq.
Director and Assistant General Counsel

Ladies and Gentlemen:

Pursuant to your request, we have conducted a depreciation study related to the gas plant of Ameren Missouri - Gas as of December 31, 2019. The attached report presents a description of the methods used in the estimation of depreciation, the summary of annual depreciation accrual rates, the statistical support for the life and net salvage estimates and the detailed tabulations of annual depreciation.

We gratefully acknowledge the assistance of Ameren Missouri - Gas personnel in the conduct of this study.

Respectfully submitted,

GANNETT FLEMING VALUATION
AND RATE CONSULTANTS, LLC

A handwritten signature in black ink that reads "John J. Spanos".

JOHN J. SPANOS
President

JJS:mle
067384

Gannett Fleming Valuation and Rate Consultants, LLC

207 Senate Avenue • Camp Hill, PA 17011-2316

t: 717.763.7211 • f: 717.763.4590

www.gfvrc.com

Schedule MJL-D13

TABLE OF CONTENTS

Executive Summary	iii
PART I. INTRODUCTION	I-1
Scope	I-2
Plan of Report	I-2
Basis of the Study	I-3
Depreciation	I-3
Service Life and Net Salvage Estimates.....	I-4
PART II. ESTIMATION OF SURVIVOR CURVES	II-1
Survivor Curves.....	II-2
Iowa Type Curves.....	II-3
Retirement Rate Method of Analysis	II-9
Schedules of Annual Transactions in Plant Records	II-10
Schedule of Plant Exposed to Retirement	II-13
Original Life Table	II-15
Smoothing the Original Survivor Curve	II-17
PART III. SERVICE LIFE CONSIDERATIONS	III-1
Field Trips	III-2
Service Life Analysis	III-2
PART IV. NET SALVAGE CONSIDERATIONS	IV-1
Salvage Analysis	IV-2
Net Salvage Considerations	IV-2
PART V. CALCULATION OF ANNUAL AND ACCRUED DEPRECIATION	V-1
Group Depreciation Procedures	V-2
Single Unit of Property.....	V-2
Remaining Life Annual Accruals.....	V-3
Average Service Life Procedure	V-3
Calculation of Annual and Accrued Amortization	V-3
PART VI. RESULTS OF STUDY	VI-1
Qualification of Results.....	VI-2
Description of Detailed Tabulations.....	VI-2

TABLE OF CONTENTS, cont

Table 1. Summary of Estimated Survivor Curves, Net Salvage Percents,
Original Cost, Book Depreciation Reserve and Calculated Annual
Accrual Rates Related to Gas Plant as of December 31, 2019..... VI-4

PART VII. SERVICE LIFE STATISTICS..... VII-1

PART VIII. NET SALVAGE STATISTICS..... VIII-1

PART IX. DETAILED DEPRECIATION CALCULATIONS IX-1

AMEREN MISSOURI - GAS

DEPRECIATION STUDY

EXECUTIVE SUMMARY

Pursuant to Ameren Missouri - Gas' ("Ameren" or "Company") request, Gannett Fleming Valuation and Rate Consultants, LLC ("Gannett Fleming") conducted a depreciation study related to the gas plant as of December 31, 2019. The purpose of this study was to determine the annual depreciation accrual rates and amounts for book and ratemaking purposes.

The annual and accrued depreciation were calculated using the straight line method, the remaining life basis and the average service life procedure. The calculations were based on attained ages and estimated service life and net salvage characteristics for each depreciable group of gas property.

The most significant change since the previous depreciation study submitted in 2015 is related to generally longer service lives for several accounts which resulted in a decrease in depreciation expense. For Gas Plant, depreciation decreased \$1.69 million.

Several gas plant accounts experienced increases in estimated service lives. Two of the gas distribution plant accounts that experienced the largest decreases in depreciation expense were Accounts 376, Mains and 380, Services. The service life estimates for both accounts were lengthened from 50 to 58 years for Mains and 40 to 47 years for Services. Both of these increases reflect the emphasized replacement of older assets and continued investment in plastic.

Gannett Fleming recommends the calculated annual depreciation accrual rates set forth herein apply specifically to gas plant in service as of December 31, 2019 as

summarized by Table 1 of the study. Supporting analysis and calculations are provided within the study.

The study results set forth an annual depreciation expense of \$10.6 million when applied to depreciable plant balances as of December 31, 2019. The results are summarized at the functional level as follows:

SUMMARY OF ORIGINAL COST, ACCRUAL RATES AND AMOUNTS

FUNCTION	ORIGINAL COST AS OF DECEMBER 31, 2019	PROPOSED RATE	PROPOSED EXPENSE
Transmission Plant	\$ 6,619,442.37	1.40	\$ 92,556
Distribution Plant	484,313,147.75	1.88	9,091,235
General Plant	27,888,980.77	4.88	1,362,315
Amortization Accounting Adjustment	-	-	41,264
Total	<u>\$518,821,570.89</u>	2.04	<u>\$10,587,370</u>

PART I. INTRODUCTION

AMEREN MISSOURI - GAS DEPRECIATION STUDY

PART I. INTRODUCTION

SCOPE

This report sets forth the results of the depreciation study for Ameren Missouri - Gas (“Ameren”), as applied to gas plant in service as of December 31, 2019. The study results include annual depreciation rates and amounts for book and ratemaking purposes applicable to the original cost of gas plant as of December 31, 2019. The rates and amounts are based on the straight line method, average service life procedure using the remaining life technique. The report also describes the concepts, methods, and basic judgments which underlie recommended annual depreciation accrual rates related to gas plant in service as of December 31, 2019.

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 2019; 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 life and net salvage estimates used for other gas properties.

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 and net salvage studies. Part III, Service Life Considerations, presents the factors and judgment utilized in the average service life analysis. Part IV, Net Salvage Considerations, presents the 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, 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, and Part IX, Detailed Depreciation Calculations presents the detailed tabulations of annual depreciation.

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 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.

For most accounts, the depreciation accrual rates were calculated by the straight line method using the average service life procedure and the remaining life basis. For

certain General Plant accounts, the annual depreciation is based on amortization accounting. Both types of calculations were based on original cost, attained ages, and estimates of service lives and net salvage.

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. 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. An explanation of the calculation of annual and accrued amortization is presented beginning on page V-3 of the report.

Service Life and Net Salvage Estimates

The service life and net 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.

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

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

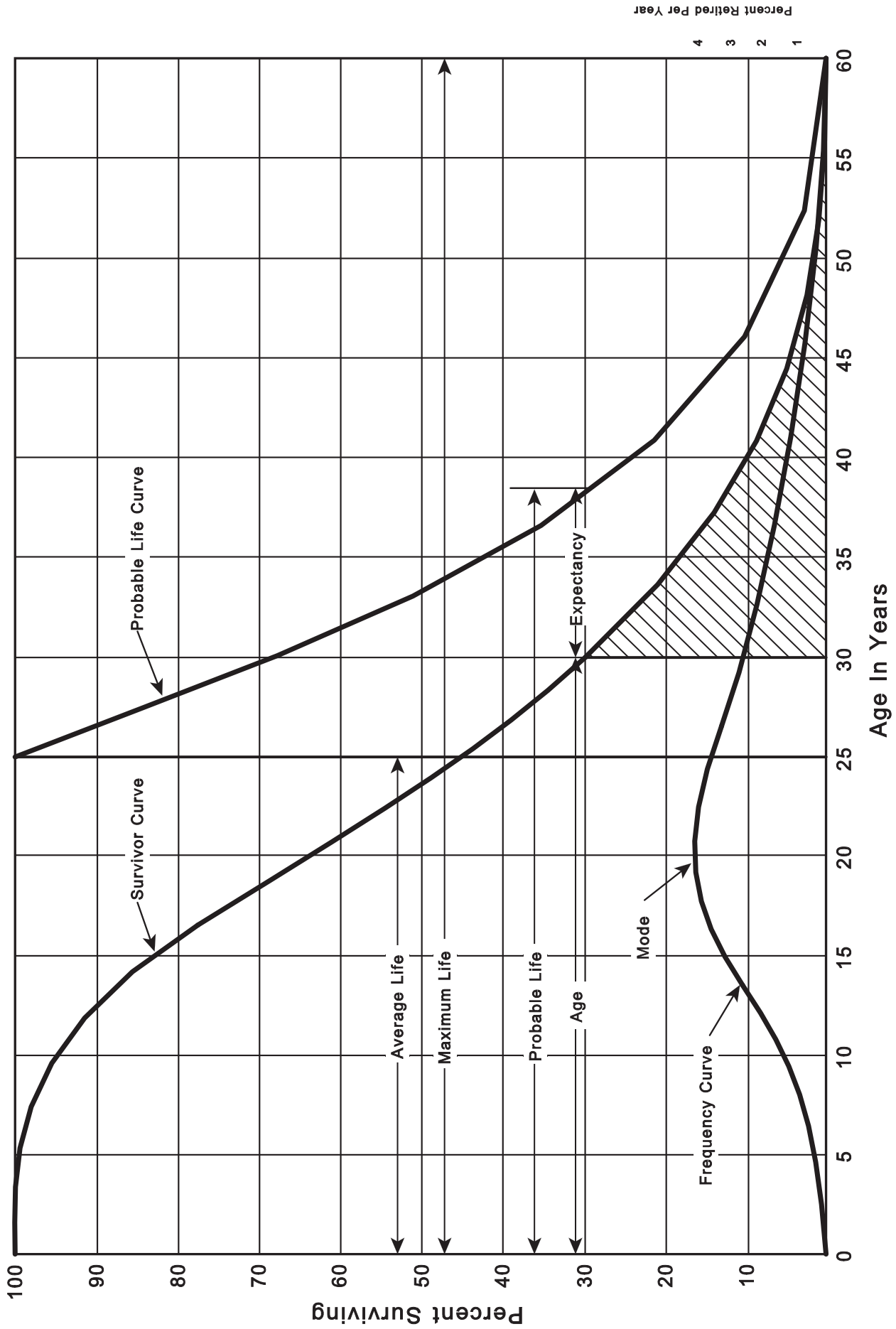


Figure 1. A Typical Survivor Curve and Derived Curves

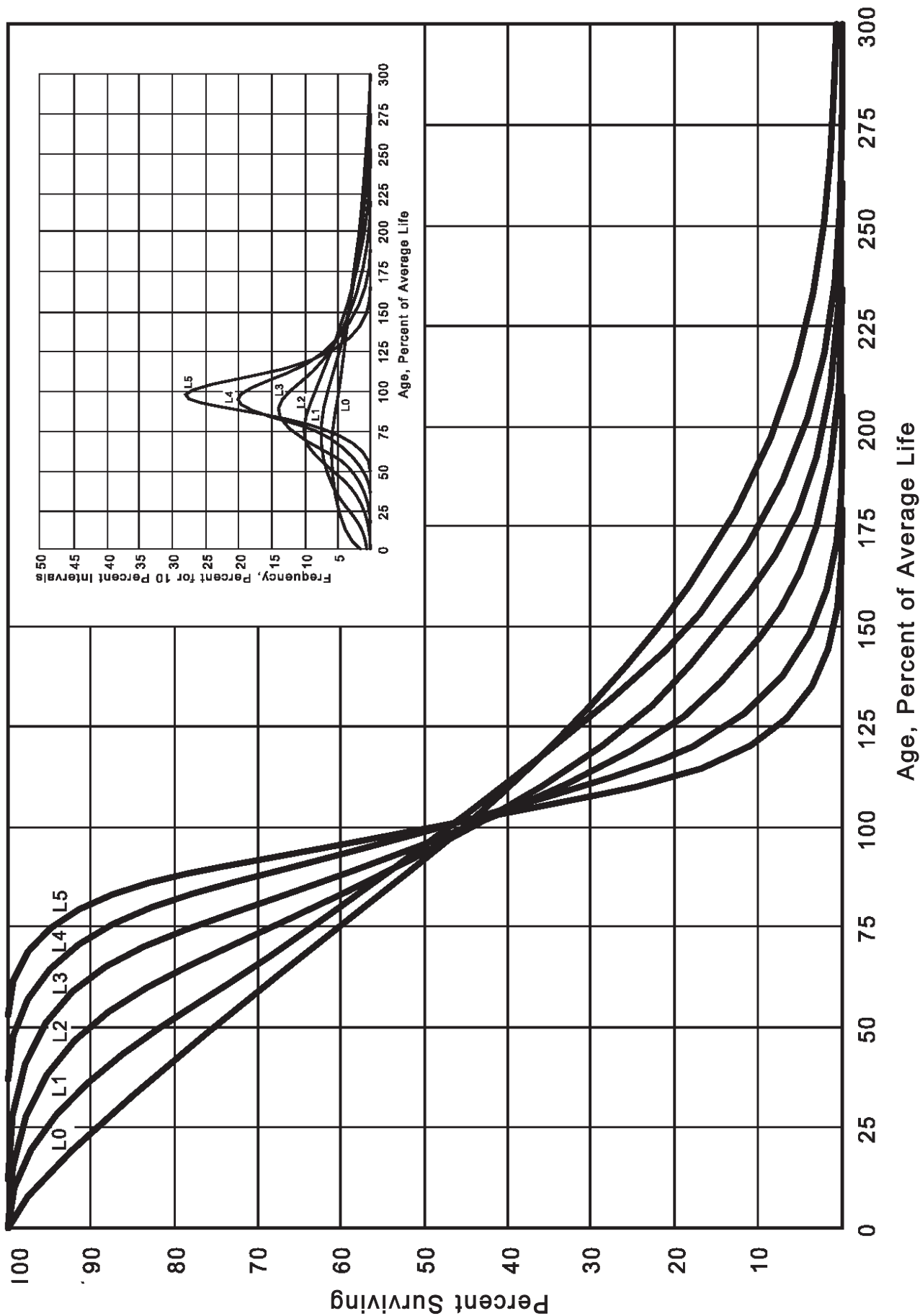


Figure 2. Left Modal or "L" Iowa Type Survivor Curves

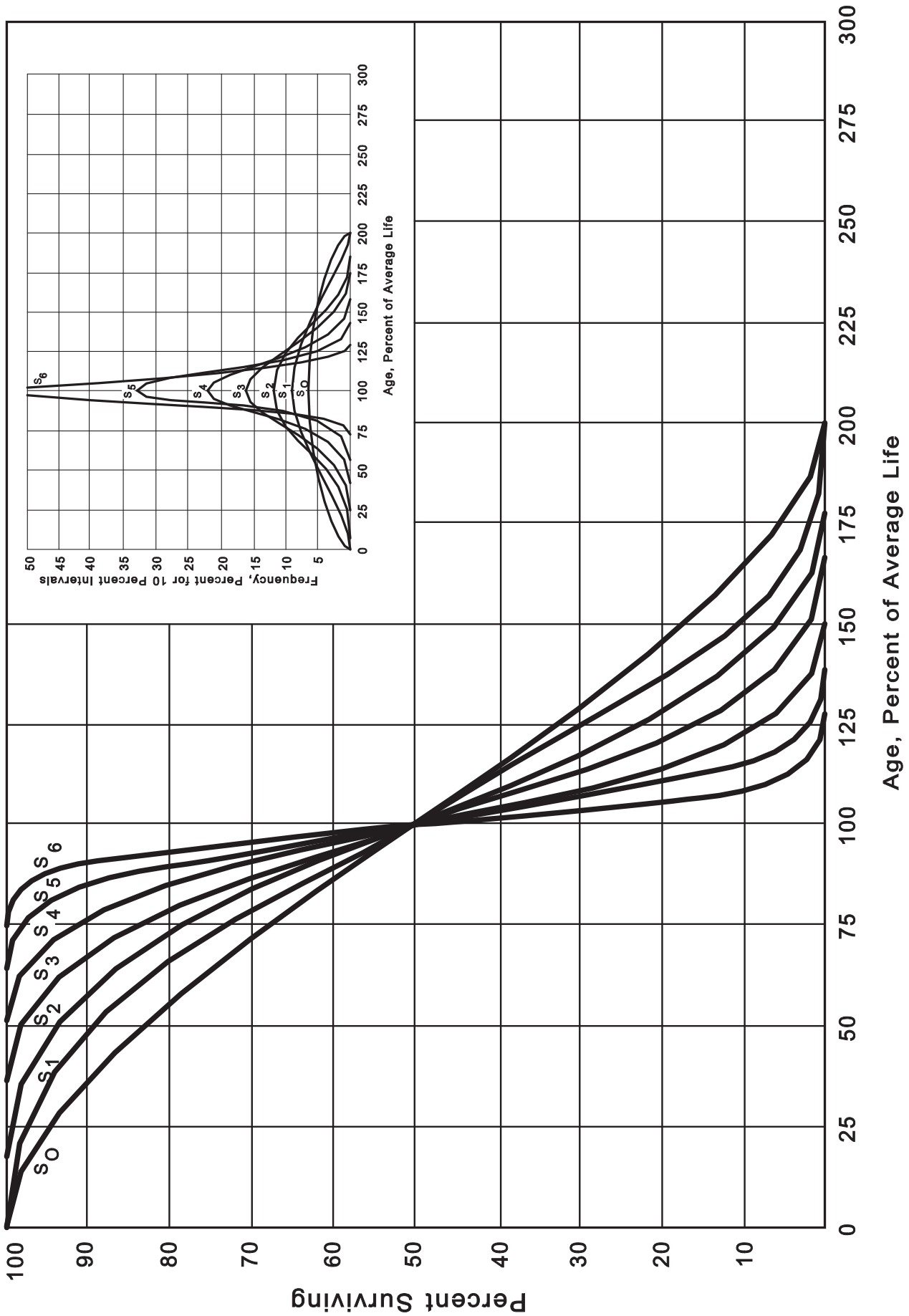


Figure 3. Symmetrical or "S" Iowa Type Survivor Curves

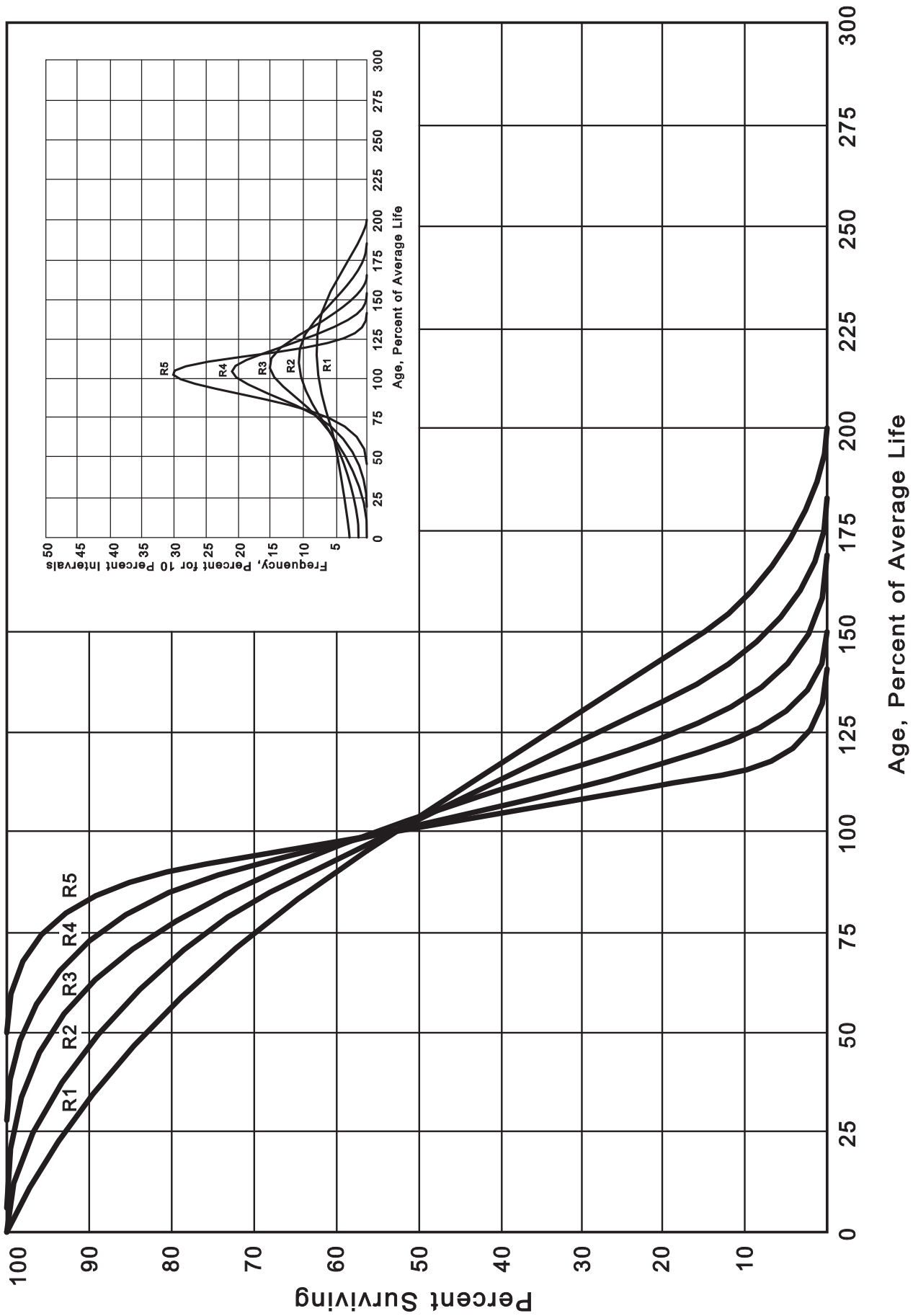


Figure 4. Right Modal or "R" Iowa Type Survivor Curves

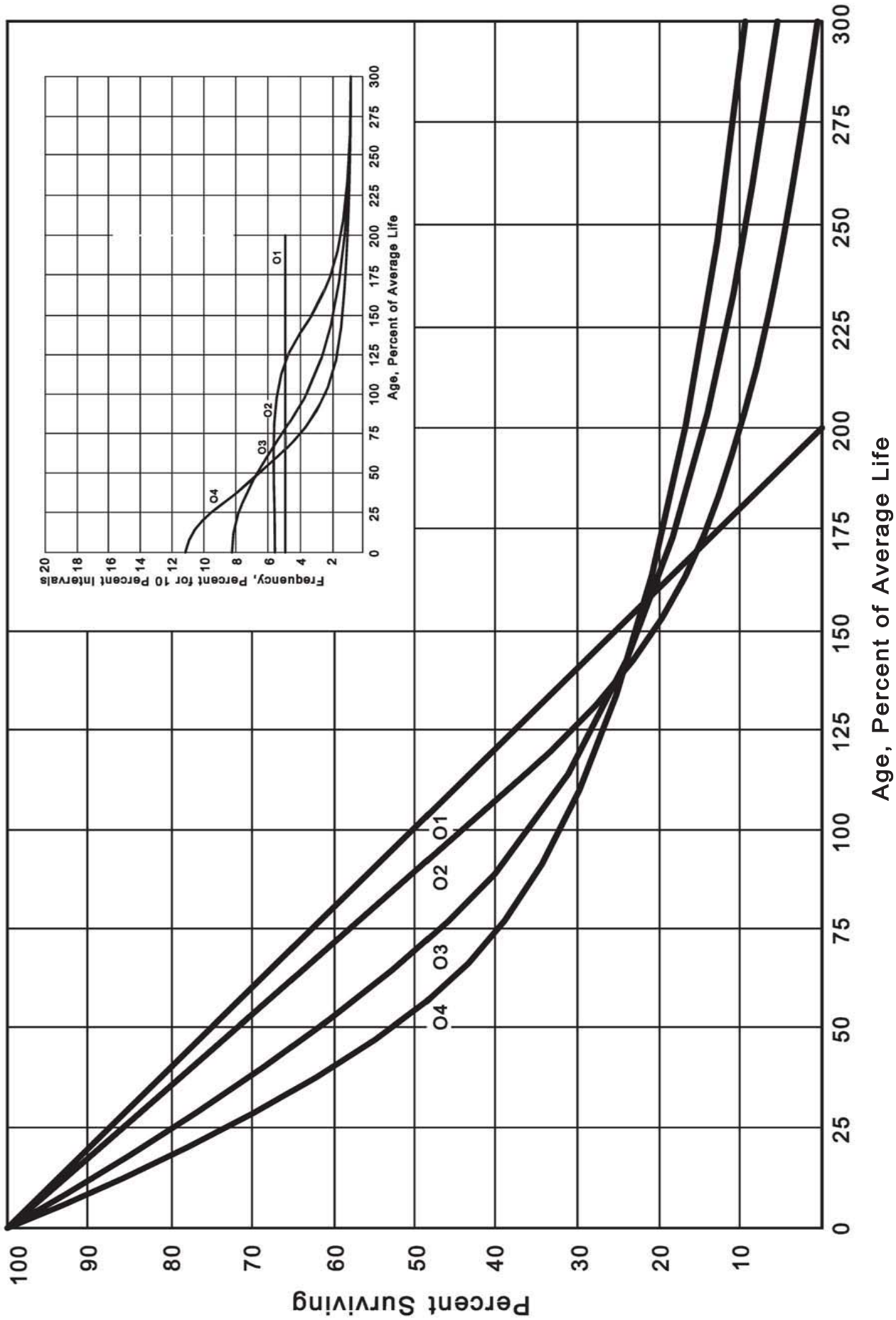


Figure 5. Origin Modal or "O" Iowa Type Survivor Curves

These curve types have also been presented in subsequent Experiment Station bulletins and in the text, "Engineering Valuation and Depreciation."¹ 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,"² "Engineering Valuation and Depreciation,"³ and "Depreciation Systems."⁴

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

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

²Winfrey, Robley, Supra Note 1.

³Marston, Anson, Robley Winfrey, and Jean C. Hempstead, Supra Note 2.

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

Schedules of Annual Transactions in Plant Records

The property group used to illustrate the retirement rate method is observed for the experience band 2010-2019 during which there were placements during the years 2005-2019. 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 2005 were retired in 2010. 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 2010 retirements of 2005 installations and ending with the 2019 retirements of the 2014 installations. Thus, the total amount of 143 for age interval 4½-5½ equals the sum of:

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

SCHEDULE 1. RETIREMENTS FOR EACH YEAR 2010-2019
SUMMARIZED BY AGE INTERVAL

Year Placed (1)	Retirements, Thousands of Dollars										Total During		Age Interval (13)
	2010 (2)	2011 (3)	2012 (4)	2013 (5)	2014 (6)	2015 (7)	2016 (8)	2017 (9)	2018 (10)	2019 (11)	Age Interval (12)	Age Interval (13)	
2005	10	11	12	13	14	16	23	24	25	26	26	13½-14½	
2006	11	12	13	15	16	18	20	21	22	19	44	12½-13½	
2007	11	12	13	14	16	17	19	21	22	18	64	11½-12½	
2008	8	9	10	11	11	13	14	15	16	17	83	10½-11½	
2009	9	10	11	12	13	14	16	17	19	20	93	9½-10½	
2010	4	9	10	11	12	13	14	15	16	20	105	8½-9½	
2011		5	11	12	13	14	15	16	18	20	113	7½-8½	
2012			6	12	13	15	16	17	19	19	124	6½-7½	
2013				6	13	15	16	17	19	19	131	5½-6½	
2014					13	14	16	17	19	20	143	4½-5½	
2015					7	8	18	20	22	23	146	3½-4½	
2016						9	9	20	22	25	150	2½-3½	
2017								11	23	25	151	1½-2½	
2018									11	24	153	½-1½	
2019										13	80	0-½	
Total	53	68	86	106	128	157	196	231	273	308	1,606		

Experience Band 2010-2019

Placement Band 2005-2019

SCHEDULE 2. OTHER TRANSACTIONS FOR EACH YEAR 2010-2019
 SUMMARIZED BY AGE INTERVAL

Year Placed	Acquisitions, Transfers and Sales, Thousands of Dollars										Total During Age Interval (12)	Age Interval (13)	
	During Year												
	2010 (2)	2011 (3)	2012 (4)	2013 (5)	2014 (6)	2015 (7)	2016 (8)	2017 (9)	2018 (10)	2019 (11)			
2005	-	-	-	-	-	-	60 ^a	-	-	-	-	-	13½-14½
2006	-	-	-	-	-	-	-	-	-	-	-	-	12½-13½
2007	-	-	-	-	-	-	-	-	-	-	-	-	11½-12½
2008	-	-	-	-	-	-	-	(5) ^b	-	-	60	-	10½-11½
2009	-	-	-	-	-	-	-	6 ^a	-	-	-	-	9½-10½
2010	-	-	-	-	-	-	-	-	-	-	(5)	-	8½-9½
2011	-	-	-	-	-	-	-	-	-	-	6	-	7½-8½
2012	-	-	-	-	-	-	-	-	-	-	-	-	6½-7½
2013	-	-	-	-	-	-	-	(12) ^b	-	-	-	-	5½-6½
2014	-	-	-	-	-	-	-	-	22 ^a	-	-	-	4½-5½
2015	-	-	-	-	-	-	-	(19) ^b	-	-	10	-	3½-4½
2016	-	-	-	-	-	-	-	-	-	-	-	-	2½-3½
2017	-	-	-	-	-	-	-	-	-	(102) ^c	(121)	-	1½-2½
2018	-	-	-	-	-	-	-	-	-	-	-	-	½-1½
2019	-	-	-	-	-	-	-	-	-	-	-	-	0-½
Total	-	-	-	-	-	-	60	(30)	22	(102)	(50)	-	

^a Transfer Affecting Exposures at Beginning of Year

^b Transfer Affecting Exposures at End of Year

^c Sale with Continued Use

Parentheses Denote Credit Amount.

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 2010 through 2019 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 2015 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 2010-2019
 SUMMARIZED BY AGE INTERVAL

Year Placed	Exposures, Thousands of Dollars										Total at Beginning of Age Interval	Age Interval	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)			(11)
2005	255	279	245	234	222	209	195	239	216	192	167	167	13½-14½
2006	307	338	268	256	243	228	212	194	174	153	131	323	12½-13½
2007	376	420 ^a	296	284	271	257	241	224	205	184	162	531	11½-12½
2008	376	420 ^a	330	321	311	300	289	276	262	242	226	823	10½-11½
2009	376	420 ^a	367	357	346	334	321	307	297	280	261	1,097	9½-10½
2010	420 ^a	460 ^a	416	407	397	386	374	361	347	332	316	1,503	8½-9½
2011	420 ^a	460 ^a	460 ^a	455	444	432	419	405	390	374	356	1,952	7½-8½
2012	420 ^a	460 ^a	460 ^a	510 ^a	504	492	479	464	448	431	412	2,463	6½-7½
2013	420 ^a	460 ^a	460 ^a	510 ^a	580 ^a	574	561	546	530	501	482	3,057	5½-6½
2014	420 ^a	460 ^a	460 ^a	510 ^a	580 ^a	660 ^a	653	639	623	628	609	3,789	4½-5½
2015	420 ^a	460 ^a	460 ^a	510 ^a	580 ^a	660 ^a	750 ^a	742	724	685	663	4,332	3½-4½
2016	420 ^a	460 ^a	460 ^a	510 ^a	580 ^a	660 ^a	750 ^a	850 ^a	841	821	799	4,955	2½-3½
2017	420 ^a	460 ^a	460 ^a	510 ^a	580 ^a	660 ^a	750 ^a	850 ^a	960 ^a	949	926	5,719	1½-2½
2018	420 ^a	460 ^a	460 ^a	510 ^a	580 ^a	660 ^a	750 ^a	850 ^a	960 ^a	1,080 ^a	1,069	6,579	½-1½
2019	420 ^a	460 ^a	460 ^a	510 ^a	580 ^a	660 ^a	750 ^a	850 ^a	960 ^a	1,080 ^a	1,220 ^a	7,490	0-½
Total	1,975	2,382	2,382	2,824	3,318	3,872	4,494	5,247	6,017	6,852	7,799	44,780	

^aAdditions during the year

For the entire experience band 2010-2019, 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:

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

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	=	3,789,000	
Retirements from age 4½ to 5½	=	143,000	
Retirement Ratio	=	143,000 ÷ 3,789,000	= 0.0377
Survivor Ratio	=	1.000 - 0.0377	= 0.9623
Percent surviving at age 5½	=	(88.15) x (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 2010-2019

Placement Band 2005-2019

(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
Total	<u>44,780</u>	<u>1,606</u>			35.66

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

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

Column 4 = Column 3 Divided by Column 2.

Column 5 = 1.0000 Minus Column 4.

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

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

Smoothing the Original Survivor Curve

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

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

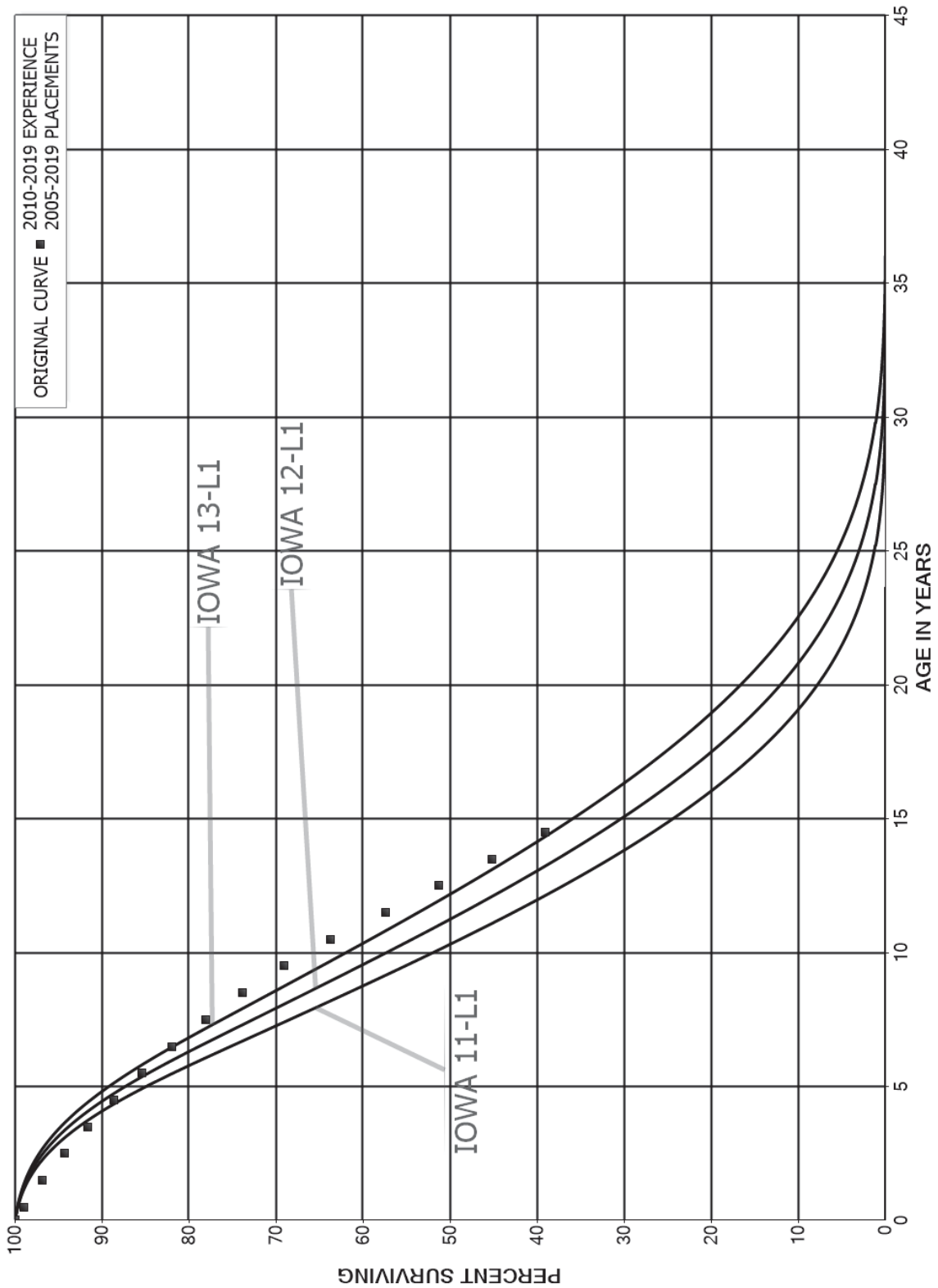


FIGURE 7. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN S0 IOWA TYPE CURVE ORIGINAL AND SMOOTH SURVIVOR CURVES

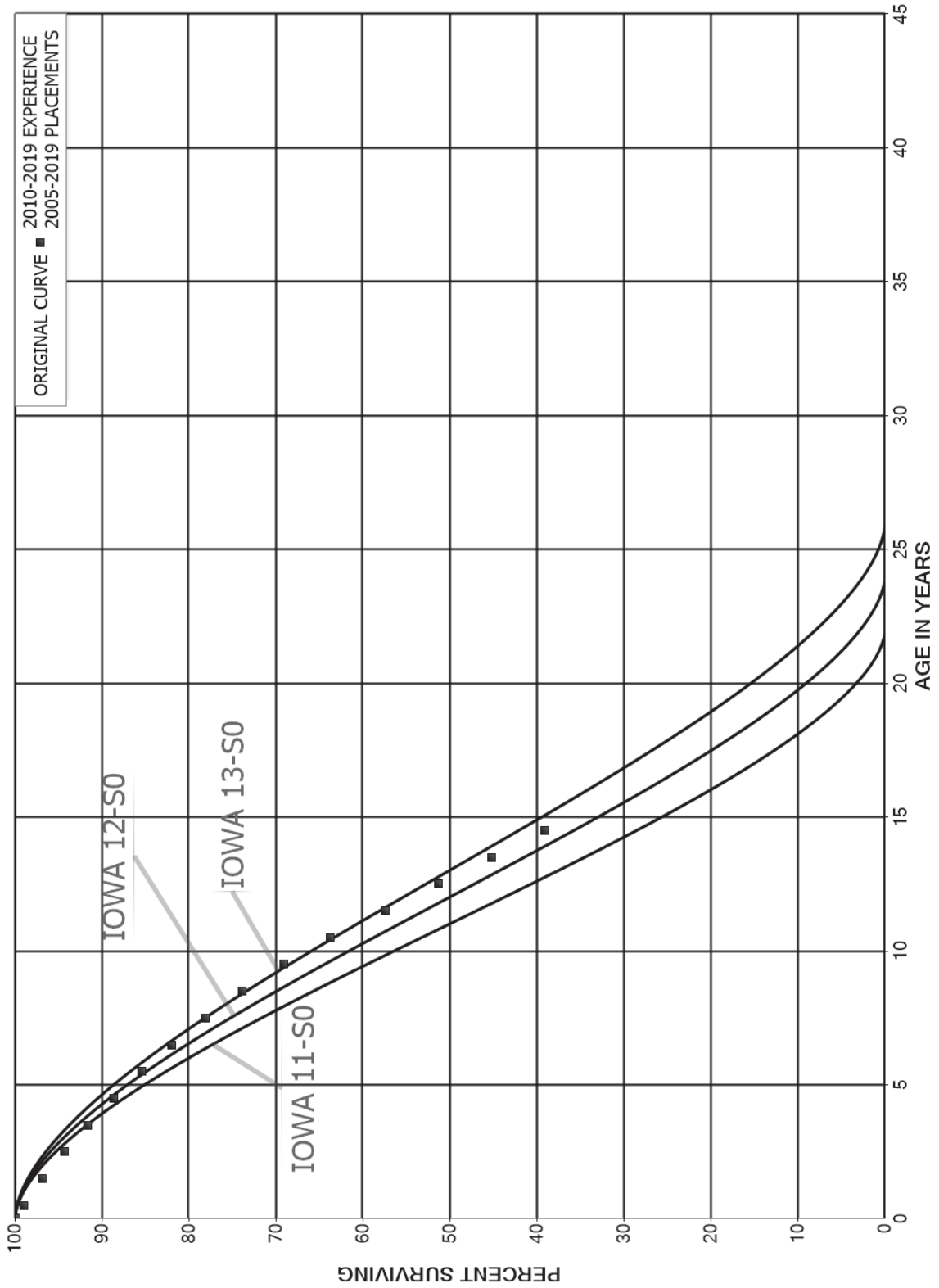


FIGURE 8. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN R1 IOWA TYPE CURVE ORIGINAL AND SMOOTH SURVIVOR CURVES

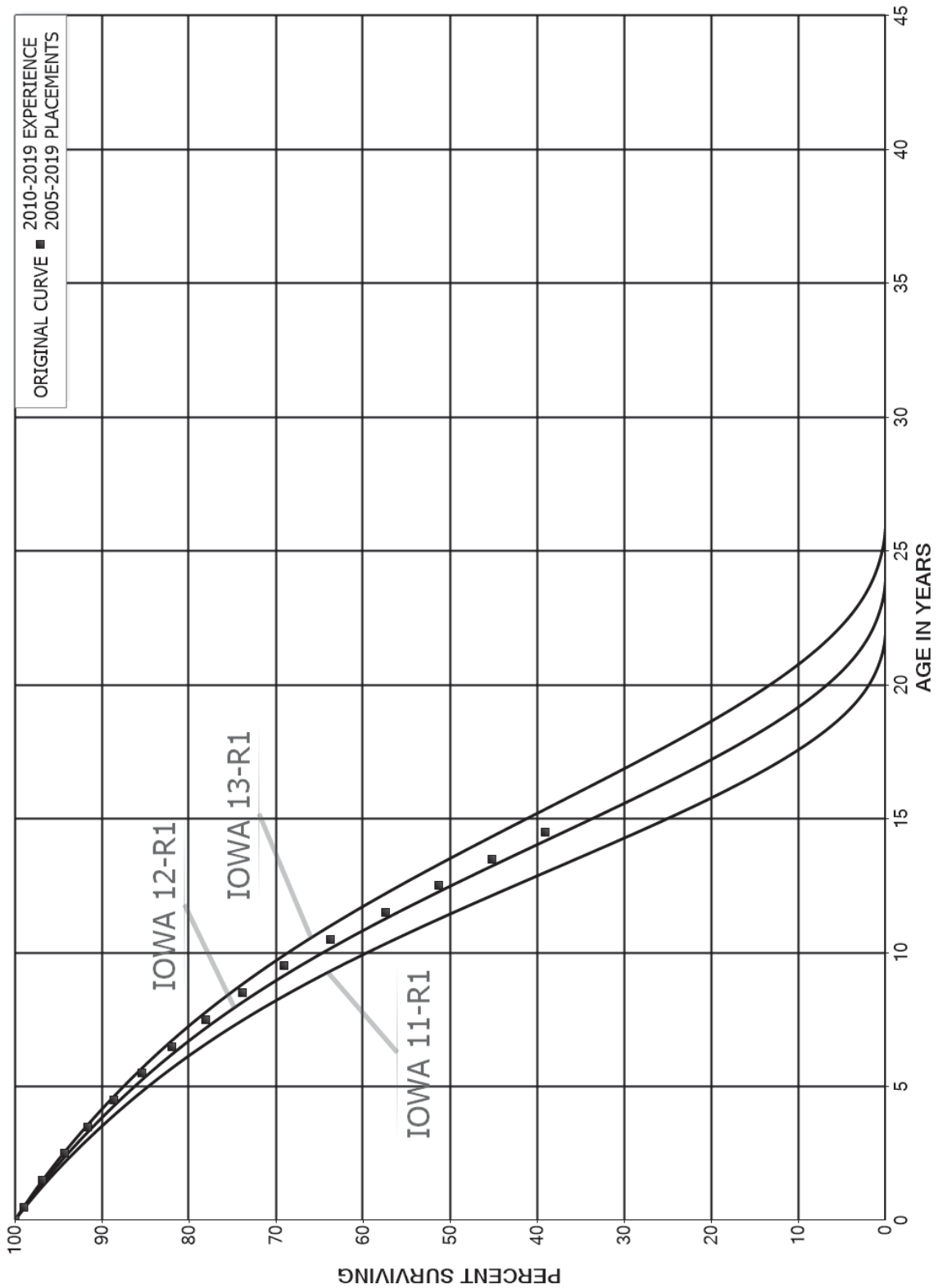
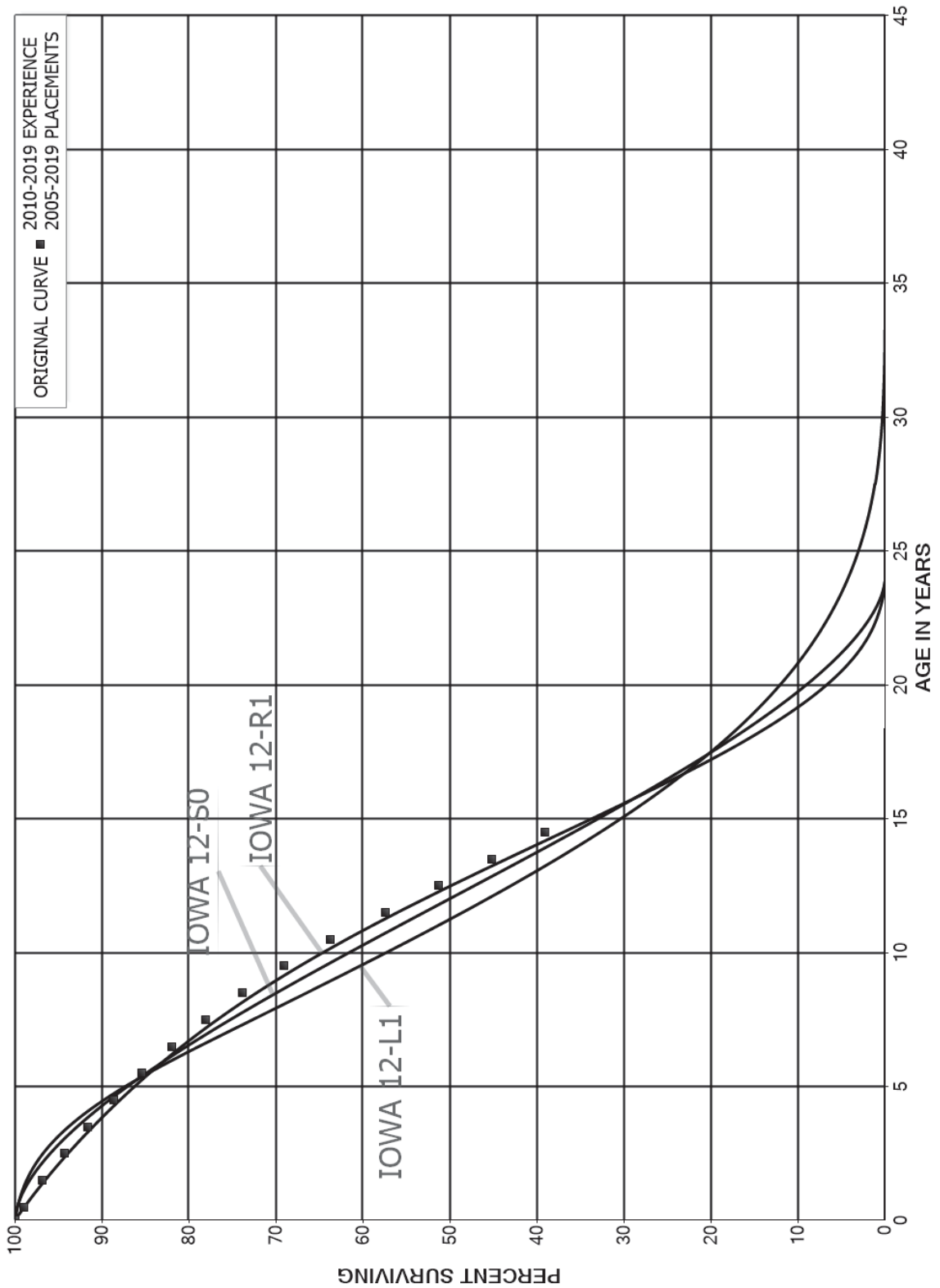


FIGURE 9. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN L1, S0 AND R1 IOWA TYPE CURVE ORIGINAL AND SMOOTH SURVIVOR CURVES



PART III. SERVICE LIFE CONSIDERATIONS

PART III. SERVICE LIFE CONSIDERATIONS

FIELD TRIPS

In order to be familiar with the operation of the Company and observe representative portions of the plant, a field trip is typically conducted during the study, however, conditions prevented this task to be completed. 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 or in this study, during discussions with the Company. 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 past field trips.

March 10-13, 2014

Troy Operations Center
Master Regulator Station at Geeding
Main Replacement Project at Hawk Point
Bellflower PVC Main Replacement Project
Columbia Works Headquarters – New Building – Built in 2013.
Loy Martin Measuring and Regulating Station – Serves Ashland, MO
Columbia Measuring Station
Oakland Gravel Road Regulating Station

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.

For the majority of the accounts and subaccounts, the statistical analysis resulted in good to excellent indications of complete survivor patterns. These accounts represent 96% of the depreciable plant. Generally, the information external to the statistics led to

minimal or no significant departure from the indicated survivor curves for the accounts listed below:

<u>Account No.</u>	<u>Account Description</u>
375	Structures and Improvements
376	Mains
380	Services
381	Meters
383	House Regulators
390	Structures and Improvements
392	Transportation Equipment
396	Power Operated Equipment

The two largest accounts, 376, Mains, and 380, Services, are used to illustrate the manner in which the study was conducted for the accounts in the preceding list. Aged plant accounting data have been compiled for the years through 2019. These data have been coded according to account or property group, type of transaction, year in which the transaction took place and year in which the utility plant was placed in service. The retirements, other plant transactions and plant additions were analyzed by the retirement rate method.

The survivor curve estimate for 376, Mains, is the 58-S1.5 and is based on the statistical indication for the period 1931 through 2019. The existing estimate is the 50-R3. A 58-S1.5 survivor curve is a reasonably good fit for the significant portion of original survivor curve as set forth on page VII-15. The company has used throughout its history a variety of pipe material for gas distribution mains such as cast iron, bare steel, coated steel and plastic. Additionally, all steel mains added after 1970 were cathodically protected. Cast iron and bare steel mains were used predominantly prior to 1960. Coated steel mains were installed primarily in the 1960's along with the introduction of

plastic mains. The mains installed since 1970 are primarily plastic or coated and wrapped, cathodically protected steel with most mains being plastic. The majority of mains in service today are either plastic or cathodically protected, coated and wrapped steel. In the past, the Company had a higher percentage of bare steel and cast iron mains, which have shorter life expectations than plastic and cathodically protected coated and wrapped steel mains. The 58-S1.5 is an excellent fit through age 80. Increasing the average service life from 50 to 58 years life is consistent with management's outlook that plastic and cathodically projected, coated and wrapped steel mains will have a longer life cycle than the cast iron and bare steel mains that had been in service in the past. The average service life estimate of 58 years is within the typical service life range of 55 to 70 years for mains used by other gas companies.

The survivor curve estimate for 380, Services, is the 47-S0.5 and is based on the statistical indication for the period 1931 through 2019. The existing estimate is the 40-R2. The 47-S0.5 is an excellent fit of the significant portion of the original survivor curve as set forth on page VII-35. The 47 year life is consistent with management outlook and is within the typical service life range of 35-50 years for services.

Similar studies were performed for the remaining plant accounts which comprise less than 5 percent of the total depreciable plant balance. The survivor curve estimates for the remaining accounts were based on judgment incorporating the statistical analyses and previous studies for this and other gas utilities. Each of the judgments represented a consideration of statistical analyses of aged plant activity, management's outlook for the future, and the typical range of lives used by other gas companies.

The selected amortization periods used for certain general plant accounts are described in the section "Calculated Annual and Accrued Amortization." These certain

general plant accounts comprised slightly more than one percent of the depreciable plant balance.

PART IV. NET SALVAGE CONSIDERATIONS

PART IV. NET SALVAGE CONSIDERATIONS

SALVAGE ANALYSIS

The estimates of net salvage were based in part on historical data compiled for the years 1984 through 2019. 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 are expressed as a percent of the original cost of plant retired.

Net Salvage Considerations

The estimates of salvage were based primarily on judgment which considered a number of factors. The primary factors were the analyses of historical data, a knowledge of management's plans and operating policies, and net salvage estimates from previous studies of this company and other gas companies.

Account 380, Services, is used to illustrate the manner in which the study was conducted for the accounts in the preceding list. Depreciation reserve accounting data were compiled for the years 1984 through 2019. These data include the retirements, cost of removal and gross salvage.

The net salvage estimate for this account is negative 10 percent and is based on the trends in cost of removal and salvage percents as shown in the tabulation on pages VIII-14 and VIII-15. Historically the Company has experienced significant cost of removal for retirements of services, although the level of removal cost has been lower in recent years. There has been limited gross salvage, and in most years the gross salvage as a percentage of original cost has been zero. Zero percent for gross salvage is expected and consistent with management's outlook as most service lines are retired in place and most services retired in the future will be made of plastic which has little to no salvage value as scrap material. The overall average net salvage for this account is negative 13 percent. The most recent five year average is negative 8 percent. Typical net salvage

estimates for services range from negative 10 percent to as high as negative 200 percent. The negative 10 percent estimate for this account is below the low end of this range, but reflects the overall historical average and more recent net salvage history.

There are costs associated with retiring mains and service lines even though most are retired in place. Some of the costs are common to the installation of a new main or service, as well as the retirement of the existing asset. These costs include travel time to the job site, costs associated with digging a trench or cutting open a street or sidewalk, repaving the street and repairing the sidewalk. Some of the retirement work tasks include cutting the existing line, purging the gas and capping the line. It is expected that these costs will continue into the future. Therefore, it is reasonable to expect that removal costs will exceed the salvage value of mains and services in the future.

**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:

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

The accrued depreciation is:

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

Remaining Life Annual Accruals

For the purpose of calculating remaining life accruals as of December 31, 2019, the depreciation reserve for each plant account is allocated among vintages in proportion to the calculated accrued depreciation for the account. Explanations of remaining life accruals and calculated accrued depreciation follow. The detailed calculations as of December 31, 2019, are set forth in the Results of Study section of the report.

Average Service Life Procedure

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

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

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

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 electric plant in service. The accounts and their amortization periods are as follows:

<u>ACCT</u>	<u>TITLE</u>	<u>AMORTIZATION PERIOD, YEARS</u>
391,	Office Furniture and Equipment	
	Furniture and Equipment	15
	Computers	5
394,	Tools, Shop and Garage Equipment	20
395,	Laboratory Equipment	20
397,	Communication Equipment	15
398,	Miscellaneous Equipment	15

For the purpose of calculating annual amortization amounts as of December 31, 2019, 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 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 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, 2019. For most plant accounts, the application of such rates to future balances that reflect additions subsequent to December 31, 2019, is reasonable for a period of three to five years.

DESCRIPTION OF DETAILED TABULATIONS

Table 1 is a summary of the results of the study as applied to the original cost of gas plant at December 31, 2019 presented on pages VI-4 and VI-5 of this report. Table 1 presents the remaining life accrual rates and amounts for each plant account.

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 the section beginning on page VII-2, within the supporting documents of this report.

For each depreciable group analyzed by the retirement rate method, a chart depicting the original and estimated survivor curves followed by a tabular presentation of the original life table(s) plotted on the chart. 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 were 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 salvage data are presented in the section titled, "Net Salvage Statistics". 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.

The tables of the calculated annual depreciation applicable to depreciable assets as of December 31, 2019 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 calculated accrued depreciation, the allocated book reserve, future accruals, the remaining life, and the calculated annual accrual amount.

AMEREN MISSOURI
GAS DIVISION

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

	(1) DEPRECIABLE GROUP	(2) SURVIVOR CURVE	(3) NET SALVAGE PERCENT	(4) ORIGINAL COST AS OF DECEMBER 31, 2019	(5) BOOK DEPRECIATION RESERVE	(6) FUTURE ACCRUALS	(7) CALCULATED ANNUAL ACCRUAL AMOUNT	(8)=(7)/(4) RATE	(9)=(6)/(7) COMPOSITE REMAINING LIFE
DEPRECIABLE PLANT									
367	TRANSMISSION PLANT								
	MAINS	60 - R3	(10)	6,576,542.29	2,883,399	4,352,997	92,439	1.41	47.1
369	MEASURING AND REGULATING STATION EQUIPMENT	45 - R2.5	(5)	40,900.08	39,304	3,641	117	0.29	31.1
	TOTAL TRANSMISSION PLANT			6,619,442.37	2,922,704	4,356,638	92,556	1.40	47.1
DISTRIBUTION PLANT									
375	STRUCTURES AND IMPROVEMENTS	45 - R2	(5)	184,148.49	12,210	181,146	6,152	3.34	29.4
376	MAINS	58 - S1.5	(10)	292,440,847.10	98,237,417	223,447,515	5,037,842	1.72	44.4
378	MEASURING AND REGULATING STATION EQUIPMENT - GENERAL	45 - R2	(5)	6,241,417.19	2,250,188	4,303,300	138,019	2.21	31.2
379	MEASURING AND REGULATING STATION EQUIPMENT - CITY GATE	45 - R2	(5)	694,104.77	217,187	511,623	15,926	2.29	32.1
380	SERVICES	47 - S0.5	(10)	141,911,454.62	74,586,265	81,536,335	2,222,660	1.57	36.7
381	METERS	30 - S0	2	22,619,219.53	3,102,727	19,064,108	1,033,116	4.57	18.5
383	HOUSE REGULATORS	45 - R3	(25)	18,868,402.61	5,293,526	18,291,978	610,929	3.24	29.9
385	INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT	40 - R1	0	1,353,553.44	605,655	747,898	26,591	1.96	28.1
	TOTAL DISTRIBUTION PLANT			484,313,147.75	184,285,175	348,083,903	9,091,235	1.88	38.3
GENERAL PLANT									
390	STRUCTURES AND IMPROVEMENTS	38 - R2	(5)	9,900,479.49	1,142,554	9,252,950	295,916	2.99	31.3
391	OFFICE FURNITURE AND EQUIPMENT	FULLY ACCRUED	0	21,614.88	21,615	-	-	-	-
	AMORTIZED	15 - SQ	0	459,789.55	171,800	287,990	30,657	6.67	9.4
	TOTAL OFFICE FURNITURE AND EQUIPMENT			481,404.43	193,415	287,990	30,657	6.37	9.4
391.2	OFFICE FURNITURE AND EQUIPMENT - COMPUTERS	5 - SQ	0	1,231,107.56	357,000	874,108	246,272	20.00	3.5
392	TRANSPORTATION EQUIPMENT	13 - S1.5	15	8,802,180.93	3,937,027	3,544,827	403,808	4.59	8.8
394	TOOLS, SHOP, AND GARAGE EQUIPMENT	FULLY ACCRUED	0	459,479.77	459,480	-	-	-	-
	AMORTIZED	20 - SQ	0	2,584,468.63	1,066,000	1,518,469	129,109	5.00	11.8
	TOTAL TOOLS, SHOP, AND GARAGE EQUIPMENT			3,043,948.40	1,525,480	1,518,469	129,109	4.24	11.8
395	LABORATORY EQUIPMENT	FULLY ACCRUED	0	8,605.24	8,605	-	-	-	-
	AMORTIZED	20 - SQ	0	90,129.67	43,900	46,230	4,508	5.00	10.3
	TOTAL LABORATORY EQUIPMENT			98,734.91	52,505	46,230	4,508	4.57	10.3
396	POWER OPERATED EQUIPMENT	15 - S2.5	20	3,515,092.09	1,040,987	1,771,086	203,677	5.79	8.7
397	COMMUNICATION EQUIPMENT	FULLY ACCRUED	0	91,204.60	91,205	-	-	-	-
	AMORTIZED	15 - SQ	0	721,482.48	408,100	313,382	48,145	6.67	6.5
	TOTAL COMMUNICATIONS EQUIPMENT			812,687.08	499,305	313,382	48,145	5.92	6.5
398	MISCELLANEOUS EQUIPMENT	15 - SQ	0	3,335.88	2,557	779	223	6.68	3.5
	TOTAL GENERAL PLANT			27,888,980.77	8,750,830	17,609,831	1,362,315	4.88	12.9

AMEREN MISSOURI
GAS DIVISION

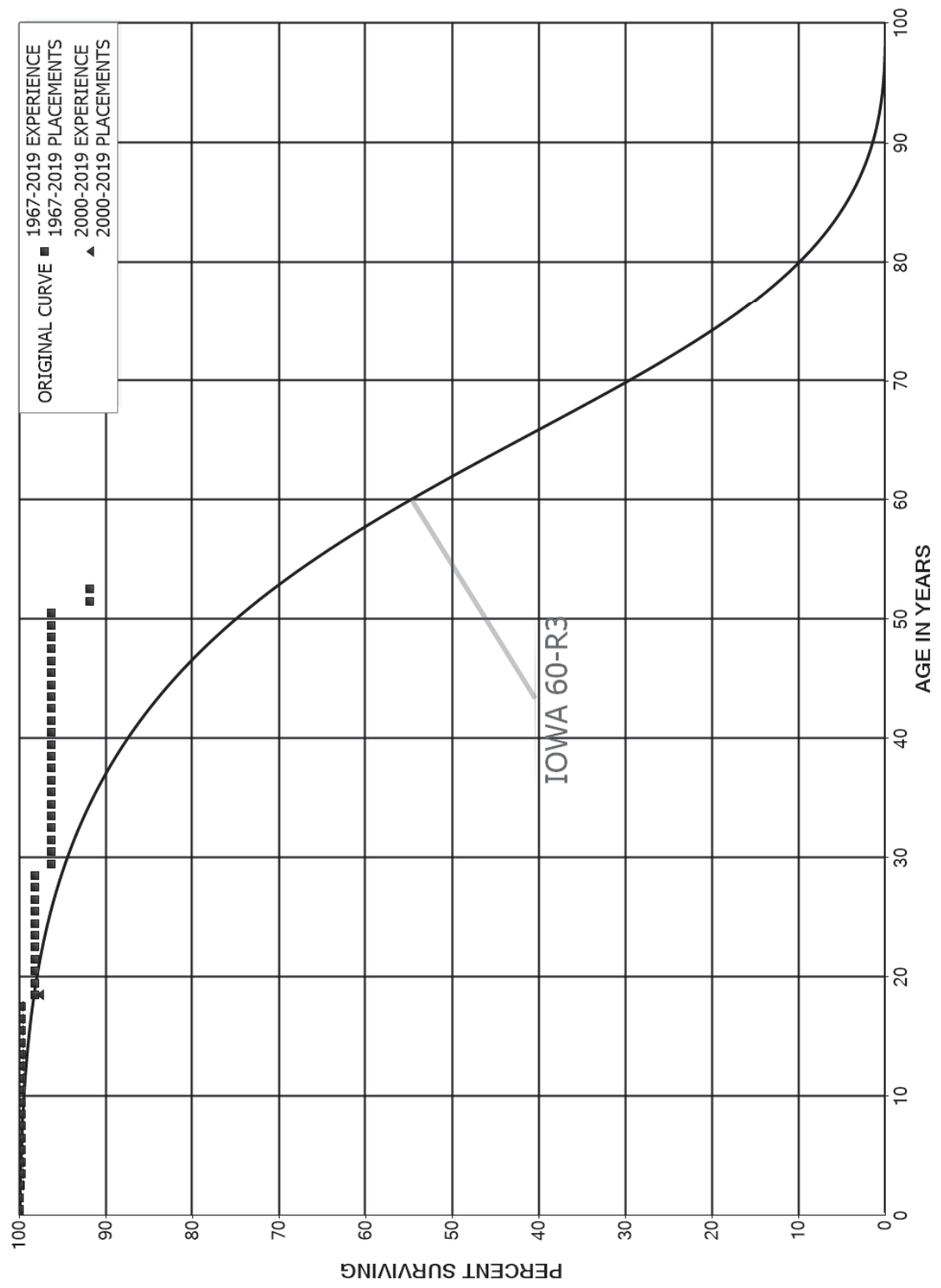
TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVES, NET SALVAGE PERCENTS, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL ACCRUAL RATES RELATED TO GAS PLANT AS OF DECEMBER 31, 2019

DEPRECIABLE GROUP (1)	SURVIVOR CURVE (2)	NET SALVAGE PERCENT (3)	ORIGINAL COST AS OF DECEMBER 31, 2019 (4)	BOOK DEPRECIATION RESERVE (5)	FUTURE ACCRUALS (6)	ANNUAL ACCRUAL AMOUNT (7)	CALCULATED RATE (8)=(7)/(4)	COMPOSITE REMAINING LIFE (9)=(6)/(7)
RESERVE ADJUSTMENT FOR AMORTIZATION								
391	OFFICE FURNITURE AND EQUIPMENT			(93,611)		18,722 *		
391.2	OFFICE FURNITURE AND EQUIPMENT - COMPUTERS			164,555		(32,911) *		
394	TOOLS, SHOP, AND GARAGE EQUIPMENT			(203,062)		40,612 *		
395	LABORATORY EQUIPMENT			(12,268)		2,454 *		
397	COMMUNICATIONS EQUIPMENT			(60,270)		12,054 *		
398	MISCELLANEOUS EQUIPMENT			(1,666)		333 *		
	TOTAL RESERVE ADJUSTMENT FOR AMORTIZATION			(206,322)		41,264		
	TOTAL DEPRECIABLE PLANT		518,821,570.89	195,752,387	370,050,372	10,587,370	2.04	35.0
ACCOUNTS NOT STUDIED								
303	MISCELLANEOUS INTANGIBLE PLANT - SOFTWARE 5 YEAR		4,496,568.05	913,454				
365.1	LAND AND LAND RIGHTS		1,281.92					
365.2	RIGHTS-OF-WAY		118,249.78					
374	LAND AND LAND RIGHTS		2,515,245.93	2,143				
389	LAND AND LAND RIGHTS		2,307,982.13					
	TOTAL ACCOUNTS NOT STUDIED		9,439,317.81	915,597				
	TOTAL GAS PLANT		528,260,888.70	196,667,984		10,587,370		

* 5 year Amortization of Adjusted Reserve related to implementation of Amortization Accounting.

PART VII. SERVICE LIFE STATISTICS

AMEREN MISSOURI
 GAS DIVISION
 ACCOUNT 367 MAINS
 ORIGINAL AND SMOOTH SURVIVOR CURVES



AMEREN MISSOURI
GAS DIVISION

ACCOUNT 367 MAINS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1967-2019

EXPERIENCE BAND 1967-2019

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	4,916,995	25	0.0000	1.0000	100.00
0.5	3,721,888	698	0.0002	0.9998	100.00
1.5	5,742,618	10,144	0.0018	0.9982	99.98
2.5	5,547,305	1,675	0.0003	0.9997	99.80
3.5	5,545,630		0.0000	1.0000	99.77
4.5	5,545,630	62	0.0000	1.0000	99.77
5.5	5,550,231		0.0000	1.0000	99.77
6.5	5,551,768		0.0000	1.0000	99.77
7.5	5,551,768	0	0.0000	1.0000	99.77
8.5	5,551,768		0.0000	1.0000	99.77
9.5	5,259,178		0.0000	1.0000	99.77
10.5	5,259,178		0.0000	1.0000	99.77
11.5	5,153,147		0.0000	1.0000	99.77
12.5	5,153,147		0.0000	1.0000	99.77
13.5	5,151,339		0.0000	1.0000	99.77
14.5	5,106,425		0.0000	1.0000	99.77
15.5	5,106,425		0.0000	1.0000	99.77
16.5	5,106,425		0.0000	1.0000	99.77
17.5	5,106,425	81,504	0.0160	0.9840	99.77
18.5	1,505,316		0.0000	1.0000	98.18
19.5	1,505,316		0.0000	1.0000	98.18
20.5	1,182,868		0.0000	1.0000	98.18
21.5	1,177,138		0.0000	1.0000	98.18
22.5	1,177,138		0.0000	1.0000	98.18
23.5	1,177,138		0.0000	1.0000	98.18
24.5	945,093		0.0000	1.0000	98.18
25.5	945,093		0.0000	1.0000	98.18
26.5	945,093		0.0000	1.0000	98.18
27.5	945,093		0.0000	1.0000	98.18
28.5	945,093	18,444	0.0195	0.9805	98.18
29.5	926,649		0.0000	1.0000	96.26
30.5	926,649		0.0000	1.0000	96.26
31.5	926,649		0.0000	1.0000	96.26
32.5	926,649		0.0000	1.0000	96.26
33.5	926,649		0.0000	1.0000	96.26
34.5	926,649		0.0000	1.0000	96.26
35.5	911,894		0.0000	1.0000	96.26
36.5	911,894		0.0000	1.0000	96.26
37.5	911,894		0.0000	1.0000	96.26
38.5	911,894		0.0000	1.0000	96.26

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 367 MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1967-2019			EXPERIENCE BAND 1967-2019		
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	911,894		0.0000	1.0000	96.26
40.5	911,894		0.0000	1.0000	96.26
41.5	911,894		0.0000	1.0000	96.26
42.5	911,894		0.0000	1.0000	96.26
43.5	911,894		0.0000	1.0000	96.26
44.5	911,894		0.0000	1.0000	96.26
45.5	911,894		0.0000	1.0000	96.26
46.5	911,894		0.0000	1.0000	96.26
47.5	911,894		0.0000	1.0000	96.26
48.5	911,894		0.0000	1.0000	96.26
49.5	911,894		0.0000	1.0000	96.26
50.5	898,891	41,733	0.0464	0.9536	96.26
51.5	857,159		0.0000	1.0000	91.80
52.5					91.80

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 367 MAINS

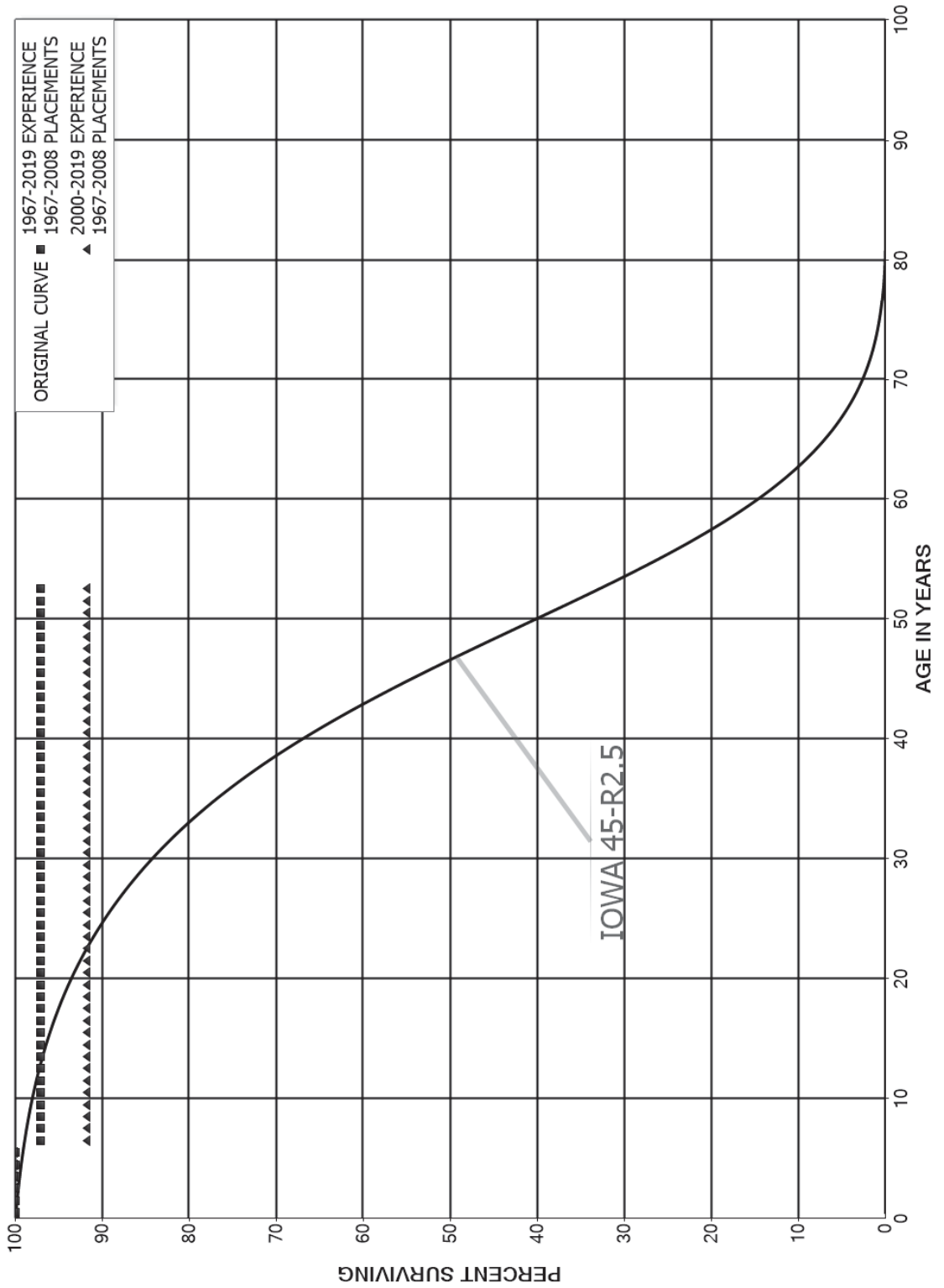
ORIGINAL LIFE TABLE

PLACEMENT BAND 2000-2019

EXPERIENCE BAND 2000-2019

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	3,411,617	25	0.0000	1.0000	100.00
0.5	2,216,510	698	0.0003	0.9997	100.00
1.5	4,237,241	10,144	0.0024	0.9976	99.97
2.5	4,041,927	1,675	0.0004	0.9996	99.73
3.5	4,040,253		0.0000	1.0000	99.69
4.5	4,040,253		0.0000	1.0000	99.69
5.5	4,044,915		0.0000	1.0000	99.69
6.5	4,046,452		0.0000	1.0000	99.69
7.5	4,046,452	0	0.0000	1.0000	99.69
8.5	4,046,452		0.0000	1.0000	99.69
9.5	3,753,862		0.0000	1.0000	99.69
10.5	3,753,862		0.0000	1.0000	99.69
11.5	3,647,831		0.0000	1.0000	99.69
12.5	3,647,831		0.0000	1.0000	99.69
13.5	3,646,024		0.0000	1.0000	99.69
14.5	3,601,109		0.0000	1.0000	99.69
15.5	3,601,109		0.0000	1.0000	99.69
16.5	3,601,109		0.0000	1.0000	99.69
17.5	3,601,109	81,504	0.0226	0.9774	99.69
18.5					97.43

AMEREN MISSOURI
 GAS DIVISION
 ACCOUNT 369 MEASURING AND REGULATING STATION EQUIPMENT
 ORIGINAL AND SMOOTH SURVIVOR CURVES



AMEREN MISSOURI
GAS DIVISION

ACCOUNT 369 MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1967-2008			EXPERIENCE BAND 1967-2019		
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	2,335,455		0.0000	1.0000	100.00
0.5	2,335,396	1,299	0.0006	0.9994	100.00
1.5	44,936		0.0000	1.0000	99.94
2.5	44,936		0.0000	1.0000	99.94
3.5	44,936		0.0000	1.0000	99.94
4.5	44,936		0.0000	1.0000	99.94
5.5	42,103	1,203	0.0286	0.9714	99.94
6.5	40,900		0.0000	1.0000	97.09
7.5	40,900		0.0000	1.0000	97.09
8.5	40,900		0.0000	1.0000	97.09
9.5	40,900		0.0000	1.0000	97.09
10.5	40,900		0.0000	1.0000	97.09
11.5	40,900		0.0000	1.0000	97.09
12.5	40,900		0.0000	1.0000	97.09
13.5	40,900		0.0000	1.0000	97.09
14.5	32,284		0.0000	1.0000	97.09
15.5	32,284		0.0000	1.0000	97.09
16.5	32,284		0.0000	1.0000	97.09
17.5	32,284		0.0000	1.0000	97.09
18.5	32,284		0.0000	1.0000	97.09
19.5	32,284		0.0000	1.0000	97.09
20.5	32,284		0.0000	1.0000	97.09
21.5	27,743		0.0000	1.0000	97.09
22.5	27,743		0.0000	1.0000	97.09
23.5	27,743		0.0000	1.0000	97.09
24.5	27,743		0.0000	1.0000	97.09
25.5	27,743		0.0000	1.0000	97.09
26.5	27,743		0.0000	1.0000	97.09
27.5	27,743		0.0000	1.0000	97.09
28.5	27,743		0.0000	1.0000	97.09
29.5	27,743		0.0000	1.0000	97.09
30.5	27,743		0.0000	1.0000	97.09
31.5	27,743		0.0000	1.0000	97.09
32.5	27,743		0.0000	1.0000	97.09
33.5	25,424		0.0000	1.0000	97.09
34.5	25,424		0.0000	1.0000	97.09
35.5	25,424		0.0000	1.0000	97.09
36.5	25,424		0.0000	1.0000	97.09
37.5	17,643		0.0000	1.0000	97.09
38.5	17,643		0.0000	1.0000	97.09

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 369 MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1967-2008			EXPERIENCE BAND 1967-2019		
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	17,643		0.0000	1.0000	97.09
40.5	17,643		0.0000	1.0000	97.09
41.5	17,643		0.0000	1.0000	97.09
42.5	17,643		0.0000	1.0000	97.09
43.5	17,643		0.0000	1.0000	97.09
44.5	17,643		0.0000	1.0000	97.09
45.5	17,643		0.0000	1.0000	97.09
46.5	17,643		0.0000	1.0000	97.09
47.5	17,643		0.0000	1.0000	97.09
48.5	17,643		0.0000	1.0000	97.09
49.5	17,643		0.0000	1.0000	97.09
50.5	17,643		0.0000	1.0000	97.09
51.5	15,139		0.0000	1.0000	97.09
52.5					97.09

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 369 MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1967-2008			EXPERIENCE BAND 2000-2019		
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	2,301,968		0.0000	1.0000	100.00
0.5	2,301,909	1,299	0.0006	0.9994	100.00
1.5	17,193		0.0000	1.0000	99.94
2.5	17,193		0.0000	1.0000	99.94
3.5	17,193		0.0000	1.0000	99.94
4.5	17,193		0.0000	1.0000	99.94
5.5	14,360	1,203	0.0838	0.9162	99.94
6.5	13,157		0.0000	1.0000	91.57
7.5	13,157		0.0000	1.0000	91.57
8.5	13,157		0.0000	1.0000	91.57
9.5	13,157		0.0000	1.0000	91.57
10.5	13,157		0.0000	1.0000	91.57
11.5	13,157		0.0000	1.0000	91.57
12.5	13,157		0.0000	1.0000	91.57
13.5	15,476		0.0000	1.0000	91.57
14.5	6,859		0.0000	1.0000	91.57
15.5	6,859		0.0000	1.0000	91.57
16.5	6,859		0.0000	1.0000	91.57
17.5	14,641		0.0000	1.0000	91.57
18.5	14,641		0.0000	1.0000	91.57
19.5	14,641		0.0000	1.0000	91.57
20.5	14,641		0.0000	1.0000	91.57
21.5	10,100		0.0000	1.0000	91.57
22.5	10,100		0.0000	1.0000	91.57
23.5	10,100		0.0000	1.0000	91.57
24.5	10,100		0.0000	1.0000	91.57
25.5	10,100		0.0000	1.0000	91.57
26.5	10,100		0.0000	1.0000	91.57
27.5	10,100		0.0000	1.0000	91.57
28.5	10,100		0.0000	1.0000	91.57
29.5	10,100		0.0000	1.0000	91.57
30.5	10,100		0.0000	1.0000	91.57
31.5	12,605		0.0000	1.0000	91.57
32.5	27,743		0.0000	1.0000	91.57
33.5	25,424		0.0000	1.0000	91.57
34.5	25,424		0.0000	1.0000	91.57
35.5	25,424		0.0000	1.0000	91.57
36.5	25,424		0.0000	1.0000	91.57
37.5	17,643		0.0000	1.0000	91.57
38.5	17,643		0.0000	1.0000	91.57

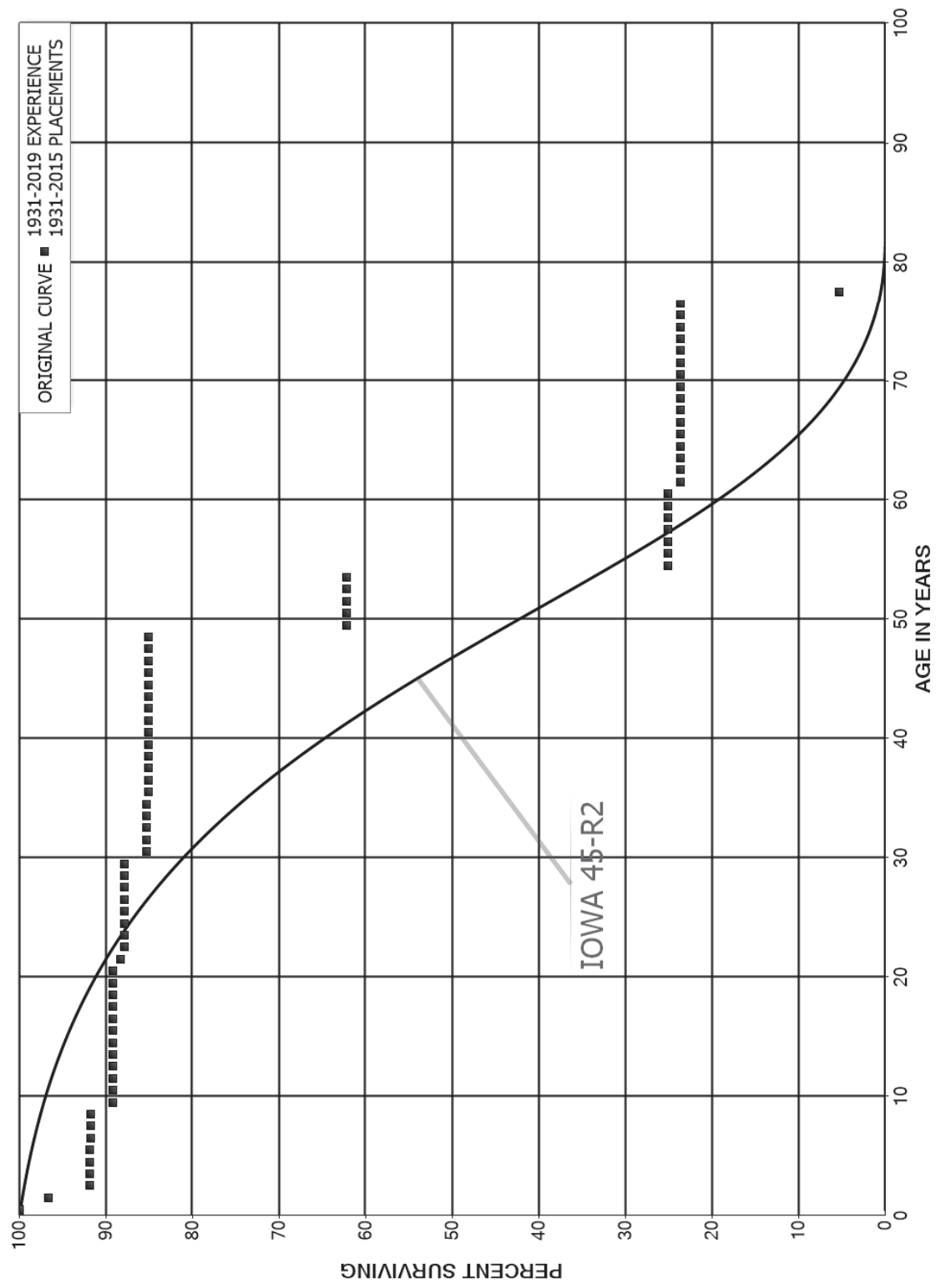
AMEREN MISSOURI
GAS DIVISION

ACCOUNT 369 MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1967-2008			EXPERIENCE BAND 2000-2019		
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	17,643		0.0000	1.0000	91.57
40.5	17,643		0.0000	1.0000	91.57
41.5	17,643		0.0000	1.0000	91.57
42.5	17,643		0.0000	1.0000	91.57
43.5	17,643		0.0000	1.0000	91.57
44.5	17,643		0.0000	1.0000	91.57
45.5	17,643		0.0000	1.0000	91.57
46.5	17,643		0.0000	1.0000	91.57
47.5	17,643		0.0000	1.0000	91.57
48.5	17,643		0.0000	1.0000	91.57
49.5	17,643		0.0000	1.0000	91.57
50.5	17,643		0.0000	1.0000	91.57
51.5	15,139		0.0000	1.0000	91.57
52.5					91.57

AMEREN MISSOURI
 GAS DIVISION
 ACCOUNT 375 STRUCTURES AND IMPROVEMENTS
 ORIGINAL AND SMOOTH SURVIVOR CURVES



AMEREN MISSOURI
GAS DIVISION

ACCOUNT 375 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1931-2015			EXPERIENCE BAND 1931-2019			
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	57,816		0.0000	1.0000	100.00	
0.5	57,816	1,965	0.0340	0.9660	100.00	
1.5	55,851	2,770	0.0496	0.9504	96.60	
2.5	161,430		0.0000	1.0000	91.81	
3.5	159,975		0.0000	1.0000	91.81	
4.5	93,720		0.0000	1.0000	91.81	
5.5	89,194	48	0.0005	0.9995	91.81	
6.5	88,111		0.0000	1.0000	91.76	
7.5	83,287		0.0000	1.0000	91.76	
8.5	83,287	2,382	0.0286	0.9714	91.76	
9.5	38,884	0	0.0000	1.0000	89.14	
10.5	38,884		0.0000	1.0000	89.14	
11.5	38,884		0.0000	1.0000	89.14	
12.5	38,884		0.0000	1.0000	89.14	
13.5	38,884		0.0000	1.0000	89.14	
14.5	38,884		0.0000	1.0000	89.14	
15.5	35,736		0.0000	1.0000	89.14	
16.5	35,736		0.0000	1.0000	89.14	
17.5	35,736		0.0000	1.0000	89.14	
18.5	35,736		0.0000	1.0000	89.14	
19.5	35,736		0.0000	1.0000	89.14	
20.5	35,736	339	0.0095	0.9905	89.14	
21.5	44,637	257	0.0058	0.9942	88.29	
22.5	44,380		0.0000	1.0000	87.78	
23.5	44,380		0.0000	1.0000	87.78	
24.5	44,380		0.0000	1.0000	87.78	
25.5	41,989		0.0000	1.0000	87.78	
26.5	30,475		0.0000	1.0000	87.78	
27.5	30,475		0.0000	1.0000	87.78	
28.5	30,475		0.0000	1.0000	87.78	
29.5	30,475	862	0.0283	0.9717	87.78	
30.5	29,612		0.0000	1.0000	85.30	
31.5	29,612		0.0000	1.0000	85.30	
32.5	29,612	5	0.0002	0.9998	85.30	
33.5	20,367		0.0000	1.0000	85.28	
34.5	20,367	56	0.0027	0.9973	85.28	
35.5	20,311		0.0000	1.0000	85.05	
36.5	20,311		0.0000	1.0000	85.05	
37.5	20,311		0.0000	1.0000	85.05	
38.5	20,311		0.0000	1.0000	85.05	

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 375 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1931-2015			EXPERIENCE BAND 1931-2019		
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	20,311		0.0000	1.0000	85.05
40.5	20,311		0.0000	1.0000	85.05
41.5	20,311		0.0000	1.0000	85.05
42.5	20,311		0.0000	1.0000	85.05
43.5	20,311		0.0000	1.0000	85.05
44.5	20,311		0.0000	1.0000	85.05
45.5	20,311		0.0000	1.0000	85.05
46.5	20,311		0.0000	1.0000	85.05
47.5	20,311		0.0000	1.0000	85.05
48.5	19,569	5,273	0.2695	0.7305	85.05
49.5	14,296		0.0000	1.0000	62.13
50.5	14,296		0.0000	1.0000	62.13
51.5	14,296		0.0000	1.0000	62.13
52.5	14,296		0.0000	1.0000	62.13
53.5	14,296	8,533	0.5969	0.4031	62.13
54.5	5,763		0.0000	1.0000	25.05
55.5	8,366		0.0000	1.0000	25.05
56.5	10,969		0.0000	1.0000	25.05
57.5	9,680		0.0000	1.0000	25.05
58.5	9,680		0.0000	1.0000	25.05
59.5	9,680		0.0000	1.0000	25.05
60.5	4,474	248	0.0554	0.9446	25.05
61.5	4,226		0.0000	1.0000	23.66
62.5	4,226		0.0000	1.0000	23.66
63.5	4,226		0.0000	1.0000	23.66
64.5	4,226		0.0000	1.0000	23.66
65.5	4,226		0.0000	1.0000	23.66
66.5	4,226		0.0000	1.0000	23.66
67.5	4,226		0.0000	1.0000	23.66
68.5	4,226		0.0000	1.0000	23.66
69.5	3,576		0.0000	1.0000	23.66
70.5	1,973		0.0000	1.0000	23.66
71.5	1,973		0.0000	1.0000	23.66
72.5	1,973		0.0000	1.0000	23.66
73.5	1,973		0.0000	1.0000	23.66
74.5	1,973		0.0000	1.0000	23.66
75.5	1,973		0.0000	1.0000	23.66
76.5	1,973	1,535	0.7777	0.2223	23.66
77.5	439		0.0000	1.0000	5.26
78.5	439		0.0000	1.0000	5.26

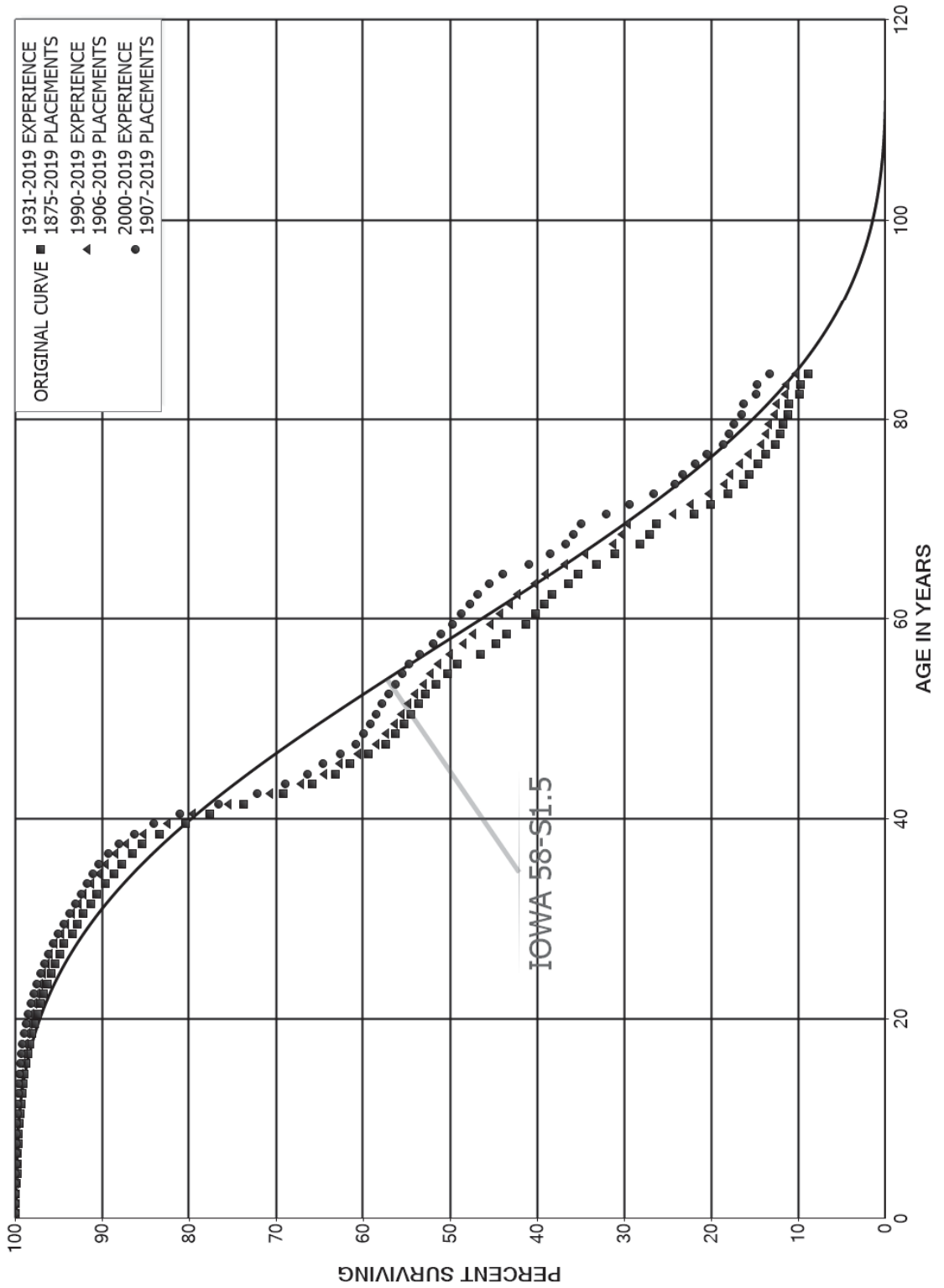
AMEREN MISSOURI
GAS DIVISION

ACCOUNT 375 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1931-2015			EXPERIENCE BAND 1931-2019		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	439		0.0000	1.0000	5.26
80.5					5.26

AMEREN MISSOURI
 GAS DIVISION
 ACCOUNT 376 MAINS
 ORIGINAL AND SMOOTH SURVIVOR CURVES



AMEREN MISSOURI
GAS DIVISION

ACCOUNT 376 MAINS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1875-2019

EXPERIENCE BAND 1931-2019

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	299,652,098	60,475	0.0002	0.9998	100.00
0.5	281,164,911	81,608	0.0003	0.9997	99.98
1.5	271,068,141	135,817	0.0005	0.9995	99.95
2.5	259,747,593	208,556	0.0008	0.9992	99.90
3.5	253,440,349	120,490	0.0005	0.9995	99.82
4.5	246,092,901	71,386	0.0003	0.9997	99.77
5.5	230,278,164	112,265	0.0005	0.9995	99.74
6.5	225,914,618	169,746	0.0008	0.9992	99.70
7.5	224,004,990	110,035	0.0005	0.9995	99.62
8.5	220,608,895	146,308	0.0007	0.9993	99.57
9.5	213,063,256	247,280	0.0012	0.9988	99.51
10.5	202,212,722	187,236	0.0009	0.9991	99.39
11.5	186,263,875	167,684	0.0009	0.9991	99.30
12.5	178,196,612	198,270	0.0011	0.9989	99.21
13.5	166,688,318	236,428	0.0014	0.9986	99.10
14.5	153,233,312	337,296	0.0022	0.9978	98.96
15.5	144,548,509	316,382	0.0022	0.9978	98.74
16.5	135,425,234	273,889	0.0020	0.9980	98.52
17.5	127,185,545	319,039	0.0025	0.9975	98.32
18.5	119,691,807	385,463	0.0032	0.9968	98.08
19.5	112,127,576	382,932	0.0034	0.9966	97.76
20.5	104,540,832	366,960	0.0035	0.9965	97.43
21.5	99,037,498	417,455	0.0042	0.9958	97.09
22.5	90,040,405	399,648	0.0044	0.9956	96.68
23.5	81,472,933	328,058	0.0040	0.9960	96.25
24.5	74,390,888	367,063	0.0049	0.9951	95.86
25.5	68,157,541	358,162	0.0053	0.9947	95.39
26.5	62,818,346	342,304	0.0054	0.9946	94.89
27.5	58,627,712	577,637	0.0099	0.9901	94.37
28.5	54,367,962	321,559	0.0059	0.9941	93.44
29.5	49,978,807	395,958	0.0079	0.9921	92.89
30.5	46,896,616	446,381	0.0095	0.9905	92.15
31.5	43,370,030	325,336	0.0075	0.9925	91.27
32.5	39,296,931	415,380	0.0106	0.9894	90.59
33.5	35,529,805	391,514	0.0110	0.9890	89.63
34.5	32,654,308	343,857	0.0105	0.9895	88.64
35.5	30,808,319	418,523	0.0136	0.9864	87.71
36.5	29,175,359	389,677	0.0134	0.9866	86.52
37.5	27,654,689	651,382	0.0236	0.9764	85.36
38.5	25,847,926	900,944	0.0349	0.9651	83.35

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 376 MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1875-2019

EXPERIENCE BAND 1931-2019

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	24,027,933	842,158	0.0350	0.9650	80.45
40.5	22,723,410	1,129,652	0.0497	0.9503	77.63
41.5	20,728,344	1,276,721	0.0616	0.9384	73.77
42.5	18,972,419	941,522	0.0496	0.9504	69.22
43.5	17,701,044	697,790	0.0394	0.9606	65.79
44.5	16,629,211	439,179	0.0264	0.9736	63.20
45.5	15,766,865	541,203	0.0343	0.9657	61.53
46.5	14,926,712	500,152	0.0335	0.9665	59.42
47.5	14,075,700	285,547	0.0203	0.9797	57.42
48.5	12,652,237	216,884	0.0171	0.9829	56.26
49.5	12,036,791	179,217	0.0149	0.9851	55.29
50.5	10,980,436	166,455	0.0152	0.9848	54.47
51.5	9,771,294	143,940	0.0147	0.9853	53.65
52.5	4,859,149	110,487	0.0227	0.9773	52.86
53.5	3,666,295	94,756	0.0258	0.9742	51.65
54.5	2,811,734	62,427	0.0222	0.9778	50.32
55.5	2,543,433	141,135	0.0555	0.9445	49.20
56.5	1,951,558	72,829	0.0373	0.9627	46.47
57.5	1,652,321	44,866	0.0272	0.9728	44.74
58.5	1,065,658	55,831	0.0524	0.9476	43.52
59.5	950,195	24,940	0.0262	0.9738	41.24
60.5	848,043	21,166	0.0250	0.9750	40.16
61.5	744,906	16,872	0.0227	0.9773	39.16
62.5	675,639	33,036	0.0489	0.9511	38.27
63.5	598,586	17,728	0.0296	0.9704	36.40
64.5	480,916	28,641	0.0596	0.9404	35.32
65.5	366,716	23,930	0.0653	0.9347	33.22
66.5	311,697	29,097	0.0934	0.9066	31.05
67.5	212,950	8,008	0.0376	0.9624	28.15
68.5	198,404	5,643	0.0284	0.9716	27.09
69.5	167,984	28,210	0.1679	0.8321	26.32
70.5	137,658	11,823	0.0859	0.9141	21.90
71.5	119,714	11,963	0.0999	0.9001	20.02
72.5	100,915	9,860	0.0977	0.9023	18.02
73.5	78,202	2,865	0.0366	0.9634	16.26
74.5	74,348	4,904	0.0660	0.9340	15.66
75.5	69,374	4,068	0.0586	0.9414	14.63
76.5	63,459	5,562	0.0876	0.9124	13.77
77.5	55,967	2,208	0.0395	0.9605	12.57
78.5	41,494	1,105	0.0266	0.9734	12.07

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 376 MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1875-2019

EXPERIENCE BAND 1931-2019

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	28,558	1,452	0.0508	0.9492	11.75
80.5	20,917	178	0.0085	0.9915	11.15
81.5	20,692	2,376	0.1149	0.8851	11.06
82.5	18,300	153	0.0084	0.9916	9.79
83.5	18,147	1,659	0.0914	0.9086	9.70
84.5	16,389	72	0.0044	0.9956	8.82
85.5	16,312	161	0.0099	0.9901	8.78
86.5	13,878	90	0.0065	0.9935	8.69
87.5	13,334		0.0000	1.0000	8.64
88.5	3,719	87	0.0233	0.9767	8.64
89.5	1,844	370	0.2009	0.7991	8.43
90.5	1,150	53	0.0461	0.9539	6.74
91.5	1,097		0.0000	1.0000	6.43
92.5	1,097	14	0.0129	0.9871	6.43
93.5	1,083	134	0.1236	0.8764	6.35
94.5	949	111	0.1166	0.8834	5.56
95.5	838	69	0.0819	0.9181	4.91
96.5	770	7	0.0097	0.9903	4.51
97.5	762	138	0.1814	0.8186	4.47
98.5	624		0.0000	1.0000	3.66
99.5	624	229	0.3672	0.6328	3.66
100.5	395		0.0000	1.0000	2.31
101.5	395		0.0000	1.0000	2.31
102.5	395		0.0000	1.0000	2.31
103.5	395		0.0000	1.0000	2.31
104.5	395		0.0000	1.0000	2.31
105.5	217	54	0.2486	0.7514	2.31
106.5	163		0.0000	1.0000	1.74
107.5	109		0.0000	1.0000	1.74
108.5	109		0.0000	1.0000	1.74
109.5	109		0.0000	1.0000	1.74
110.5	109		0.0000	1.0000	1.74
111.5	109		0.0000	1.0000	1.74
112.5					1.74

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 376 MAINS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1906-2019

EXPERIENCE BAND 1990-2019

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	244,439,328	52,122	0.0002	0.9998	100.00
0.5	228,686,761	48,924	0.0002	0.9998	99.98
1.5	221,868,588	92,247	0.0004	0.9996	99.96
2.5	214,742,770	136,264	0.0006	0.9994	99.92
3.5	212,305,996	31,040	0.0001	0.9999	99.85
4.5	207,927,305	26,220	0.0001	0.9999	99.84
5.5	194,056,810	81,317	0.0004	0.9996	99.83
6.5	191,376,811	100,670	0.0005	0.9995	99.78
7.5	190,882,373	52,653	0.0003	0.9997	99.73
8.5	188,886,565	94,764	0.0005	0.9995	99.70
9.5	182,485,225	76,290	0.0004	0.9996	99.65
10.5	172,395,622	104,000	0.0006	0.9994	99.61
11.5	157,532,365	93,437	0.0006	0.9994	99.55
12.5	150,134,824	129,004	0.0009	0.9991	99.49
13.5	139,131,125	181,918	0.0013	0.9987	99.41
14.5	126,211,784	257,338	0.0020	0.9980	99.28
15.5	118,127,586	260,242	0.0022	0.9978	99.07
16.5	109,425,866	187,214	0.0017	0.9983	98.86
17.5	101,789,231	187,146	0.0018	0.9982	98.69
18.5	95,945,757	242,472	0.0025	0.9975	98.51
19.5	89,223,365	210,572	0.0024	0.9976	98.26
20.5	83,064,230	244,134	0.0029	0.9971	98.02
21.5	79,353,291	277,539	0.0035	0.9965	97.74
22.5	76,389,577	271,548	0.0036	0.9964	97.39
23.5	69,808,416	251,639	0.0036	0.9964	97.05
24.5	64,181,847	277,634	0.0043	0.9957	96.70
25.5	58,940,650	238,423	0.0040	0.9960	96.28
26.5	54,891,439	257,317	0.0047	0.9953	95.89
27.5	51,389,361	467,154	0.0091	0.9909	95.44
28.5	48,242,326	247,924	0.0051	0.9949	94.57
29.5	44,333,396	343,093	0.0077	0.9923	94.09
30.5	41,678,312	318,903	0.0077	0.9923	93.36
31.5	38,679,310	252,329	0.0065	0.9935	92.65
32.5	34,965,965	326,182	0.0093	0.9907	92.04
33.5	31,711,085	331,108	0.0104	0.9896	91.18
34.5	29,341,906	248,161	0.0085	0.9915	90.23
35.5	28,012,940	347,415	0.0124	0.9876	89.47
36.5	26,749,676	348,888	0.0130	0.9870	88.36
37.5	25,717,969	586,753	0.0228	0.9772	87.21
38.5	24,223,330	805,379	0.0332	0.9668	85.22

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 376 MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1906-2019			EXPERIENCE BAND 1990-2019		
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	22,846,884	810,249	0.0355	0.9645	82.38
40.5	21,762,988	1,104,646	0.0508	0.9492	79.46
41.5	19,846,780	1,264,450	0.0637	0.9363	75.43
42.5	18,132,961	913,393	0.0504	0.9496	70.62
43.5	16,928,898	677,528	0.0400	0.9600	67.06
44.5	15,883,315	425,618	0.0268	0.9732	64.38
45.5	15,036,597	525,168	0.0349	0.9651	62.66
46.5	14,217,673	475,539	0.0334	0.9666	60.47
47.5	13,399,262	267,033	0.0199	0.9801	58.44
48.5	12,012,878	204,127	0.0170	0.9830	57.28
49.5	11,440,049	161,191	0.0141	0.9859	56.31
50.5	10,429,471	146,855	0.0141	0.9859	55.51
51.5	9,250,997	127,048	0.0137	0.9863	54.73
52.5	4,387,335	86,447	0.0197	0.9803	53.98
53.5	3,239,953	45,883	0.0142	0.9858	52.92
54.5	2,447,969	41,986	0.0172	0.9828	52.17
55.5	2,204,512	54,299	0.0246	0.9754	51.27
56.5	1,714,637	55,567	0.0324	0.9676	50.01
57.5	1,438,468	32,703	0.0227	0.9773	48.39
58.5	956,672	40,150	0.0420	0.9580	47.29
59.5	878,918	21,352	0.0243	0.9757	45.30
60.5	829,988	20,885	0.0252	0.9748	44.20
61.5	727,429	15,449	0.0212	0.9788	43.09
62.5	659,607	32,099	0.0487	0.9513	42.18
63.5	583,723	16,954	0.0290	0.9710	40.12
64.5	466,828	26,131	0.0560	0.9440	38.96
65.5	355,138	22,882	0.0644	0.9356	36.78
66.5	301,420	28,059	0.0931	0.9069	34.41
67.5	203,853	7,070	0.0347	0.9653	31.20
68.5	190,246	4,168	0.0219	0.9781	30.12
69.5	161,300	28,153	0.1745	0.8255	29.46
70.5	131,122	11,099	0.0846	0.9154	24.32
71.5	113,903	10,584	0.0929	0.9071	22.26
72.5	96,482	8,754	0.0907	0.9093	20.19
73.5	74,876	2,726	0.0364	0.9636	18.36
74.5	71,160	4,480	0.0630	0.9370	17.69
75.5	66,937	3,930	0.0587	0.9413	16.58
76.5	61,161	5,484	0.0897	0.9103	15.61
77.5	53,816	2,037	0.0379	0.9621	14.21
78.5	39,514	1,105	0.0280	0.9720	13.67

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 376 MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1906-2019			EXPERIENCE BAND 1990-2019			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
79.5	26,578	1,452	0.0546	0.9454	13.29	
80.5	18,937	178	0.0094	0.9906	12.56	
81.5	18,888	1,641	0.0869	0.9131	12.44	
82.5	17,580	153	0.0087	0.9913	11.36	
83.5	17,451	1,659	0.0951	0.9049	11.26	
84.5	15,693	72	0.0046	0.9954	10.19	
85.5	15,616	161	0.0103	0.9897	10.14	
86.5	13,182	90	0.0068	0.9932	10.04	
87.5	12,638		0.0000	1.0000	9.97	
88.5	3,023	87	0.0287	0.9713	9.97	
89.5	1,148	126	0.1102	0.8898	9.69	
90.5	698	53	0.0759	0.9241	8.62	
91.5	645		0.0000	1.0000	7.96	
92.5	645	14	0.0219	0.9781	7.96	
93.5	631	134	0.2122	0.7878	7.79	
94.5	497	111	0.2226	0.7774	6.14	
95.5	386	36	0.0924	0.9076	4.77	
96.5	351	7	0.0212	0.9788	4.33	
97.5	343	2	0.0063	0.9937	4.24	
98.5	341		0.0000	1.0000	4.21	
99.5	341		0.0000	1.0000	4.21	
100.5	341		0.0000	1.0000	4.21	
101.5	341		0.0000	1.0000	4.21	
102.5	341		0.0000	1.0000	4.21	
103.5	341		0.0000	1.0000	4.21	
104.5	341		0.0000	1.0000	4.21	
105.5	163		0.0000	1.0000	4.21	
106.5	163		0.0000	1.0000	4.21	
107.5	109		0.0000	1.0000	4.21	
108.5	109		0.0000	1.0000	4.21	
109.5	109		0.0000	1.0000	4.21	
110.5	109		0.0000	1.0000	4.21	
111.5	109		0.0000	1.0000	4.21	
112.5					4.21	

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 376 MAINS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1907-2019

EXPERIENCE BAND 2000-2019

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	193,211,542	46,008	0.0002	0.9998	100.00
0.5	181,874,673	31,194	0.0002	0.9998	99.98
1.5	176,561,983	14,323	0.0001	0.9999	99.96
2.5	171,104,762	81,904	0.0005	0.9995	99.95
3.5	170,546,784	18,763	0.0001	0.9999	99.90
4.5	168,545,929	21,015	0.0001	0.9999	99.89
5.5	157,747,806	24,702	0.0002	0.9998	99.88
6.5	158,626,225	36,039	0.0002	0.9998	99.86
7.5	160,846,617	33,855	0.0002	0.9998	99.84
8.5	161,404,240	47,675	0.0003	0.9997	99.82
9.5	158,265,259	55,363	0.0003	0.9997	99.79
10.5	150,449,440	67,631	0.0004	0.9996	99.76
11.5	137,952,078	74,147	0.0005	0.9995	99.71
12.5	134,081,805	91,621	0.0007	0.9993	99.66
13.5	126,429,615	95,339	0.0008	0.9992	99.59
14.5	115,963,063	112,961	0.0010	0.9990	99.51
15.5	109,233,860	123,497	0.0011	0.9989	99.42
16.5	101,725,433	149,039	0.0015	0.9985	99.30
17.5	94,936,398	166,196	0.0018	0.9982	99.16
18.5	88,929,337	216,343	0.0024	0.9976	98.99
19.5	82,591,350	195,300	0.0024	0.9976	98.75
20.5	75,753,258	230,837	0.0030	0.9970	98.51
21.5	71,360,942	250,025	0.0035	0.9965	98.21
22.5	63,116,917	255,433	0.0040	0.9960	97.87
23.5	55,102,157	231,833	0.0042	0.9958	97.47
24.5	48,584,307	234,660	0.0048	0.9952	97.06
25.5	42,996,161	204,932	0.0048	0.9952	96.59
26.5	38,174,516	218,629	0.0057	0.9943	96.13
27.5	34,594,278	191,773	0.0055	0.9945	95.58
28.5	32,232,458	205,368	0.0064	0.9936	95.05
29.5	28,642,138	202,763	0.0071	0.9929	94.45
30.5	26,992,224	216,412	0.0080	0.9920	93.78
31.5	25,256,512	176,925	0.0070	0.9930	93.03
32.5	27,148,352	181,352	0.0067	0.9933	92.37
33.5	25,120,328	188,838	0.0075	0.9925	91.76
34.5	23,766,397	187,176	0.0079	0.9921	91.07
35.5	22,946,426	271,526	0.0118	0.9882	90.35
36.5	22,488,161	317,405	0.0141	0.9859	89.28
37.5	21,587,368	430,344	0.0199	0.9801	88.02
38.5	20,941,548	524,117	0.0250	0.9750	86.27

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 376 MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1907-2019			EXPERIENCE BAND 2000-2019		
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	19,842,404	725,066	0.0365	0.9635	84.11
40.5	18,933,820	1,035,034	0.0547	0.9453	81.03
41.5	17,334,730	1,009,943	0.0583	0.9417	76.60
42.5	16,045,810	715,467	0.0446	0.9554	72.14
43.5	15,250,283	570,857	0.0374	0.9626	68.92
44.5	14,676,341	372,413	0.0254	0.9746	66.34
45.5	14,175,695	454,940	0.0321	0.9679	64.66
46.5	13,555,863	369,663	0.0273	0.9727	62.59
47.5	13,022,885	197,605	0.0152	0.9848	60.88
48.5	11,713,743	144,285	0.0123	0.9877	59.95
49.5	11,269,146	126,326	0.0112	0.9888	59.22
50.5	10,289,133	128,995	0.0125	0.9875	58.55
51.5	9,133,507	114,627	0.0126	0.9874	57.82
52.5	4,259,148	62,921	0.0148	0.9852	57.09
53.5	3,127,369	39,953	0.0128	0.9872	56.25
54.5	2,331,837	35,528	0.0152	0.9848	55.53
55.5	2,091,736	45,103	0.0216	0.9784	54.68
56.5	1,600,607	46,867	0.0293	0.9707	53.51
57.5	1,330,070	22,970	0.0173	0.9827	51.94
58.5	780,182	20,298	0.0260	0.9740	51.04
59.5	715,385	14,397	0.0201	0.9799	49.71
60.5	635,892	13,152	0.0207	0.9793	48.71
61.5	543,394	10,123	0.0186	0.9814	47.71
62.5	482,612	14,076	0.0292	0.9708	46.82
63.5	437,980	14,747	0.0337	0.9663	45.45
64.5	329,511	22,699	0.0689	0.9311	43.92
65.5	222,035	13,118	0.0591	0.9409	40.90
66.5	183,626	8,326	0.0453	0.9547	38.48
67.5	107,883	2,646	0.0245	0.9755	36.73
68.5	151,053	3,847	0.0255	0.9745	35.83
69.5	139,299	11,514	0.0827	0.9173	34.92
70.5	130,106	10,940	0.0841	0.9159	32.03
71.5	113,342	10,584	0.0934	0.9066	29.34
72.5	95,922	8,754	0.0913	0.9087	26.60
73.5	74,389	2,726	0.0366	0.9634	24.17
74.5	70,673	4,456	0.0631	0.9369	23.29
75.5	66,147	3,930	0.0594	0.9406	21.82
76.5	60,600	5,484	0.0905	0.9095	20.52
77.5	53,328	2,037	0.0382	0.9618	18.67
78.5	39,026	1,105	0.0283	0.9717	17.95

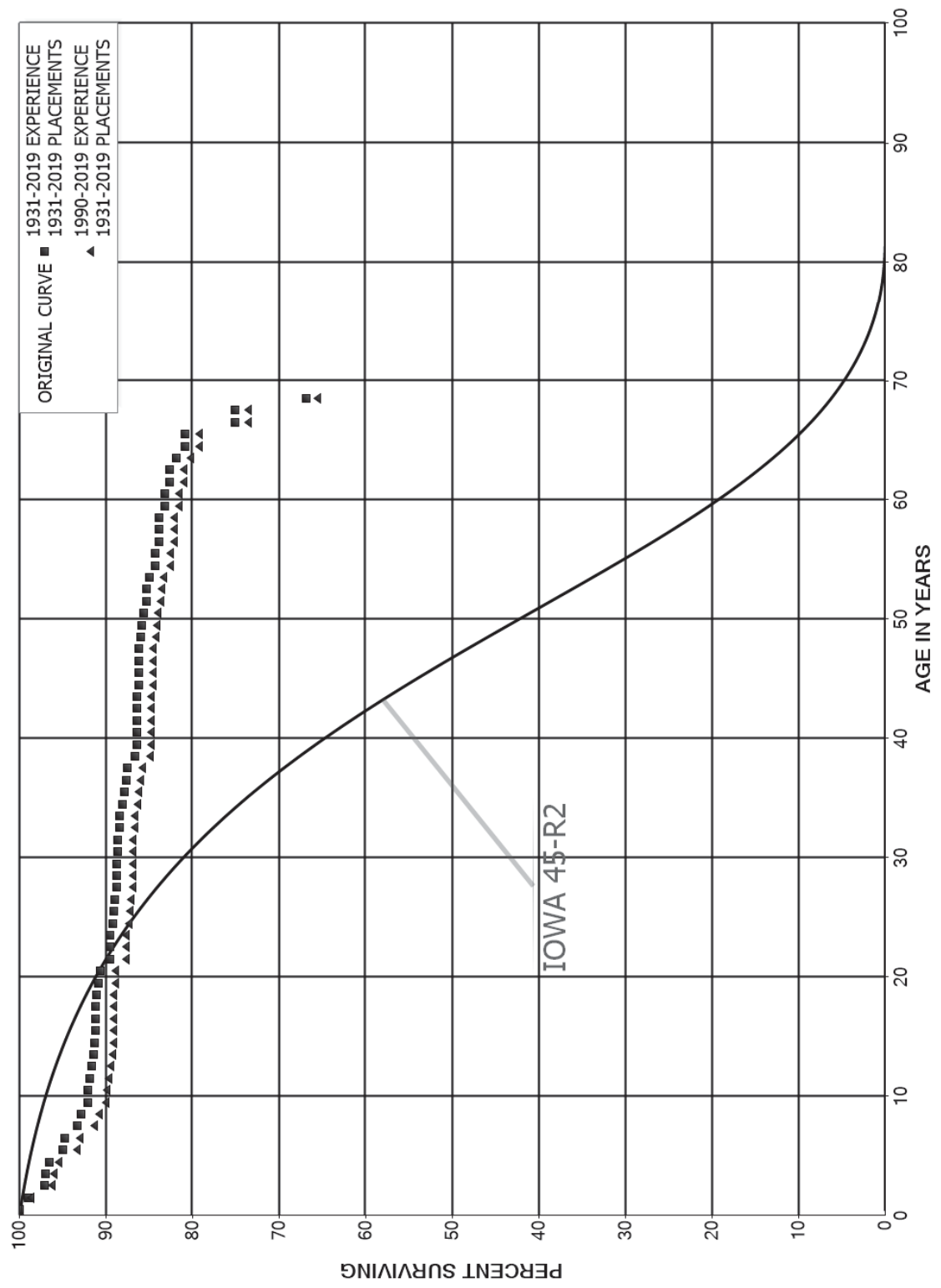
AMEREN MISSOURI
GAS DIVISION

ACCOUNT 376 MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1907-2019			EXPERIENCE BAND 2000-2019			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
79.5	26,090	1,452	0.0556	0.9444	17.44	
80.5	18,540	178	0.0096	0.9904	16.47	
81.5	18,315	1,641	0.0896	0.9104	16.32	
82.5	16,658	153	0.0092	0.9908	14.85	
83.5	16,506	1,624	0.0984	0.9016	14.72	
84.5	14,782	72	0.0049	0.9951	13.27	
85.5	14,998	161	0.0107	0.9893	13.20	
86.5	12,564	90	0.0071	0.9929	13.06	
87.5	12,089		0.0000	1.0000	12.97	
88.5	2,474	87	0.0351	0.9649	12.97	
89.5	599	25	0.0425	0.9575	12.51	
90.5	250	3	0.0120	0.9880	11.98	
91.5	424		0.0000	1.0000	11.84	
92.5	645	14	0.0219	0.9781	11.84	
93.5	631	134	0.2122	0.7878	11.58	
94.5	497	111	0.2226	0.7774	9.12	
95.5	386	36	0.0924	0.9076	7.09	
96.5	351	7	0.0212	0.9788	6.44	
97.5	343	2	0.0063	0.9937	6.30	
98.5	341		0.0000	1.0000	6.26	
99.5	341		0.0000	1.0000	6.26	
100.5	341		0.0000	1.0000	6.26	
101.5	341		0.0000	1.0000	6.26	
102.5	341		0.0000	1.0000	6.26	
103.5	341		0.0000	1.0000	6.26	
104.5	341		0.0000	1.0000	6.26	
105.5	163		0.0000	1.0000	6.26	
106.5	163		0.0000	1.0000	6.26	
107.5	109		0.0000	1.0000	6.26	
108.5	109		0.0000	1.0000	6.26	
109.5	109		0.0000	1.0000	6.26	
110.5	109		0.0000	1.0000	6.26	
111.5	109		0.0000	1.0000	6.26	
112.5					6.26	

AMEREN MISSOURI
 GAS DIVISION
 ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL
 ORIGINAL AND SMOOTH SURVIVOR CURVES



AMEREN MISSOURI
GAS DIVISION

ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE

PLACEMENT BAND 1931-2019

EXPERIENCE BAND 1931-2019

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	6,748,864	3,774	0.0006	0.9994	100.00
0.5	6,472,106	66,381	0.0103	0.9897	99.94
1.5	5,878,850	107,385	0.0183	0.9817	98.92
2.5	5,945,381	9,754	0.0016	0.9984	97.11
3.5	5,895,932	28,511	0.0048	0.9952	96.95
4.5	5,021,838	79,831	0.0159	0.9841	96.48
5.5	4,535,345	13,285	0.0029	0.9971	94.95
6.5	4,432,859	65,388	0.0148	0.9852	94.67
7.5	4,376,876	19,624	0.0045	0.9955	93.28
8.5	4,282,991	34,616	0.0081	0.9919	92.86
9.5	4,225,829	2,531	0.0006	0.9994	92.11
10.5	4,114,721	7,662	0.0019	0.9981	92.05
11.5	3,924,608	9,477	0.0024	0.9976	91.88
12.5	3,806,640	10,931	0.0029	0.9971	91.66
13.5	3,565,538	4,621	0.0013	0.9987	91.40
14.5	3,303,932	3,173	0.0010	0.9990	91.28
15.5	3,065,741		0.0000	1.0000	91.19
16.5	2,902,064		0.0000	1.0000	91.19
17.5	2,902,064	2,608	0.0009	0.9991	91.19
18.5	2,676,094	7,466	0.0028	0.9972	91.11
19.5	2,420,295	5,887	0.0024	0.9976	90.85
20.5	2,308,142	28,765	0.0125	0.9875	90.63
21.5	2,170,382		0.0000	1.0000	89.50
22.5	2,071,645	506	0.0002	0.9998	89.50
23.5	2,039,419	7,184	0.0035	0.9965	89.48
24.5	2,013,506	1,778	0.0009	0.9991	89.17
25.5	1,944,907	2,594	0.0013	0.9987	89.09
26.5	1,826,152	4,758	0.0026	0.9974	88.97
27.5	1,768,155		0.0000	1.0000	88.74
28.5	1,718,619		0.0000	1.0000	88.74
29.5	1,641,514	1,306	0.0008	0.9992	88.74
30.5	1,600,978		0.0000	1.0000	88.67
31.5	1,531,068	4,312	0.0028	0.9972	88.67
32.5	1,449,796	166	0.0001	0.9999	88.42
33.5	1,317,275	5,641	0.0043	0.9957	88.41
34.5	1,269,706	2,115	0.0017	0.9983	88.03
35.5	1,233,502	3,563	0.0029	0.9971	87.88
36.5	897,814	1,608	0.0018	0.9982	87.63
37.5	695,468	7,092	0.0102	0.9898	87.47
38.5	581,263	1,145	0.0020	0.9980	86.58

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1931-2019			EXPERIENCE BAND 1931-2019		
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	571,334		0.0000	1.0000	86.41
40.5	560,679		0.0000	1.0000	86.41
41.5	551,976		0.0000	1.0000	86.41
42.5	539,148		0.0000	1.0000	86.41
43.5	521,796	1,181	0.0023	0.9977	86.41
44.5	507,048		0.0000	1.0000	86.21
45.5	452,842		0.0000	1.0000	86.21
46.5	424,614	32	0.0001	0.9999	86.21
47.5	409,980	1,373	0.0033	0.9967	86.21
48.5	364,408	413	0.0011	0.9989	85.92
49.5	344,902	711	0.0021	0.9979	85.82
50.5	323,287	1,195	0.0037	0.9963	85.64
51.5	278,776	268	0.0010	0.9990	85.33
52.5	204,720	665	0.0032	0.9968	85.24
53.5	178,660	1,488	0.0083	0.9917	84.97
54.5	155,269		0.0000	1.0000	84.26
55.5	144,607	740	0.0051	0.9949	84.26
56.5	124,443		0.0000	1.0000	83.83
57.5	103,396		0.0000	1.0000	83.83
58.5	68,722	491	0.0071	0.9929	83.83
59.5	58,178		0.0000	1.0000	83.23
60.5	52,449	400	0.0076	0.9924	83.23
61.5	48,963		0.0000	1.0000	82.60
62.5	42,350	384	0.0091	0.9909	82.60
63.5	33,853	414	0.0122	0.9878	81.85
64.5	29,491		0.0000	1.0000	80.85
65.5	27,644	1,980	0.0716	0.9284	80.85
66.5	18,772		0.0000	1.0000	75.05
67.5	13,503	1,478	0.1095	0.8905	75.05
68.5	10,059		0.0000	1.0000	66.84
69.5	5,813		0.0000	1.0000	66.84
70.5	2,261		0.0000	1.0000	66.84
71.5	1,394		0.0000	1.0000	66.84
72.5	947		0.0000	1.0000	66.84
73.5	554		0.0000	1.0000	66.84
74.5	122		0.0000	1.0000	66.84
75.5	122		0.0000	1.0000	66.84
76.5	122		0.0000	1.0000	66.84
77.5	122		0.0000	1.0000	66.84
78.5	122		0.0000	1.0000	66.84
79.5					66.84

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE

PLACEMENT BAND 1931-2019

EXPERIENCE BAND 1990-2019

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	5,005,200	3,639	0.0007	0.9993	100.00
0.5	4,768,965	66,381	0.0139	0.9861	99.93
1.5	4,249,857	107,385	0.0253	0.9747	98.54
2.5	4,400,201	9,754	0.0022	0.9978	96.05
3.5	4,501,880	28,142	0.0063	0.9937	95.83
4.5	3,670,083	78,414	0.0214	0.9786	95.23
5.5	3,219,096	12,660	0.0039	0.9961	93.20
6.5	3,449,360	63,602	0.0184	0.9816	92.83
7.5	3,595,902	19,358	0.0054	0.9946	91.12
8.5	3,610,870	33,261	0.0092	0.9908	90.63
9.5	3,563,847	2,528	0.0007	0.9993	89.80
10.5	3,463,397	7,591	0.0022	0.9978	89.73
11.5	3,284,664	9,464	0.0029	0.9971	89.54
12.5	3,179,538	9,533	0.0030	0.9970	89.28
13.5	2,957,782	926	0.0003	0.9997	89.01
14.5	2,733,871	92	0.0000	1.0000	88.98
15.5	2,552,968		0.0000	1.0000	88.98
16.5	2,417,519		0.0000	1.0000	88.98
17.5	2,437,339		0.0000	1.0000	88.98
18.5	2,266,512	5,543	0.0024	0.9976	88.98
19.5	2,031,729		0.0000	1.0000	88.76
20.5	1,948,821	27,944	0.0143	0.9857	88.76
21.5	1,861,734		0.0000	1.0000	87.49
22.5	1,843,876		0.0000	1.0000	87.49
23.5	1,837,552	7,184	0.0039	0.9961	87.49
24.5	1,835,030	1,778	0.0010	0.9990	87.15
25.5	1,778,050	2,080	0.0012	0.9988	87.06
26.5	1,682,780	4,758	0.0028	0.9972	86.96
27.5	1,645,830		0.0000	1.0000	86.71
28.5	1,636,489		0.0000	1.0000	86.71
29.5	1,569,539		0.0000	1.0000	86.71
30.5	1,539,540		0.0000	1.0000	86.71
31.5	1,472,716	3,547	0.0024	0.9976	86.71
32.5	1,398,822		0.0000	1.0000	86.51
33.5	1,274,580	5,641	0.0044	0.9956	86.51
34.5	1,231,814	1,255	0.0010	0.9990	86.12
35.5	1,200,502	3,369	0.0028	0.9972	86.04
36.5	872,478	1,608	0.0018	0.9982	85.79
37.5	675,941	7,092	0.0105	0.9895	85.64
38.5	565,107	1,145	0.0020	0.9980	84.74

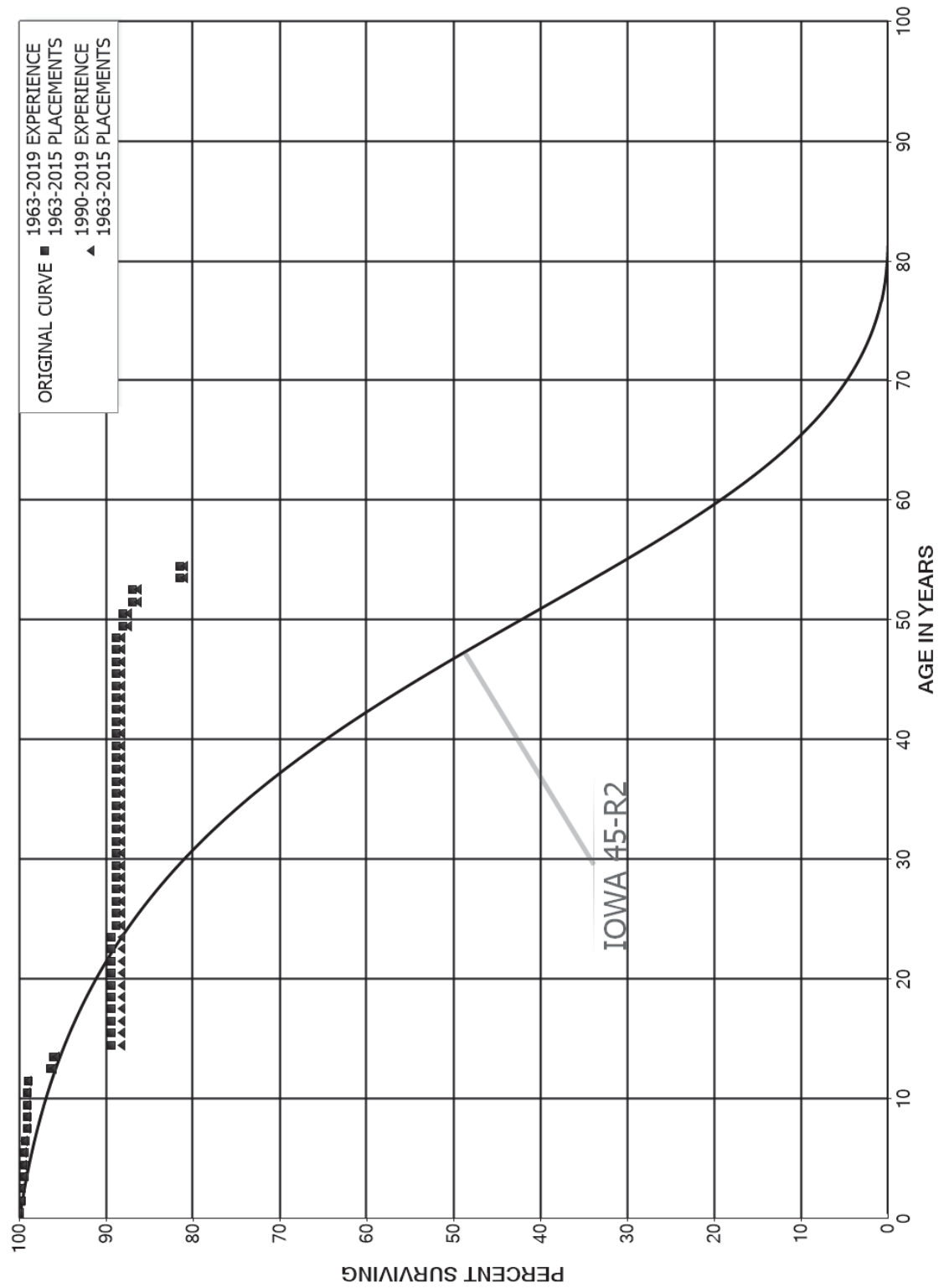
AMEREN MISSOURI
GAS DIVISION

ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1931-2019			EXPERIENCE BAND 1990-2019		
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	559,424		0.0000	1.0000	84.57
40.5	553,061		0.0000	1.0000	84.57
41.5	545,226		0.0000	1.0000	84.57
42.5	532,884		0.0000	1.0000	84.57
43.5	515,925	1,181	0.0023	0.9977	84.57
44.5	501,656		0.0000	1.0000	84.37
45.5	447,449		0.0000	1.0000	84.37
46.5	419,345	32	0.0001	0.9999	84.37
47.5	404,712	1,373	0.0034	0.9966	84.37
48.5	359,140	413	0.0012	0.9988	84.08
49.5	340,245	711	0.0021	0.9979	83.98
50.5	318,631	1,195	0.0037	0.9963	83.81
51.5	274,519	268	0.0010	0.9990	83.49
52.5	200,464	665	0.0033	0.9967	83.41
53.5	174,788	1,488	0.0085	0.9915	83.13
54.5	151,810		0.0000	1.0000	82.43
55.5	141,149	740	0.0052	0.9948	82.43
56.5	122,965		0.0000	1.0000	81.99
57.5	101,918		0.0000	1.0000	81.99
58.5	68,722	491	0.0071	0.9929	81.99
59.5	58,178		0.0000	1.0000	81.41
60.5	52,449	400	0.0076	0.9924	81.41
61.5	48,963		0.0000	1.0000	80.79
62.5	42,350	384	0.0091	0.9909	80.79
63.5	33,853	414	0.0122	0.9878	80.06
64.5	29,491		0.0000	1.0000	79.08
65.5	27,644	1,980	0.0716	0.9284	79.08
66.5	18,772		0.0000	1.0000	73.41
67.5	13,503	1,478	0.1095	0.8905	73.41
68.5	10,059		0.0000	1.0000	65.38
69.5	5,813		0.0000	1.0000	65.38
70.5	2,261		0.0000	1.0000	65.38
71.5	1,394		0.0000	1.0000	65.38
72.5	947		0.0000	1.0000	65.38
73.5	554		0.0000	1.0000	65.38
74.5	122		0.0000	1.0000	65.38
75.5	122		0.0000	1.0000	65.38
76.5	122		0.0000	1.0000	65.38
77.5	122		0.0000	1.0000	65.38
78.5	122		0.0000	1.0000	65.38
79.5					65.38

AMEREN MISSOURI
 GAS DIVISION
 ACCOUNT 379 MEASURING AND REGULATING STATION EQUIPMENT - CITY GATE
 ORIGINAL AND SMOOTH SURVIVOR CURVES



AMEREN MISSOURI
GAS DIVISION

ACCOUNT 379 MEASURING AND REGULATING STATION EQUIPMENT - CITY GATE

ORIGINAL LIFE TABLE

PLACEMENT BAND 1963-2015

EXPERIENCE BAND 1963-2019

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	683,464		0.0000	1.0000	100.00
0.5	674,934	2,147	0.0032	0.9968	100.00
1.5	793,816		0.0000	1.0000	99.68
2.5	819,002	1,986	0.0024	0.9976	99.68
3.5	762,527	275	0.0004	0.9996	99.44
4.5	562,828		0.0000	1.0000	99.40
5.5	548,075	612	0.0011	0.9989	99.40
6.5	483,310	1,289	0.0027	0.9973	99.29
7.5	481,455		0.0000	1.0000	99.03
8.5	481,455		0.0000	1.0000	99.03
9.5	452,289	55	0.0001	0.9999	99.03
10.5	452,233	551	0.0012	0.9988	99.02
11.5	451,682	11,428	0.0253	0.9747	98.90
12.5	440,254	1,629	0.0037	0.9963	96.39
13.5	411,707	28,400	0.0690	0.9310	96.04
14.5	319,721		0.0000	1.0000	89.41
15.5	293,145		0.0000	1.0000	89.41
16.5	229,451		0.0000	1.0000	89.41
17.5	222,288		0.0000	1.0000	89.41
18.5	196,947		0.0000	1.0000	89.41
19.5	184,299		0.0000	1.0000	89.41
20.5	158,302		0.0000	1.0000	89.41
21.5	157,378		0.0000	1.0000	89.41
22.5	153,578		0.0000	1.0000	89.41
23.5	136,703	802	0.0059	0.9941	89.41
24.5	135,901		0.0000	1.0000	88.89
25.5	114,343		0.0000	1.0000	88.89
26.5	114,343		0.0000	1.0000	88.89
27.5	114,343		0.0000	1.0000	88.89
28.5	89,456		0.0000	1.0000	88.89
29.5	89,456		0.0000	1.0000	88.89
30.5	89,456		0.0000	1.0000	88.89
31.5	89,456		0.0000	1.0000	88.89
32.5	88,760		0.0000	1.0000	88.89
33.5	87,868		0.0000	1.0000	88.89
34.5	54,299		0.0000	1.0000	88.89
35.5	48,438		0.0000	1.0000	88.89
36.5	48,438		0.0000	1.0000	88.89
37.5	48,438		0.0000	1.0000	88.89
38.5	48,438		0.0000	1.0000	88.89

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 379 MEASURING AND REGULATING STATION EQUIPMENT - CITY GATE

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1963-2015			EXPERIENCE BAND 1963-2019		
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	48,438		0.0000	1.0000	88.89
40.5	48,438		0.0000	1.0000	88.89
41.5	48,438		0.0000	1.0000	88.89
42.5	48,438		0.0000	1.0000	88.89
43.5	48,438		0.0000	1.0000	88.89
44.5	48,438		0.0000	1.0000	88.89
45.5	48,438		0.0000	1.0000	88.89
46.5	48,438		0.0000	1.0000	88.89
47.5	48,438		0.0000	1.0000	88.89
48.5	33,591	306	0.0091	0.9909	88.89
49.5	30,138		0.0000	1.0000	88.08
50.5	30,138	369	0.0122	0.9878	88.08
51.5	29,769		0.0000	1.0000	87.00
52.5	28,117	1,763	0.0627	0.9373	87.00
53.5	24,857		0.0000	1.0000	81.54
54.5	7,952		0.0000	1.0000	81.54
55.5	7,509		0.0000	1.0000	81.54
56.5					81.54

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 379 MEASURING AND REGULATING STATION EQUIPMENT - CITY GATE

ORIGINAL LIFE TABLE

PLACEMENT BAND 1963-2015

EXPERIENCE BAND 1990-2019

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	591,794		0.0000	1.0000	100.00
0.5	583,264	2,129	0.0037	0.9963	100.00
1.5	702,164		0.0000	1.0000	99.63
2.5	728,046	1,986	0.0027	0.9973	99.63
3.5	672,463		0.0000	1.0000	99.36
4.5	507,159		0.0000	1.0000	99.36
5.5	498,267	612	0.0012	0.9988	99.36
6.5	433,502	1,289	0.0030	0.9970	99.24
7.5	432,215		0.0000	1.0000	98.95
8.5	432,215		0.0000	1.0000	98.95
9.5	403,049	55	0.0001	0.9999	98.95
10.5	402,993	551	0.0014	0.9986	98.93
11.5	402,442	11,428	0.0284	0.9716	98.80
12.5	391,015	1,629	0.0042	0.9958	95.99
13.5	362,467	28,400	0.0784	0.9216	95.59
14.5	270,481		0.0000	1.0000	88.10
15.5	243,906		0.0000	1.0000	88.10
16.5	180,211		0.0000	1.0000	88.10
17.5	173,048		0.0000	1.0000	88.10
18.5	162,554		0.0000	1.0000	88.10
19.5	153,053		0.0000	1.0000	88.10
20.5	127,056		0.0000	1.0000	88.10
21.5	126,132		0.0000	1.0000	88.10
22.5	124,290		0.0000	1.0000	88.10
23.5	108,913		0.0000	1.0000	88.10
24.5	126,187		0.0000	1.0000	88.10
25.5	105,071		0.0000	1.0000	88.10
26.5	114,343		0.0000	1.0000	88.10
27.5	114,343		0.0000	1.0000	88.10
28.5	89,456		0.0000	1.0000	88.10
29.5	89,456		0.0000	1.0000	88.10
30.5	89,456		0.0000	1.0000	88.10
31.5	89,456		0.0000	1.0000	88.10
32.5	88,760		0.0000	1.0000	88.10
33.5	87,868		0.0000	1.0000	88.10
34.5	54,299		0.0000	1.0000	88.10
35.5	48,438		0.0000	1.0000	88.10
36.5	48,438		0.0000	1.0000	88.10
37.5	48,438		0.0000	1.0000	88.10
38.5	48,438		0.0000	1.0000	88.10

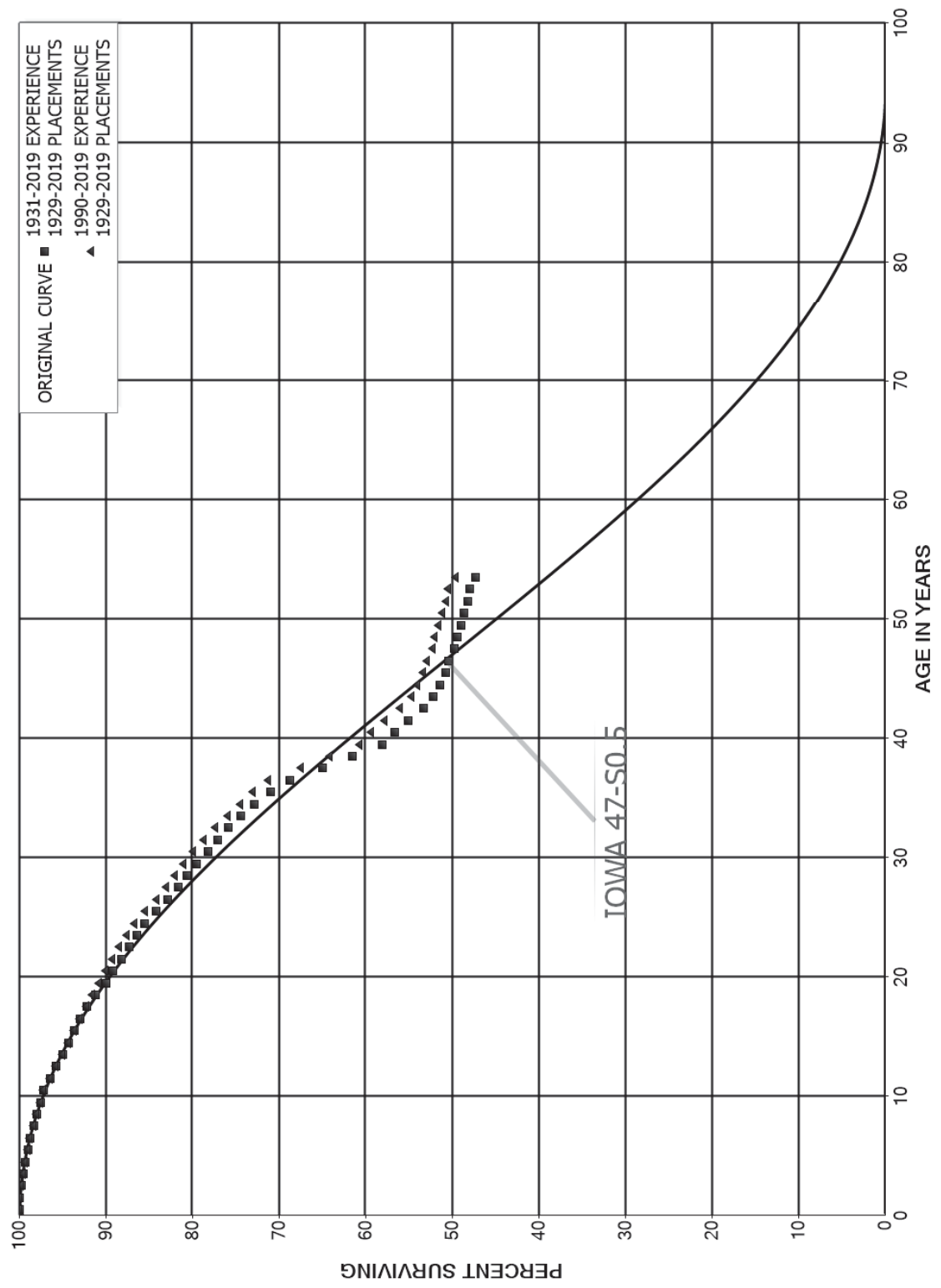
AMEREN MISSOURI
GAS DIVISION

ACCOUNT 379 MEASURING AND REGULATING STATION EQUIPMENT - CITY GATE

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1963-2015			EXPERIENCE BAND 1990-2019		
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	48,438		0.0000	1.0000	88.10
40.5	48,438		0.0000	1.0000	88.10
41.5	48,438		0.0000	1.0000	88.10
42.5	48,438		0.0000	1.0000	88.10
43.5	48,438		0.0000	1.0000	88.10
44.5	48,438		0.0000	1.0000	88.10
45.5	48,438		0.0000	1.0000	88.10
46.5	48,438		0.0000	1.0000	88.10
47.5	48,438		0.0000	1.0000	88.10
48.5	33,591	306	0.0091	0.9909	88.10
49.5	30,138		0.0000	1.0000	87.30
50.5	30,138	369	0.0122	0.9878	87.30
51.5	29,769		0.0000	1.0000	86.23
52.5	28,117	1,763	0.0627	0.9373	86.23
53.5	24,857		0.0000	1.0000	80.82
54.5	7,952		0.0000	1.0000	80.82
55.5	7,509		0.0000	1.0000	80.82
56.5					80.82

AMEREN MISSOURI
 GAS DIVISION
 ACCOUNT 380 SERVICES
 ORIGINAL AND SMOOTH SURVIVOR CURVES



AMEREN MISSOURI
GAS DIVISION

ACCOUNT 380 SERVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1929-2019

EXPERIENCE BAND 1931-2019

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	160,882,613	6,085	0.0000	1.0000	100.00
0.5	152,911,998	115,222	0.0008	0.9992	100.00
1.5	145,743,047	234,988	0.0016	0.9984	99.92
2.5	140,895,714	301,761	0.0021	0.9979	99.76
3.5	137,299,926	357,581	0.0026	0.9974	99.55
4.5	133,260,635	400,849	0.0030	0.9970	99.29
5.5	129,362,140	400,400	0.0031	0.9969	98.99
6.5	126,772,349	495,092	0.0039	0.9961	98.68
7.5	123,538,005	444,916	0.0036	0.9964	98.30
8.5	119,329,716	473,024	0.0040	0.9960	97.94
9.5	114,641,111	493,485	0.0043	0.9957	97.55
10.5	108,291,703	764,462	0.0071	0.9929	97.13
11.5	101,224,307	757,992	0.0075	0.9925	96.45
12.5	98,548,787	756,233	0.0077	0.9923	95.73
13.5	93,527,959	651,528	0.0070	0.9930	94.99
14.5	87,244,031	621,900	0.0071	0.9929	94.33
15.5	82,184,650	640,673	0.0078	0.9922	93.66
16.5	77,365,212	670,096	0.0087	0.9913	92.93
17.5	72,793,058	781,431	0.0107	0.9893	92.12
18.5	68,585,334	853,363	0.0124	0.9876	91.13
19.5	64,211,768	622,997	0.0097	0.9903	90.00
20.5	59,499,752	638,918	0.0107	0.9893	89.13
21.5	54,709,443	550,257	0.0101	0.9899	88.17
22.5	50,262,252	494,007	0.0098	0.9902	87.28
23.5	45,762,123	490,070	0.0107	0.9893	86.42
24.5	40,839,358	633,097	0.0155	0.9845	85.50
25.5	36,090,689	574,998	0.0159	0.9841	84.17
26.5	32,301,588	456,070	0.0141	0.9859	82.83
27.5	29,126,584	383,160	0.0132	0.9868	81.66
28.5	26,100,992	351,385	0.0135	0.9865	80.59
29.5	23,173,561	374,765	0.0162	0.9838	79.50
30.5	20,656,093	317,455	0.0154	0.9846	78.22
31.5	18,085,927	282,477	0.0156	0.9844	77.02
32.5	15,719,663	303,164	0.0193	0.9807	75.81
33.5	13,768,941	280,613	0.0204	0.9796	74.35
34.5	12,088,046	304,685	0.0252	0.9748	72.84
35.5	10,613,491	348,056	0.0328	0.9672	71.00
36.5	9,296,669	511,640	0.0550	0.9450	68.67
37.5	7,718,184	401,584	0.0520	0.9480	64.89
38.5	6,473,413	366,547	0.0566	0.9434	61.52

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 380 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1929-2019			EXPERIENCE BAND 1931-2019		
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	5,334,137	128,884	0.0242	0.9758	58.03
40.5	4,536,629	124,807	0.0275	0.9725	56.63
41.5	3,961,937	126,734	0.0320	0.9680	55.07
42.5	3,562,674	79,555	0.0223	0.9777	53.31
43.5	3,170,859	47,380	0.0149	0.9851	52.12
44.5	2,855,392	31,411	0.0110	0.9890	51.34
45.5	2,651,756	22,329	0.0084	0.9916	50.78
46.5	2,478,731	33,176	0.0134	0.9866	50.35
47.5	2,184,552	12,645	0.0058	0.9942	49.68
48.5	1,825,739	14,829	0.0081	0.9919	49.39
49.5	1,489,520	10,603	0.0071	0.9929	48.99
50.5	1,184,571	10,340	0.0087	0.9913	48.64
51.5	898,804	4,473	0.0050	0.9950	48.21
52.5	341,449	4,577	0.0134	0.9866	47.97
53.5	277,613	3,109	0.0112	0.9888	47.33
54.5	236,466	5,625	0.0238	0.9762	46.80
55.5	226,741	6,758	0.0298	0.9702	45.69
56.5	197,813	3,903	0.0197	0.9803	44.33
57.5	188,135	1,890	0.0100	0.9900	43.45
58.5	179,549	5,072	0.0282	0.9718	43.01
59.5	169,621	814	0.0048	0.9952	41.80
60.5	155,713	2,128	0.0137	0.9863	41.60
61.5	141,978	1,603	0.0113	0.9887	41.03
62.5	133,777	1,043	0.0078	0.9922	40.57
63.5	128,138	1,033	0.0081	0.9919	40.25
64.5	121,486	5,093	0.0419	0.9581	39.93
65.5	114,772	4,676	0.0407	0.9593	38.25
66.5	109,713	1,629	0.0149	0.9851	36.69
67.5	107,142	888	0.0083	0.9917	36.15
68.5	105,964	227	0.0021	0.9979	35.85
69.5	104,042	6,088	0.0585	0.9415	35.77
70.5	97,551	2,637	0.0270	0.9730	33.68
71.5	93,978	2,928	0.0312	0.9688	32.77
72.5	90,560	2,079	0.0230	0.9770	31.75
73.5	88,007	748	0.0085	0.9915	31.02
74.5	87,124	2,525	0.0290	0.9710	30.76
75.5	84,145	6,409	0.0762	0.9238	29.86
76.5	77,735	4,624	0.0595	0.9405	27.59
77.5	73,111	13,135	0.1797	0.8203	25.95
78.5	59,976	7,063	0.1178	0.8822	21.29

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 380 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1929-2019			EXPERIENCE BAND 1931-2019			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
79.5	52,814	914	0.0173	0.9827	18.78	
80.5	51,034	36	0.0007	0.9993	18.45	
81.5	50,432	54	0.0011	0.9989	18.44	
82.5	35,511	7	0.0002	0.9998	18.42	
83.5	30,150	12	0.0004	0.9996	18.42	
84.5	23,552	14	0.0006	0.9994	18.41	
85.5	17,258	11	0.0006	0.9994	18.40	
86.5	14,862	244	0.0164	0.9836	18.39	
87.5	7,595		0.0000	1.0000	18.09	
88.5	106		0.0000	1.0000	18.09	
89.5	42		0.0000	1.0000	18.09	
90.5					18.09	

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 380 SERVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1929-2019

EXPERIENCE BAND 1990-2019

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	131,866,464	3,725	0.0000	1.0000	100.00
0.5	126,452,082	90,853	0.0007	0.9993	100.00
1.5	121,960,440	210,258	0.0017	0.9983	99.93
2.5	119,676,941	252,956	0.0021	0.9979	99.75
3.5	118,237,902	315,831	0.0027	0.9973	99.54
4.5	115,992,980	336,188	0.0029	0.9971	99.28
5.5	113,512,865	351,505	0.0031	0.9969	98.99
6.5	112,117,920	444,286	0.0040	0.9960	98.68
7.5	110,210,880	396,366	0.0036	0.9964	98.29
8.5	107,044,939	427,997	0.0040	0.9960	97.94
9.5	103,339,299	443,820	0.0043	0.9957	97.55
10.5	97,872,806	702,958	0.0072	0.9928	97.13
11.5	91,607,739	691,173	0.0075	0.9925	96.43
12.5	89,544,737	687,581	0.0077	0.9923	95.70
13.5	85,078,825	601,756	0.0071	0.9929	94.97
14.5	79,320,915	552,710	0.0070	0.9930	94.30
15.5	74,696,153	561,430	0.0075	0.9925	93.64
16.5	70,281,986	536,581	0.0076	0.9924	92.93
17.5	66,254,842	518,740	0.0078	0.9922	92.22
18.5	62,817,238	522,401	0.0083	0.9917	91.50
19.5	59,216,803	497,861	0.0084	0.9916	90.74
20.5	55,056,009	478,434	0.0087	0.9913	89.98
21.5	50,881,591	462,631	0.0091	0.9909	89.20
22.5	47,264,194	443,849	0.0094	0.9906	88.39
23.5	43,096,837	448,926	0.0104	0.9896	87.56
24.5	38,434,019	577,638	0.0150	0.9850	86.64
25.5	33,909,122	486,548	0.0143	0.9857	85.34
26.5	30,393,221	411,309	0.0135	0.9865	84.12
27.5	27,380,786	327,862	0.0120	0.9880	82.98
28.5	24,568,346	297,038	0.0121	0.9879	81.99
29.5	21,826,530	321,405	0.0147	0.9853	80.99
30.5	19,489,041	296,799	0.0152	0.9848	79.80
31.5	17,050,058	271,809	0.0159	0.9841	78.59
32.5	14,802,999	288,317	0.0195	0.9805	77.33
33.5	12,967,030	250,176	0.0193	0.9807	75.83
34.5	11,388,894	222,853	0.0196	0.9804	74.36
35.5	10,054,073	240,758	0.0239	0.9761	72.91
36.5	8,893,581	469,992	0.0528	0.9472	71.16
37.5	7,404,047	362,576	0.0490	0.9510	67.40
38.5	6,220,954	341,423	0.0549	0.9451	64.10

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 380 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1929-2019			EXPERIENCE BAND 1990-2019		
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	5,135,717	112,759	0.0220	0.9780	60.58
40.5	4,374,435	111,806	0.0256	0.9744	59.25
41.5	3,815,248	122,125	0.0320	0.9680	57.74
42.5	3,422,703	75,507	0.0221	0.9779	55.89
43.5	3,036,184	42,429	0.0140	0.9860	54.66
44.5	2,726,135	29,814	0.0109	0.9891	53.89
45.5	2,524,937	20,329	0.0081	0.9919	53.30
46.5	2,355,685	31,228	0.0133	0.9867	52.88
47.5	2,067,806	11,133	0.0054	0.9946	52.17
48.5	1,713,811	13,513	0.0079	0.9921	51.89
49.5	1,379,326	9,936	0.0072	0.9928	51.48
50.5	1,076,113	9,909	0.0092	0.9908	51.11
51.5	791,879	4,223	0.0053	0.9947	50.64
52.5	252,780	4,363	0.0173	0.9827	50.37
53.5	195,780	2,553	0.0130	0.9870	49.50
54.5	163,650	5,484	0.0335	0.9665	48.86
55.5	162,112	6,178	0.0381	0.9619	47.22
56.5	137,092	3,687	0.0269	0.9731	45.42
57.5	136,810	1,524	0.0111	0.9889	44.20
58.5	164,545	5,072	0.0308	0.9692	43.71
59.5	158,132	814	0.0051	0.9949	42.36
60.5	155,713	2,128	0.0137	0.9863	42.14
61.5	141,978	1,603	0.0113	0.9887	41.57
62.5	133,777	1,043	0.0078	0.9922	41.10
63.5	128,138	1,033	0.0081	0.9919	40.78
64.5	121,486	5,093	0.0419	0.9581	40.45
65.5	114,772	4,676	0.0407	0.9593	38.75
66.5	109,713	1,629	0.0149	0.9851	37.17
67.5	107,142	888	0.0083	0.9917	36.62
68.5	105,964	227	0.0021	0.9979	36.32
69.5	104,042	6,088	0.0585	0.9415	36.24
70.5	97,551	2,637	0.0270	0.9730	34.12
71.5	93,978	2,928	0.0312	0.9688	33.20
72.5	90,560	2,079	0.0230	0.9770	32.16
73.5	88,007	748	0.0085	0.9915	31.42
74.5	87,124	2,525	0.0290	0.9710	31.16
75.5	84,145	6,409	0.0762	0.9238	30.25
76.5	77,735	4,624	0.0595	0.9405	27.95
77.5	73,111	13,135	0.1797	0.8203	26.29
78.5	59,976	7,063	0.1178	0.8822	21.56

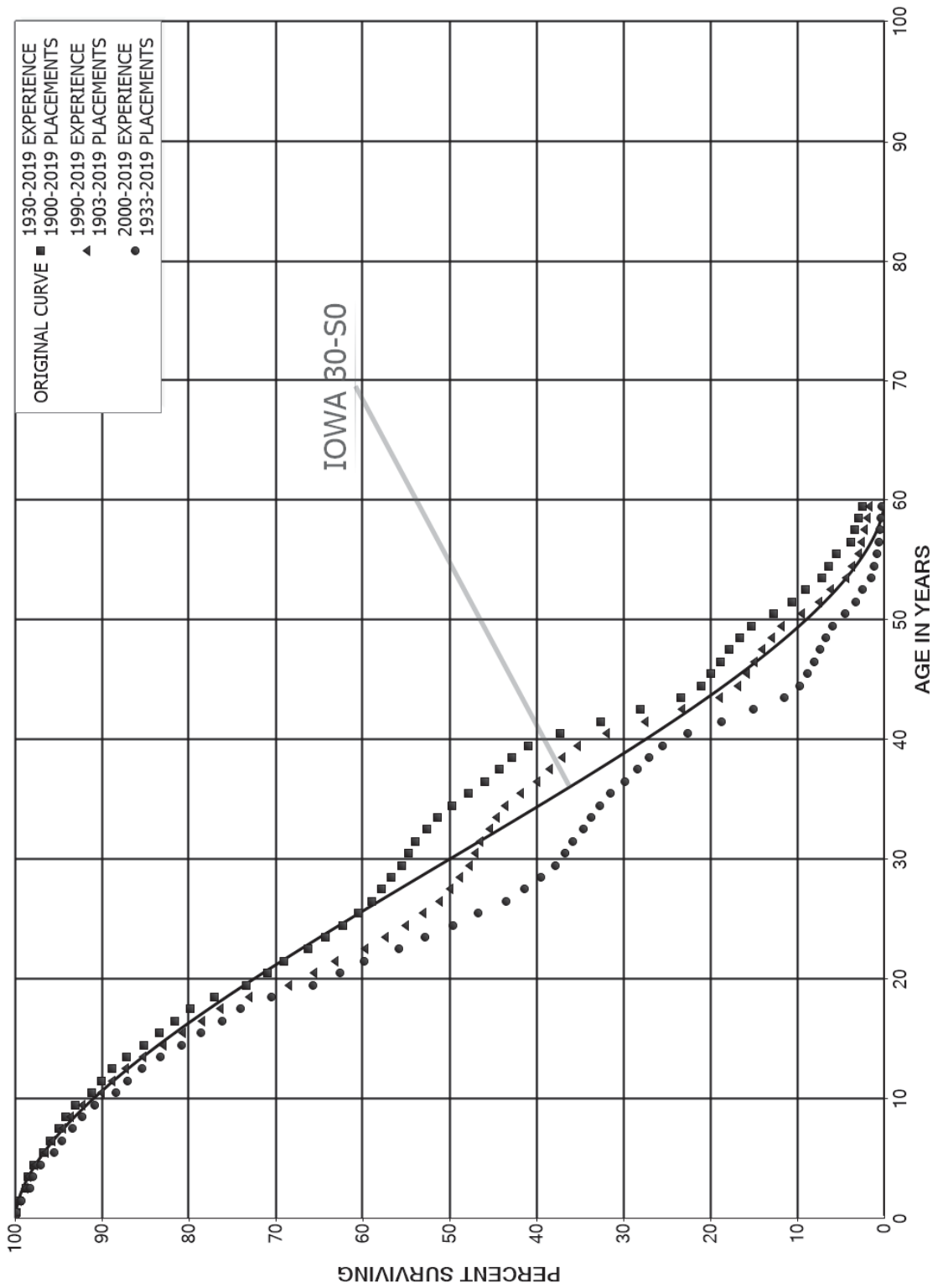
AMEREN MISSOURI
GAS DIVISION

ACCOUNT 380 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1929-2019			EXPERIENCE BAND 1990-2019			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
79.5	52,814	914	0.0173	0.9827	19.02	
80.5	51,034	36	0.0007	0.9993	18.70	
81.5	50,432	54	0.0011	0.9989	18.68	
82.5	35,511	7	0.0002	0.9998	18.66	
83.5	30,150	12	0.0004	0.9996	18.66	
84.5	23,552	14	0.0006	0.9994	18.65	
85.5	17,258	11	0.0006	0.9994	18.64	
86.5	14,862	244	0.0164	0.9836	18.63	
87.5	7,595		0.0000	1.0000	18.32	
88.5	106		0.0000	1.0000	18.32	
89.5	42		0.0000	1.0000	18.32	
90.5					18.32	

AMEREN MISSOURI
 GAS DIVISION
 ACCOUNT 381 METERS
 ORIGINAL AND SMOOTH SURVIVOR CURVES



AMEREN MISSOURI
GAS DIVISION

ACCOUNT 381 METERS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1900-2019

EXPERIENCE BAND 1930-2019

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	31,564,426	43,190	0.0014	0.9986	100.00
0.5	30,921,032	120,864	0.0039	0.9961	99.86
1.5	30,130,477	210,578	0.0070	0.9930	99.47
2.5	29,148,524	78,594	0.0027	0.9973	98.78
3.5	28,854,302	204,413	0.0071	0.9929	98.51
4.5	27,359,872	300,757	0.0110	0.9890	97.81
5.5	26,092,415	209,780	0.0080	0.9920	96.74
6.5	25,203,862	266,486	0.0106	0.9894	95.96
7.5	23,939,516	203,403	0.0085	0.9915	94.95
8.5	23,898,485	282,304	0.0118	0.9882	94.14
9.5	23,219,899	467,855	0.0201	0.9799	93.03
10.5	22,057,921	262,305	0.0119	0.9881	91.15
11.5	20,778,668	289,937	0.0140	0.9860	90.07
12.5	20,094,395	380,830	0.0190	0.9810	88.81
13.5	18,675,993	420,358	0.0225	0.9775	87.13
14.5	17,500,706	361,734	0.0207	0.9793	85.17
15.5	16,627,449	366,064	0.0220	0.9780	83.41
16.5	15,588,383	324,698	0.0208	0.9792	81.57
17.5	14,744,762	513,738	0.0348	0.9652	79.87
18.5	13,238,976	634,325	0.0479	0.9521	77.09
19.5	11,435,700	374,321	0.0327	0.9673	73.40
20.5	9,876,306	270,356	0.0274	0.9726	70.99
21.5	9,000,204	363,884	0.0404	0.9596	69.05
22.5	8,245,098	249,691	0.0303	0.9697	66.26
23.5	7,444,417	231,516	0.0311	0.9689	64.25
24.5	6,308,178	172,858	0.0274	0.9726	62.25
25.5	5,731,114	148,713	0.0259	0.9741	60.55
26.5	5,348,891	104,127	0.0195	0.9805	58.98
27.5	5,022,795	95,412	0.0190	0.9810	57.83
28.5	4,722,952	101,658	0.0215	0.9785	56.73
29.5	4,457,773	63,674	0.0143	0.9857	55.51
30.5	4,315,079	60,377	0.0140	0.9860	54.72
31.5	4,174,370	100,543	0.0241	0.9759	53.95
32.5	4,033,624	95,241	0.0236	0.9764	52.65
33.5	3,823,958	121,925	0.0319	0.9681	51.41
34.5	3,693,114	143,523	0.0389	0.9611	49.77
35.5	3,540,722	139,385	0.0394	0.9606	47.83
36.5	3,350,227	120,616	0.0360	0.9640	45.95
37.5	3,161,993	107,288	0.0339	0.9661	44.30
38.5	2,965,058	127,240	0.0429	0.9571	42.79

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 381 METERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1900-2019			EXPERIENCE BAND 1930-2019		
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	2,800,367	247,778	0.0885	0.9115	40.96
40.5	2,504,686	313,577	0.1252	0.8748	37.33
41.5	2,177,761	306,379	0.1407	0.8593	32.66
42.5	1,843,966	303,920	0.1648	0.8352	28.06
43.5	1,535,204	154,259	0.1005	0.8995	23.44
44.5	1,380,491	76,635	0.0555	0.9445	21.08
45.5	1,299,099	72,852	0.0561	0.9439	19.91
46.5	1,199,667	61,473	0.0512	0.9488	18.80
47.5	1,088,716	76,108	0.0699	0.9301	17.83
48.5	950,188	72,610	0.0764	0.9236	16.59
49.5	820,933	140,708	0.1714	0.8286	15.32
50.5	618,642	103,419	0.1672	0.8328	12.69
51.5	430,943	61,756	0.1433	0.8567	10.57
52.5	348,337	70,440	0.2022	0.7978	9.06
53.5	271,508	29,642	0.1092	0.8908	7.23
54.5	238,493	33,379	0.1400	0.8600	6.44
55.5	203,531	62,933	0.3092	0.6908	5.54
56.5	133,100	13,923	0.1046	0.8954	3.82
57.5	112,887	15,291	0.1355	0.8645	3.42
58.5	92,397	14,033	0.1519	0.8481	2.96
59.5	76,899	19,054	0.2478	0.7522	2.51
60.5	57,814	10,153	0.1756	0.8244	1.89
61.5	46,897	7,494	0.1598	0.8402	1.56
62.5	37,912	12,618	0.3328	0.6672	1.31
63.5	23,261	9,050	0.3891	0.6109	0.87
64.5	13,243	7,412	0.5597	0.4403	0.53
65.5	5,831	1,127	0.1933	0.8067	0.23
66.5	4,704	1,173	0.2494	0.7506	0.19
67.5	3,531	1,084	0.3071	0.6929	0.14
68.5	2,447	744	0.3039	0.6961	0.10
69.5	1,703	14	0.0080	0.9920	0.07
70.5	1,690	12	0.0073	0.9927	0.07
71.5	1,677		0.0000	1.0000	0.07
72.5	1,677		0.0000	1.0000	0.07
73.5	1,599	12	0.0077	0.9923	0.07
74.5	1,587		0.0000	1.0000	0.07
75.5	1,587		0.0000	1.0000	0.07
76.5	1,587	144	0.0907	0.9093	0.07
77.5	1,132	219	0.1935	0.8065	0.06
78.5	913	152	0.1662	0.8338	0.05

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 381 METERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1900-2019			EXPERIENCE BAND 1930-2019			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
79.5	761	7	0.0092	0.9908	0.04	
80.5	754	172	0.2281	0.7719	0.04	
81.5	582	373	0.6409	0.3591	0.03	
82.5	209		0.0000	1.0000	0.01	
83.5	209	43	0.2057	0.7943	0.01	
84.5	166	115	0.6928	0.3072	0.01	
85.5	51		0.0000	1.0000	0.00	
86.5	51	28	0.5490	0.4510	0.00	
87.5	23		0.0000	1.0000	0.00	
88.5	23		0.0000	1.0000	0.00	
89.5	23	11	0.4783	0.5217	0.00	
90.5	12	6	0.5000	0.5000	0.00	
91.5	6		0.0000	1.0000	0.00	
92.5	6	6	1.0000		0.00	
93.5						

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 381 METERS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1903-2019

EXPERIENCE BAND 1990-2019

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	25,423,285	25,873	0.0010	0.9990	100.00
0.5	25,179,957	101,585	0.0040	0.9960	99.90
1.5	24,834,771	201,483	0.0081	0.9919	99.50
2.5	24,045,420	66,663	0.0028	0.9972	98.69
3.5	23,979,593	190,244	0.0079	0.9921	98.41
4.5	22,717,221	287,225	0.0126	0.9874	97.63
5.5	21,519,850	182,413	0.0085	0.9915	96.40
6.5	20,804,367	255,500	0.0123	0.9877	95.58
7.5	19,697,413	195,582	0.0099	0.9901	94.41
8.5	19,884,351	278,289	0.0140	0.9860	93.47
9.5	19,300,726	466,053	0.0241	0.9759	92.16
10.5	18,240,006	255,703	0.0140	0.9860	89.94
11.5	17,002,415	288,552	0.0170	0.9830	88.68
12.5	16,376,545	378,826	0.0231	0.9769	87.17
13.5	14,985,567	416,604	0.0278	0.9722	85.15
14.5	13,842,504	359,536	0.0260	0.9740	82.79
15.5	12,989,313	360,445	0.0277	0.9723	80.64
16.5	12,036,389	321,342	0.0267	0.9733	78.40
17.5	11,354,992	507,925	0.0447	0.9553	76.31
18.5	10,103,482	623,361	0.0617	0.9383	72.89
19.5	8,520,855	365,403	0.0429	0.9571	68.40
20.5	7,186,404	266,297	0.0371	0.9629	65.46
21.5	6,607,929	358,502	0.0543	0.9457	63.04
22.5	6,092,157	243,605	0.0400	0.9600	59.62
23.5	5,556,795	227,050	0.0409	0.9591	57.23
24.5	4,584,016	164,062	0.0358	0.9642	54.89
25.5	4,133,624	145,018	0.0351	0.9649	52.93
26.5	3,887,982	93,467	0.0240	0.9760	51.07
27.5	3,661,857	80,538	0.0220	0.9780	49.85
28.5	3,464,100	77,424	0.0224	0.9776	48.75
29.5	3,310,659	46,726	0.0141	0.9859	47.66
30.5	3,279,350	43,165	0.0132	0.9868	46.99
31.5	3,221,823	74,075	0.0230	0.9770	46.37
32.5	3,189,811	53,515	0.0168	0.9832	45.30
33.5	3,109,531	69,615	0.0224	0.9776	44.54
34.5	3,048,828	127,290	0.0418	0.9582	43.55
35.5	2,938,644	131,899	0.0449	0.9551	41.73
36.5	2,811,588	106,529	0.0379	0.9621	39.85
37.5	2,721,875	100,911	0.0371	0.9629	38.34
38.5	2,577,156	121,225	0.0470	0.9530	36.92

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 381 METERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1903-2019			EXPERIENCE BAND 1990-2019		
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	2,486,926	238,915	0.0961	0.9039	35.19
40.5	2,233,534	310,224	0.1389	0.8611	31.81
41.5	1,943,369	301,642	0.1552	0.8448	27.39
42.5	1,645,183	303,238	0.1843	0.8157	23.14
43.5	1,346,632	151,035	0.1122	0.8878	18.87
44.5	1,201,765	72,948	0.0607	0.9393	16.76
45.5	1,126,670	68,337	0.0607	0.9393	15.74
46.5	1,032,260	58,494	0.0567	0.9433	14.78
47.5	926,462	72,548	0.0783	0.9217	13.95
48.5	799,991	69,166	0.0865	0.9135	12.85
49.5	682,367	137,296	0.2012	0.7988	11.74
50.5	492,127	102,107	0.2075	0.7925	9.38
51.5	311,599	58,284	0.1870	0.8130	7.43
52.5	238,208	68,863	0.2891	0.7109	6.04
53.5	169,574	27,371	0.1614	0.8386	4.30
54.5	147,434	29,520	0.2002	0.7998	3.60
55.5	120,484	16,451	0.1365	0.8635	2.88
56.5	99,416	13,094	0.1317	0.8683	2.49
57.5	85,183	10,837	0.1272	0.8728	2.16
58.5	90,733	13,970	0.1540	0.8460	1.89
59.5	75,297	19,054	0.2530	0.7470	1.60
60.5	56,213	9,992	0.1778	0.8222	1.19
61.5	45,456	7,431	0.1635	0.8365	0.98
62.5	36,534	12,618	0.3454	0.6546	0.82
63.5	21,883	9,022	0.4123	0.5877	0.54
64.5	11,893	7,400	0.6222	0.3778	0.32
65.5	4,493	1,127	0.2508	0.7492	0.12
66.5	3,367	1,158	0.3440	0.6560	0.09
67.5	2,209	1,084	0.4910	0.5090	0.06
68.5	1,124	697	0.6197	0.3803	0.03
69.5	860	14	0.0158	0.9842	0.01
70.5	929	12	0.0133	0.9867	0.01
71.5	916		0.0000	1.0000	0.01
72.5	923		0.0000	1.0000	0.01
73.5	860	12	0.0142	0.9858	0.01
74.5	1,084		0.0000	1.0000	0.01
75.5	1,378		0.0000	1.0000	0.01
76.5	1,378	144	0.1045	0.8955	0.01
77.5	966	219	0.2268	0.7732	0.01
78.5	862	152	0.1760	0.8240	0.01

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 381 METERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1903-2019			EXPERIENCE BAND 1990-2019			
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL	
79.5	710	7	0.0099	0.9901	0.01	
80.5	731	172	0.2353	0.7647	0.01	
81.5	559	373	0.6673	0.3327	0.00	
82.5	186		0.0000	1.0000	0.00	
83.5	197	43	0.2183	0.7817	0.00	
84.5	160	115	0.7188	0.2813	0.00	
85.5	45		0.0000	1.0000	0.00	
86.5	51	28	0.5490	0.4510	0.00	
87.5	23		0.0000	1.0000	0.00	
88.5	23		0.0000	1.0000	0.00	
89.5	23	11	0.4783	0.5217	0.00	
90.5	12	6	0.5000	0.5000	0.00	
91.5	6		0.0000	1.0000	0.00	
92.5	6	6	1.0000		0.00	
93.5						

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 381 METERS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1933-2019

EXPERIENCE BAND 2000-2019

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	18,260,068	25,873	0.0014	0.9986	100.00
0.5	19,333,654	101,585	0.0053	0.9947	99.86
1.5	19,409,837	201,483	0.0104	0.9896	99.33
2.5	19,238,974	66,663	0.0035	0.9965	98.30
3.5	19,765,056	190,244	0.0096	0.9904	97.96
4.5	18,950,850	285,146	0.0150	0.9850	97.02
5.5	18,368,785	179,363	0.0098	0.9902	95.56
6.5	17,953,977	239,272	0.0133	0.9867	94.63
7.5	17,152,482	195,582	0.0114	0.9886	93.36
8.5	17,561,609	278,289	0.0158	0.9842	92.30
9.5	17,222,774	461,586	0.0268	0.9732	90.84
10.5	16,449,486	253,010	0.0154	0.9846	88.40
11.5	15,602,847	288,552	0.0185	0.9815	87.04
12.5	15,101,639	378,748	0.0251	0.9749	85.43
13.5	13,903,922	414,338	0.0298	0.9702	83.29
14.5	12,948,603	359,536	0.0278	0.9722	80.81
15.5	12,118,484	360,242	0.0297	0.9703	78.57
16.5	11,231,454	321,342	0.0286	0.9714	76.23
17.5	10,537,808	507,925	0.0482	0.9518	74.05
18.5	9,258,187	621,976	0.0672	0.9328	70.48
19.5	7,558,388	365,403	0.0483	0.9517	65.74
20.5	6,107,614	266,297	0.0436	0.9564	62.57
21.5	5,270,631	357,464	0.0678	0.9322	59.84
22.5	4,578,967	243,605	0.0532	0.9468	55.78
23.5	3,810,176	227,050	0.0596	0.9404	52.81
24.5	2,707,140	162,849	0.0602	0.9398	49.67
25.5	2,158,279	145,018	0.0672	0.9328	46.68
26.5	1,859,231	90,092	0.0485	0.9515	43.54
27.5	1,706,081	78,206	0.0458	0.9542	41.43
28.5	1,672,022	72,931	0.0436	0.9564	39.53
29.5	1,640,085	46,726	0.0285	0.9715	37.81
30.5	1,730,404	41,157	0.0238	0.9762	36.73
31.5	1,899,110	68,492	0.0361	0.9639	35.86
32.5	2,021,038	50,462	0.0250	0.9750	34.56
33.5	2,113,992	63,516	0.0300	0.9700	33.70
34.5	2,197,750	78,322	0.0356	0.9644	32.69
35.5	2,223,902	119,272	0.0536	0.9464	31.52
36.5	2,169,126	101,835	0.0469	0.9531	29.83
37.5	2,084,193	100,722	0.0483	0.9517	28.43
38.5	1,977,046	111,679	0.0565	0.9435	27.06

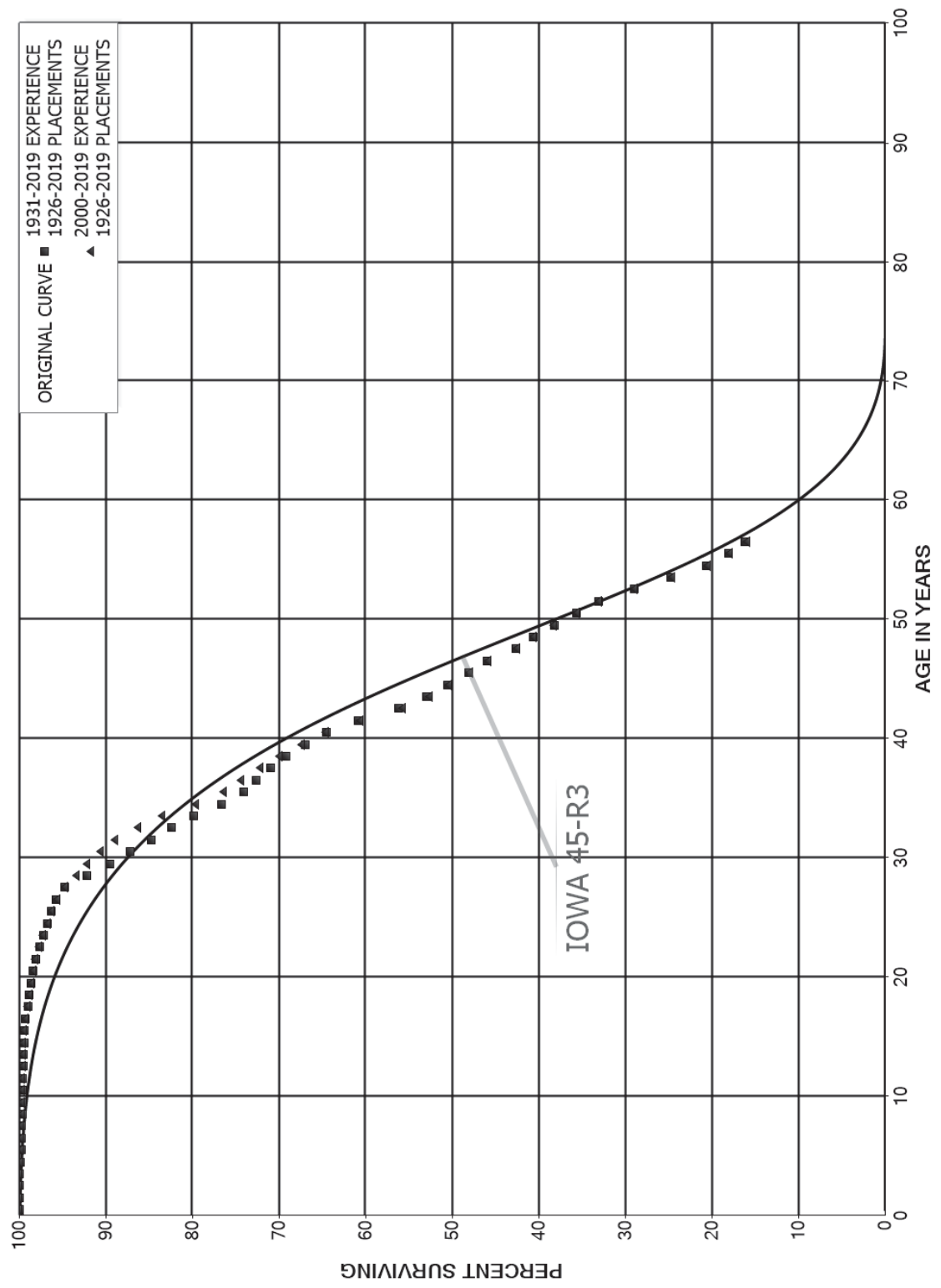
AMEREN MISSOURI
GAS DIVISION

ACCOUNT 381 METERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1933-2019			EXPERIENCE BAND 2000-2019		
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	1,913,266	216,017	0.1129	0.8871	25.53
40.5	1,729,640	299,452	0.1731	0.8269	22.65
41.5	1,472,341	284,533	0.1933	0.8067	18.73
42.5	1,217,766	289,042	0.2374	0.7626	15.11
43.5	954,703	150,154	0.1573	0.8427	11.52
44.5	815,965	72,039	0.0883	0.9117	9.71
45.5	764,515	66,362	0.0868	0.9132	8.85
46.5	726,364	57,551	0.0792	0.9208	8.08
47.5	699,114	71,133	0.1017	0.8983	7.44
48.5	609,802	65,994	0.1082	0.8918	6.69
49.5	549,069	137,172	0.2498	0.7502	5.96
50.5	383,166	101,809	0.2657	0.7343	4.47
51.5	229,868	58,284	0.2536	0.7464	3.28
52.5	180,172	68,727	0.3815	0.6185	2.45
53.5	114,118	22,794	0.1997	0.8003	1.52
54.5	89,996	27,244	0.3027	0.6973	1.21
55.5	61,654	13,466	0.2184	0.7816	0.85
56.5	40,762	11,345	0.2783	0.7217	0.66
57.5	23,746	4,391	0.1849	0.8151	0.48
58.5	16,581	3,082	0.1859	0.8141	0.39
59.5	13,681	1,734	0.1267	0.8733	0.32
60.5	14,402	4,080	0.2833	0.7167	0.28
61.5	10,255	785	0.0766	0.9234	0.20
62.5	8,062	405	0.0502	0.9498	0.18
63.5	5,687	102	0.0180	0.9820	0.17
64.5	4,617	179	0.0388	0.9612	0.17
65.5	4,438	1,084	0.2442	0.7558	0.16
66.5	3,367	1,158	0.3440	0.6560	0.12
67.5	2,209	1,084	0.4910	0.5090	0.08
68.5	1,124	697	0.6197	0.3803	0.04
69.5	428	14	0.0317	0.9683	0.02
70.5	414	12	0.0297	0.9703	0.02
71.5	402		0.0000	1.0000	0.01
72.5	402		0.0000	1.0000	0.01
73.5	324	12	0.0378	0.9622	0.01
74.5	312		0.0000	1.0000	0.01
75.5	312		0.0000	1.0000	0.01
76.5	312		0.0000	1.0000	0.01
77.5					0.01

AMEREN MISSOURI
 GAS DIVISION
 ACCOUNT 383 HOUSE REGULATORS
 ORIGINAL AND SMOOTH SURVIVOR CURVES



AMEREN MISSOURI
GAS DIVISION

ACCOUNT 383 HOUSE REGULATORS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1926-2019

EXPERIENCE BAND 1931-2019

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	19,439,647		0.0000	1.0000	100.00
0.5	18,431,015	4,357	0.0002	0.9998	100.00
1.5	17,178,393	2,425	0.0001	0.9999	99.98
2.5	16,393,439	7,145	0.0004	0.9996	99.96
3.5	15,559,507	5,889	0.0004	0.9996	99.92
4.5	14,922,361	20,277	0.0014	0.9986	99.88
5.5	14,715,502	2,602	0.0002	0.9998	99.75
6.5	14,599,428	2,065	0.0001	0.9999	99.73
7.5	11,876,761	8,762	0.0007	0.9993	99.71
8.5	11,906,793	286	0.0000	1.0000	99.64
9.5	11,716,527	5,992	0.0005	0.9995	99.64
10.5	11,155,173	1,065	0.0001	0.9999	99.59
11.5	10,563,792	2,424	0.0002	0.9998	99.58
12.5	10,419,685	5,262	0.0005	0.9995	99.55
13.5	9,916,778	5,615	0.0006	0.9994	99.50
14.5	9,179,291	7,050	0.0008	0.9992	99.45
15.5	8,982,818	11,347	0.0013	0.9987	99.37
16.5	8,941,531	24,743	0.0028	0.9972	99.25
17.5	8,760,415	10,110	0.0012	0.9988	98.97
18.5	8,329,398	21,463	0.0026	0.9974	98.86
19.5	7,865,131	19,544	0.0025	0.9975	98.60
20.5	7,305,173	22,964	0.0031	0.9969	98.36
21.5	6,674,178	26,892	0.0040	0.9960	98.05
22.5	5,867,622	29,557	0.0050	0.9950	97.65
23.5	4,630,296	22,183	0.0048	0.9952	97.16
24.5	4,211,388	17,770	0.0042	0.9958	96.70
25.5	3,289,413	18,678	0.0057	0.9943	96.29
26.5	2,906,157	29,606	0.0102	0.9898	95.74
27.5	2,627,353	70,844	0.0270	0.9730	94.77
28.5	2,385,763	68,598	0.0288	0.9712	92.21
29.5	1,974,841	52,499	0.0266	0.9734	89.56
30.5	1,753,507	49,567	0.0283	0.9717	87.18
31.5	1,615,573	44,903	0.0278	0.9722	84.71
32.5	1,455,928	44,774	0.0308	0.9692	82.36
33.5	1,302,210	52,991	0.0407	0.9593	79.83
34.5	1,148,870	37,862	0.0330	0.9670	76.58
35.5	1,044,828	20,572	0.0197	0.9803	74.05
36.5	960,864	22,087	0.0230	0.9770	72.60
37.5	897,760	21,929	0.0244	0.9756	70.93
38.5	836,574	26,464	0.0316	0.9684	69.19

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 383 HOUSE REGULATORS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1926-2019			EXPERIENCE BAND 1931-2019		
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	766,209	28,066	0.0366	0.9634	67.01
40.5	701,888	40,858	0.0582	0.9418	64.55
41.5	641,831	49,337	0.0769	0.9231	60.79
42.5	598,604	33,674	0.0563	0.9437	56.12
43.5	547,055	25,090	0.0459	0.9541	52.96
44.5	501,840	24,919	0.0497	0.9503	50.53
45.5	481,678	21,292	0.0442	0.9558	48.03
46.5	448,837	32,116	0.0716	0.9284	45.90
47.5	394,448	18,136	0.0460	0.9540	42.62
48.5	390,247	23,426	0.0600	0.9400	40.66
49.5	343,125	23,559	0.0687	0.9313	38.22
50.5	291,109	20,979	0.0721	0.9279	35.59
51.5	235,300	28,654	0.1218	0.8782	33.03
52.5	188,555	28,185	0.1495	0.8505	29.01
53.5	158,782	26,000	0.1637	0.8363	24.67
54.5	123,495	15,136	0.1226	0.8774	20.63
55.5	99,377	10,747	0.1081	0.8919	18.10
56.5	74,424	7,214	0.0969	0.9031	16.14
57.5	62,606	6,721	0.1073	0.8927	14.58
58.5	47,546	2,403	0.0506	0.9494	13.01
59.5	39,547	1,924	0.0487	0.9513	12.36
60.5	29,154	2,901	0.0995	0.9005	11.76
61.5	20,581	852	0.0414	0.9586	10.59
62.5	11,833	5	0.0004	0.9996	10.15
63.5	5,714	31	0.0054	0.9946	10.14
64.5	3,470	90	0.0260	0.9740	10.09
65.5	2,306	24	0.0104	0.9896	9.83
66.5	2,282		0.0000	1.0000	9.72
67.5	606	71	0.1170	0.8830	9.72
68.5	535		0.0000	1.0000	8.59
69.5	297		0.0000	1.0000	8.59
70.5	31		0.0000	1.0000	8.59
71.5	31		0.0000	1.0000	8.59
72.5	31		0.0000	1.0000	8.59
73.5	31		0.0000	1.0000	8.59
74.5	31		0.0000	1.0000	8.59
75.5	31		0.0000	1.0000	8.59
76.5	31		0.0000	1.0000	8.59
77.5	31		0.0000	1.0000	8.59
78.5	31		0.0000	1.0000	8.59

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 383 HOUSE REGULATORS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1926-2019			EXPERIENCE BAND 1931-2019		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	31		0.0000	1.0000	8.59
80.5	31		0.0000	1.0000	8.59
81.5	31		0.0000	1.0000	8.59
82.5	31		0.0000	1.0000	8.59
83.5	31		0.0000	1.0000	8.59
84.5	31		0.0000	1.0000	8.59
85.5	31		0.0000	1.0000	8.59
86.5	31		0.0000	1.0000	8.59
87.5					8.59

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 383 HOUSE REGULATORS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1926-2019

EXPERIENCE BAND 2000-2019

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	12,185,472		0.0000	1.0000	100.00
0.5	11,651,811	2,779	0.0002	0.9998	100.00
1.5	10,928,653	2,081	0.0002	0.9998	99.98
2.5	10,823,836	6,879	0.0006	0.9994	99.96
3.5	11,165,643	5,088	0.0005	0.9995	99.89
4.5	10,915,855	12,052	0.0011	0.9989	99.85
5.5	11,517,027	466	0.0000	1.0000	99.74
6.5	11,770,198	1,474	0.0001	0.9999	99.73
7.5	9,304,961	8,439	0.0009	0.9991	99.72
8.5	9,490,653	203	0.0000	1.0000	99.63
9.5	9,652,092	5,632	0.0006	0.9994	99.63
10.5	9,265,587	802	0.0001	0.9999	99.57
11.5	8,750,957	1,823	0.0002	0.9998	99.56
12.5	8,730,508	3,339	0.0004	0.9996	99.54
13.5	8,336,456	4,387	0.0005	0.9995	99.50
14.5	7,703,869	6,802	0.0009	0.9991	99.45
15.5	7,579,620	10,602	0.0014	0.9986	99.36
16.5	7,607,247	24,468	0.0032	0.9968	99.22
17.5	7,500,048	9,937	0.0013	0.9987	98.90
18.5	7,143,865	20,745	0.0029	0.9971	98.77
19.5	6,763,588	16,056	0.0024	0.9976	98.49
20.5	6,267,581	15,481	0.0025	0.9975	98.25
21.5	5,678,592	21,869	0.0039	0.9961	98.01
22.5	4,903,388	24,988	0.0051	0.9949	97.63
23.5	3,701,669	19,480	0.0053	0.9947	97.14
24.5	3,316,408	15,725	0.0047	0.9953	96.62
25.5	2,415,829	16,983	0.0070	0.9930	96.17
26.5	2,055,227	19,688	0.0096	0.9904	95.49
27.5	1,844,050	24,926	0.0135	0.9865	94.58
28.5	1,719,718	22,094	0.0128	0.9872	93.30
29.5	1,421,093	24,030	0.0169	0.9831	92.10
30.5	1,282,634	24,056	0.0188	0.9812	90.54
31.5	1,217,722	35,994	0.0296	0.9704	88.84
32.5	1,106,167	36,295	0.0328	0.9672	86.22
33.5	994,292	46,010	0.0463	0.9537	83.39
34.5	864,360	35,163	0.0407	0.9593	79.53
35.5	778,919	20,256	0.0260	0.9740	76.29
36.5	724,178	21,498	0.0297	0.9703	74.31
37.5	679,987	21,294	0.0313	0.9687	72.10
38.5	641,939	23,734	0.0370	0.9630	69.85

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 383 HOUSE REGULATORS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1926-2019			EXPERIENCE BAND 2000-2019		
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	590,358	24,441	0.0414	0.9586	67.26
40.5	542,667	33,149	0.0611	0.9389	64.48
41.5	506,575	40,952	0.0808	0.9192	60.54
42.5	490,183	27,277	0.0556	0.9444	55.65
43.5	463,441	20,283	0.0438	0.9562	52.55
44.5	436,920	20,734	0.0475	0.9525	50.25
45.5	432,839	19,198	0.0444	0.9556	47.87
46.5	413,382	30,145	0.0729	0.9271	45.74
47.5	373,419	16,785	0.0449	0.9551	42.41
48.5	373,670	21,902	0.0586	0.9414	40.50
49.5	333,922	22,654	0.0678	0.9322	38.13
50.5	285,133	20,775	0.0729	0.9271	35.54
51.5	229,900	28,402	0.1235	0.8765	32.95
52.5	184,004	28,078	0.1526	0.8474	28.88
53.5	154,339	25,773	0.1670	0.8330	24.47
54.5	119,278	15,001	0.1258	0.8742	20.39
55.5	95,295	10,555	0.1108	0.8892	17.82
56.5	70,534	6,952	0.0986	0.9014	15.85
57.5	58,978	6,596	0.1118	0.8882	14.29
58.5	44,043	2,251	0.0511	0.9489	12.69
59.5	36,196	1,848	0.0511	0.9489	12.04
60.5	25,879	417	0.0161	0.9839	11.43
61.5	19,791	313	0.0158	0.9842	11.24
62.5	11,581		0.0000	1.0000	11.06
63.5	5,467		0.0000	1.0000	11.06
64.5	3,255		0.0000	1.0000	11.06
65.5	2,181		0.0000	1.0000	11.06
66.5	2,181		0.0000	1.0000	11.06
67.5	535		0.0000	1.0000	11.06
68.5	535		0.0000	1.0000	11.06
69.5	297		0.0000	1.0000	11.06
70.5	31		0.0000	1.0000	11.06
71.5	31		0.0000	1.0000	11.06
72.5	31		0.0000	1.0000	11.06
73.5	31		0.0000	1.0000	11.06
74.5	31		0.0000	1.0000	11.06
75.5	31		0.0000	1.0000	11.06
76.5	31		0.0000	1.0000	11.06
77.5	31		0.0000	1.0000	11.06
78.5	31		0.0000	1.0000	11.06

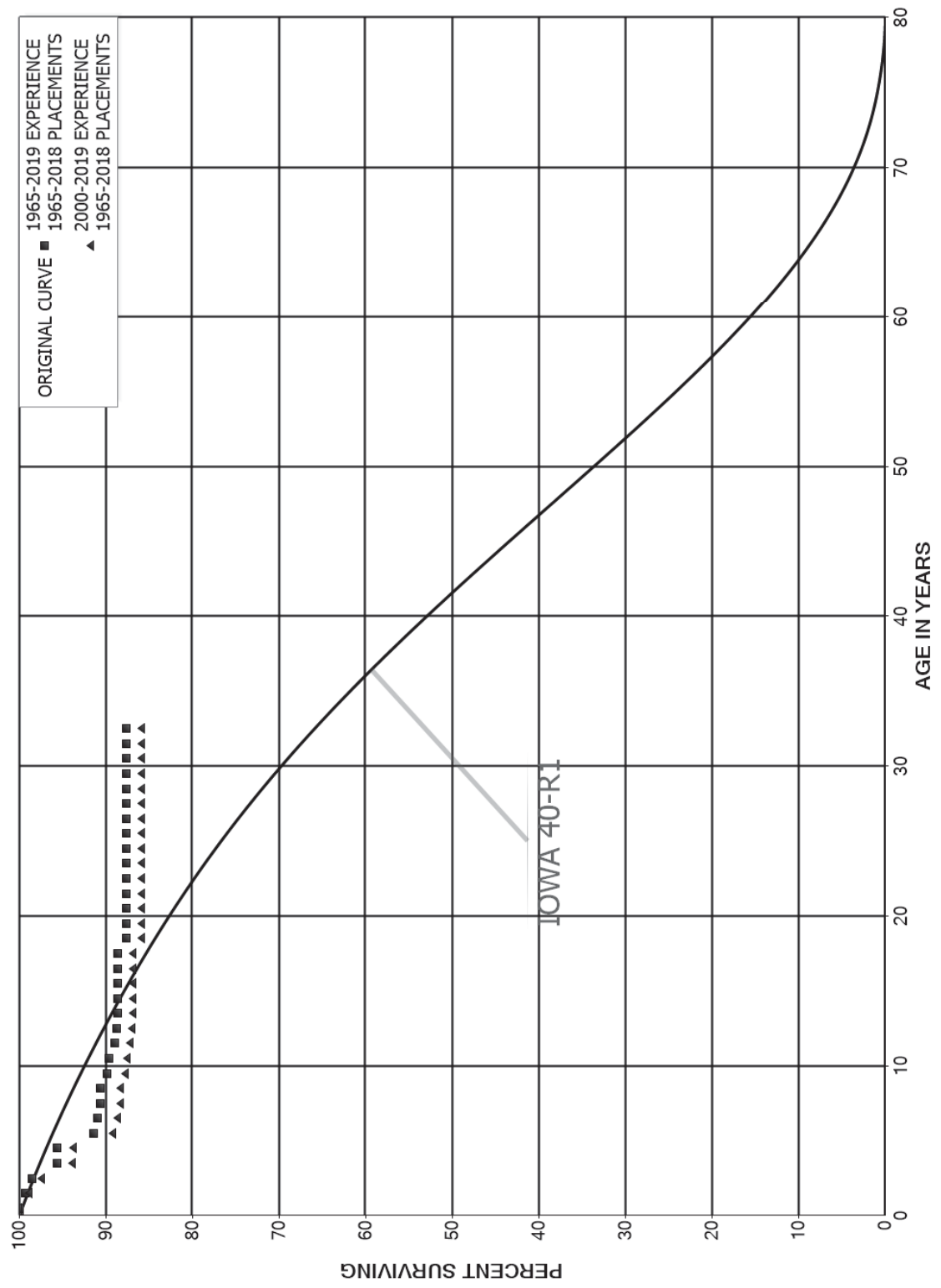
AMEREN MISSOURI
GAS DIVISION

ACCOUNT 383 HOUSE REGULATORS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1926-2019			EXPERIENCE BAND 2000-2019		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	31		0.0000	1.0000	11.06
80.5	31		0.0000	1.0000	11.06
81.5	31		0.0000	1.0000	11.06
82.5	31		0.0000	1.0000	11.06
83.5	31		0.0000	1.0000	11.06
84.5	31		0.0000	1.0000	11.06
85.5	31		0.0000	1.0000	11.06
86.5	31		0.0000	1.0000	11.06
87.5					11.06

AMEREN MISSOURI
 GAS DIVISION
 ACCOUNT 385 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT
 ORIGINAL AND SMOOTH SURVIVOR CURVES



AMEREN MISSOURI
GAS DIVISION

ACCOUNT 385 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1965-2018

EXPERIENCE BAND 1965-2019

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	1,840,999		0.0000	1.0000	100.00
0.5	1,812,633	12,647	0.0070	0.9930	100.00
1.5	1,813,613	15,548	0.0086	0.9914	99.30
2.5	1,787,311	51,492	0.0288	0.9712	98.45
3.5	1,626,206	585	0.0004	0.9996	95.61
4.5	1,596,713	69,344	0.0434	0.9566	95.58
5.5	1,514,757	8,515	0.0056	0.9944	91.43
6.5	1,463,873	4,559	0.0031	0.9969	90.92
7.5	1,249,786		0.0000	1.0000	90.63
8.5	1,221,151	10,186	0.0083	0.9917	90.63
9.5	1,164,218	3,565	0.0031	0.9969	89.88
10.5	1,104,786	8,553	0.0077	0.9923	89.60
11.5	1,072,784	2,694	0.0025	0.9975	88.91
12.5	1,051,175	649	0.0006	0.9994	88.68
13.5	967,945		0.0000	1.0000	88.63
14.5	938,392	2	0.0000	1.0000	88.63
15.5	922,908	589	0.0006	0.9994	88.63
16.5	887,874		0.0000	1.0000	88.57
17.5	869,173	9,480	0.0109	0.9891	88.57
18.5	769,463		0.0000	1.0000	87.61
19.5	762,671		0.0000	1.0000	87.61
20.5	747,967		0.0000	1.0000	87.61
21.5	625,694		0.0000	1.0000	87.61
22.5	380,384		0.0000	1.0000	87.61
23.5	181,562		0.0000	1.0000	87.61
24.5	135,866		0.0000	1.0000	87.61
25.5	115,372		0.0000	1.0000	87.61
26.5	95,226		0.0000	1.0000	87.61
27.5	70,948		0.0000	1.0000	87.61
28.5	53,218		0.0000	1.0000	87.61
29.5	42,192		0.0000	1.0000	87.61
30.5	42,192		0.0000	1.0000	87.61
31.5	34,886		0.0000	1.0000	87.61
32.5	34,010		0.0000	1.0000	87.61
33.5	28,063		0.0000	1.0000	87.61
34.5	23,211		0.0000	1.0000	87.61
35.5	22,624		0.0000	1.0000	87.61
36.5	22,624		0.0000	1.0000	87.61
37.5	22,503		0.0000	1.0000	87.61
38.5	22,503		0.0000	1.0000	87.61

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 385 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1965-2018			EXPERIENCE BAND 1965-2019		
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	22,503		0.0000	1.0000	87.61
40.5	22,503		0.0000	1.0000	87.61
41.5	19,653		0.0000	1.0000	87.61
42.5	19,653		0.0000	1.0000	87.61
43.5	15,964		0.0000	1.0000	87.61
44.5	9,440		0.0000	1.0000	87.61
45.5	9,440		0.0000	1.0000	87.61
46.5	9,440		0.0000	1.0000	87.61
47.5	9,440		0.0000	1.0000	87.61
48.5	6,320		0.0000	1.0000	87.61
49.5	6,320		0.0000	1.0000	87.61
50.5	3,129		0.0000	1.0000	87.61
51.5	2,039		0.0000	1.0000	87.61
52.5	2,039		0.0000	1.0000	87.61
53.5	2,039		0.0000	1.0000	87.61
54.5					87.61

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 385 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1965-2018

EXPERIENCE BAND 2000-2019

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	883,316		0.0000	1.0000	100.00
0.5	954,629	12,647	0.0132	0.9868	100.00
1.5	1,145,258	15,548	0.0136	0.9864	98.68
2.5	1,367,918	51,492	0.0376	0.9624	97.34
3.5	1,405,835	585	0.0004	0.9996	93.67
4.5	1,422,422	69,344	0.0488	0.9512	93.63
5.5	1,363,677	8,515	0.0062	0.9938	89.07
6.5	1,334,874	4,559	0.0034	0.9966	88.51
7.5	1,158,131		0.0000	1.0000	88.21
8.5	1,149,920	7,937	0.0069	0.9931	88.21
9.5	1,106,912	1,935	0.0017	0.9983	87.60
10.5	1,049,109	5,139	0.0049	0.9951	87.45
11.5	1,027,829	2,694	0.0026	0.9974	87.02
12.5	1,007,097	649	0.0006	0.9994	86.79
13.5	929,813		0.0000	1.0000	86.74
14.5	914,592	2	0.0000	1.0000	86.74
15.5	899,695		0.0000	1.0000	86.73
16.5	865,249		0.0000	1.0000	86.73
17.5	846,669	9,480	0.0112	0.9888	86.73
18.5	746,960		0.0000	1.0000	85.76
19.5	740,167		0.0000	1.0000	85.76
20.5	725,464		0.0000	1.0000	85.76
21.5	603,190		0.0000	1.0000	85.76
22.5	357,880		0.0000	1.0000	85.76
23.5	159,058		0.0000	1.0000	85.76
24.5	113,362		0.0000	1.0000	85.76
25.5	92,869		0.0000	1.0000	85.76
26.5	72,723		0.0000	1.0000	85.76
27.5	48,445		0.0000	1.0000	85.76
28.5	36,685		0.0000	1.0000	85.76
29.5	25,658		0.0000	1.0000	85.76
30.5	32,538		0.0000	1.0000	85.76
31.5	32,847		0.0000	1.0000	85.76
32.5	31,970		0.0000	1.0000	85.76
33.5	26,024		0.0000	1.0000	85.76
34.5	23,211		0.0000	1.0000	85.76
35.5	22,624		0.0000	1.0000	85.76
36.5	22,624		0.0000	1.0000	85.76
37.5	22,503		0.0000	1.0000	85.76
38.5	22,503		0.0000	1.0000	85.76

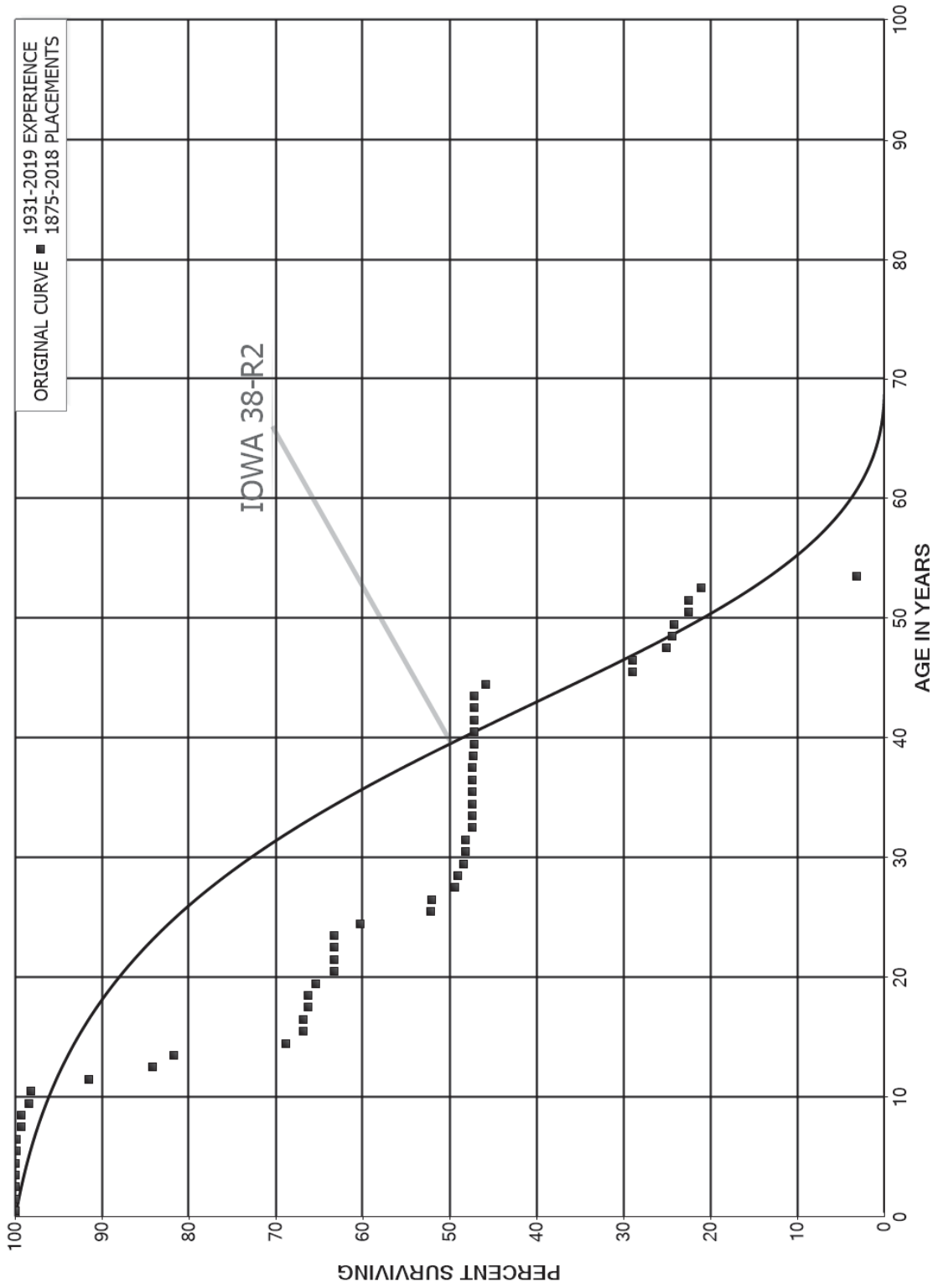
AMEREN MISSOURI
GAS DIVISION

ACCOUNT 385 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1965-2018			EXPERIENCE BAND 2000-2019		
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	22,503		0.0000	1.0000	85.76
40.5	22,503		0.0000	1.0000	85.76
41.5	19,653		0.0000	1.0000	85.76
42.5	19,653		0.0000	1.0000	85.76
43.5	15,964		0.0000	1.0000	85.76
44.5	9,440		0.0000	1.0000	85.76
45.5	9,440		0.0000	1.0000	85.76
46.5	9,440		0.0000	1.0000	85.76
47.5	9,440		0.0000	1.0000	85.76
48.5	6,320		0.0000	1.0000	85.76
49.5	6,320		0.0000	1.0000	85.76
50.5	3,129		0.0000	1.0000	85.76
51.5	2,039		0.0000	1.0000	85.76
52.5	2,039		0.0000	1.0000	85.76
53.5	2,039		0.0000	1.0000	85.76
54.5					85.76

AMEREN MISSOURI
 GAS DIVISION
 ACCOUNT 390 STRUCTURES AND IMPROVEMENTS
 ORIGINAL AND SMOOTH SURVIVOR CURVES



AMEREN MISSOURI
GAS DIVISION

ACCOUNT 390 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1875-2018

EXPERIENCE BAND 1931-2019

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	10,495,415		0.0000	1.0000	100.00
0.5	10,494,915		0.0000	1.0000	100.00
1.5	9,880,307		0.0000	1.0000	100.00
2.5	9,522,361	3,989	0.0004	0.9996	100.00
3.5	9,518,417	3,801	0.0004	0.9996	99.96
4.5	9,516,590	6,262	0.0007	0.9993	99.92
5.5	9,480,084		0.0000	1.0000	99.85
6.5	1,060,192	5,842	0.0055	0.9945	99.85
7.5	1,022,895		0.0000	1.0000	99.30
8.5	1,022,895	9,240	0.0090	0.9910	99.30
9.5	1,088,416	2,762	0.0025	0.9975	98.41
10.5	1,085,654	74,032	0.0682	0.9318	98.16
11.5	993,952	79,240	0.0797	0.9203	91.46
12.5	914,712	26,239	0.0287	0.9713	84.17
13.5	888,472	140,049	0.1576	0.8424	81.76
14.5	728,462	22,055	0.0303	0.9697	68.87
15.5	706,407		0.0000	1.0000	66.78
16.5	706,407	4,871	0.0069	0.9931	66.78
17.5	701,535		0.0000	1.0000	66.32
18.5	705,220	9,655	0.0137	0.9863	66.32
19.5	695,565	22,885	0.0329	0.9671	65.42
20.5	672,680		0.0000	1.0000	63.26
21.5	672,680		0.0000	1.0000	63.26
22.5	672,680		0.0000	1.0000	63.26
23.5	672,680	31,228	0.0464	0.9536	63.26
24.5	641,452	86,556	0.1349	0.8651	60.33
25.5	554,896	1,389	0.0025	0.9975	52.19
26.5	553,507	28,324	0.0512	0.9488	52.06
27.5	520,025	2,915	0.0056	0.9944	49.39
28.5	498,897	7,268	0.0146	0.9854	49.11
29.5	491,629	1,742	0.0035	0.9965	48.40
30.5	434,570	308	0.0007	0.9993	48.23
31.5	228,281	3,844	0.0168	0.9832	48.19
32.5	183,055		0.0000	1.0000	47.38
33.5	182,564		0.0000	1.0000	47.38
34.5	180,336		0.0000	1.0000	47.38
35.5	180,336		0.0000	1.0000	47.38
36.5	180,336		0.0000	1.0000	47.38
37.5	177,488	388	0.0022	0.9978	47.38
38.5	170,705	344	0.0020	0.9980	47.28

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 390 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1875-2018			EXPERIENCE BAND 1931-2019		
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	150,850		0.0000	1.0000	47.18
40.5	149,438		0.0000	1.0000	47.18
41.5	149,438		0.0000	1.0000	47.18
42.5	92,011		0.0000	1.0000	47.18
43.5	92,011	2,647	0.0288	0.9712	47.18
44.5	89,365	32,907	0.3682	0.6318	45.83
45.5	56,457		0.0000	1.0000	28.95
46.5	52,420	7,051	0.1345	0.8655	28.95
47.5	41,494	1,187	0.0286	0.9714	25.06
48.5	40,307	301	0.0075	0.9925	24.34
49.5	40,006	2,704	0.0676	0.9324	24.16
50.5	37,302	31	0.0008	0.9992	22.53
51.5	33,430	2,097	0.0627	0.9373	22.51
52.5	24,391	20,706	0.8489	0.1511	21.09
53.5	3,685		0.0000	1.0000	3.19
54.5	3,685		0.0000	1.0000	3.19
55.5	4,616		0.0000	1.0000	3.19
56.5	4,616		0.0000	1.0000	3.19
57.5	4,616		0.0000	1.0000	3.19
58.5	4,616		0.0000	1.0000	3.19
59.5	4,616		0.0000	1.0000	3.19
60.5	4,616		0.0000	1.0000	3.19
61.5	4,616		0.0000	1.0000	3.19
62.5	4,616		0.0000	1.0000	3.19
63.5	4,616	3,685	0.7983	0.2017	3.19
64.5	931		0.0000	1.0000	0.64
65.5	931		0.0000	1.0000	0.64
66.5	931		0.0000	1.0000	0.64
67.5	931		0.0000	1.0000	0.64
68.5	931		0.0000	1.0000	0.64
69.5	931		0.0000	1.0000	0.64
70.5	931		0.0000	1.0000	0.64
71.5	931		0.0000	1.0000	0.64
72.5	931		0.0000	1.0000	0.64
73.5	931		0.0000	1.0000	0.64
74.5	931		0.0000	1.0000	0.64
75.5	931		0.0000	1.0000	0.64
76.5	931		0.0000	1.0000	0.64
77.5	931		0.0000	1.0000	0.64
78.5	931		0.0000	1.0000	0.64

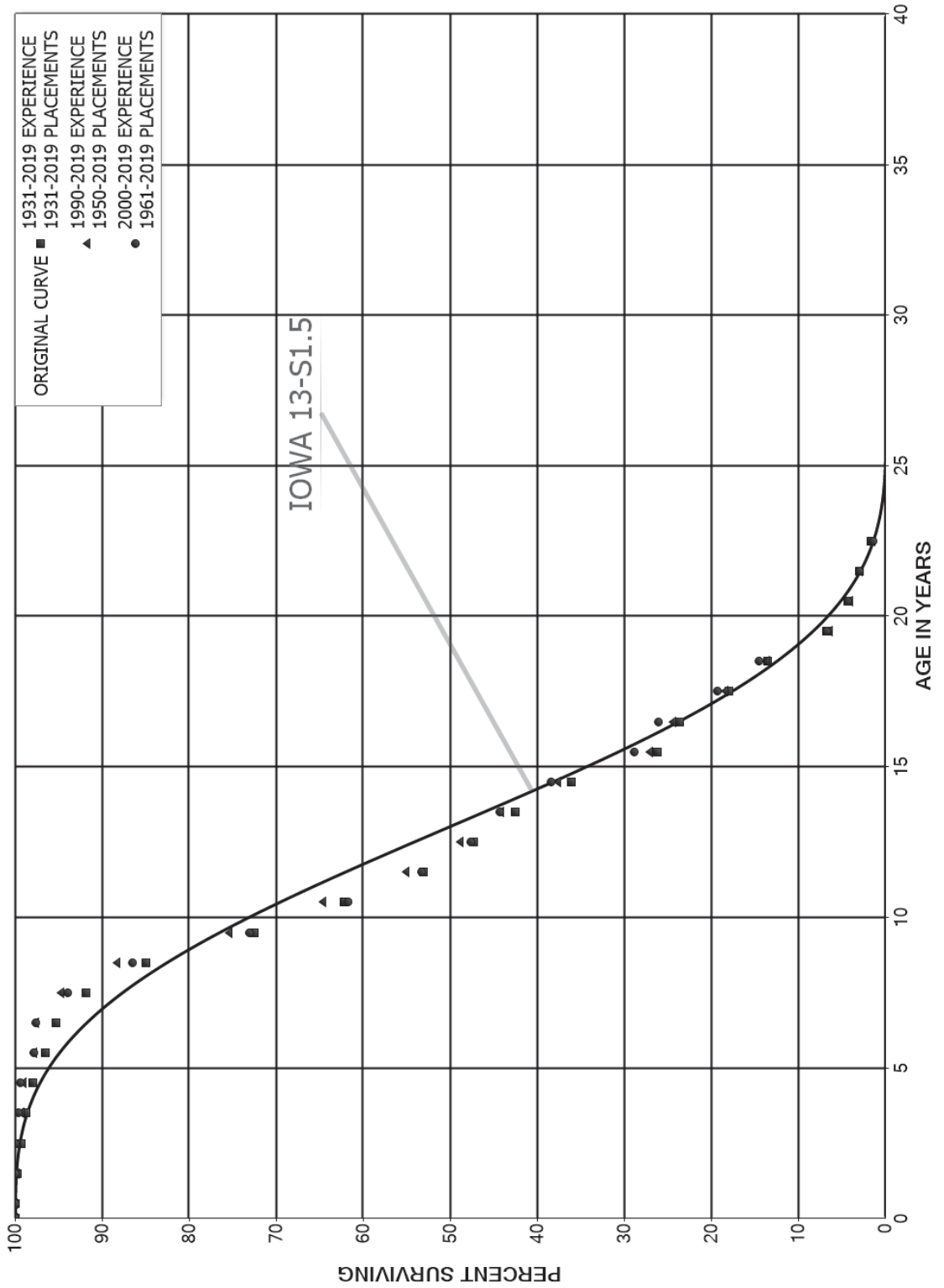
AMEREN MISSOURI
GAS DIVISION

ACCOUNT 390 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1875-2018			EXPERIENCE BAND 1931-2019		
AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	931		0.0000	1.0000	0.64
80.5	931		0.0000	1.0000	0.64
81.5	931		0.0000	1.0000	0.64
82.5	931		0.0000	1.0000	0.64
83.5	931		0.0000	1.0000	0.64
84.5	931		0.0000	1.0000	0.64
85.5	931		0.0000	1.0000	0.64
86.5	931		0.0000	1.0000	0.64
87.5	931		0.0000	1.0000	0.64
88.5	931		0.0000	1.0000	0.64
89.5	931		0.0000	1.0000	0.64
90.5	931		0.0000	1.0000	0.64
91.5	931		0.0000	1.0000	0.64
92.5	931		0.0000	1.0000	0.64
93.5	931		0.0000	1.0000	0.64
94.5	931		0.0000	1.0000	0.64
95.5	931		0.0000	1.0000	0.64
96.5	931		0.0000	1.0000	0.64
97.5	931		0.0000	1.0000	0.64
98.5	931		0.0000	1.0000	0.64
99.5	931		0.0000	1.0000	0.64
100.5	931	931	1.0000		0.64
101.5					

AMEREN MISSOURI
 GAS DIVISION
 ACCOUNT 392 TRANSPORTATION EQUIPMENT
 ORIGINAL AND SMOOTH SURVIVOR CURVES



AMEREN MISSOURI
GAS DIVISION

ACCOUNT 392 TRANSPORTATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1931-2019

EXPERIENCE BAND 1931-2019

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	19,046,335	1,249	0.0001	0.9999	100.00
0.5	18,049,002	55,386	0.0031	0.9969	99.99
1.5	15,561,296	61,327	0.0039	0.9961	99.69
2.5	16,549,865	89,666	0.0054	0.9946	99.29
3.5	14,824,851	112,611	0.0076	0.9924	98.76
4.5	14,190,199	223,446	0.0157	0.9843	98.01
5.5	13,435,560	167,387	0.0125	0.9875	96.46
6.5	12,610,542	450,786	0.0357	0.9643	95.26
7.5	11,607,876	866,165	0.0746	0.9254	91.86
8.5	9,031,664	1,328,055	0.1470	0.8530	85.00
9.5	7,002,460	993,645	0.1419	0.8581	72.50
10.5	5,420,582	801,410	0.1478	0.8522	62.21
11.5	4,225,046	457,258	0.1082	0.8918	53.02
12.5	3,545,149	355,503	0.1003	0.8997	47.28
13.5	3,092,010	468,347	0.1515	0.8485	42.54
14.5	2,624,863	719,589	0.2741	0.7259	36.09
15.5	1,966,370	195,191	0.0993	0.9007	26.20
16.5	1,742,327	414,217	0.2377	0.7623	23.60
17.5	1,314,120	329,635	0.2508	0.7492	17.99
18.5	922,574	462,280	0.5011	0.4989	13.48
19.5	471,184	174,616	0.3706	0.6294	6.72
20.5	242,026	76,278	0.3152	0.6848	4.23
21.5	165,748	75,564	0.4559	0.5441	2.90
22.5	90,184	15,035	0.1667	0.8333	1.58
23.5	75,149	13,114	0.1745	0.8255	1.31
24.5	54,827	14,381	0.2623	0.7377	1.08
25.5	40,446	3,549	0.0877	0.9123	0.80
26.5	36,897	19,859	0.5382	0.4618	0.73
27.5	17,038	3,216	0.1888	0.8112	0.34
28.5	13,822	1,633	0.1181	0.8819	0.27
29.5	14,861	2,168	0.1459	0.8541	0.24
30.5	12,693	3,140	0.2474	0.7526	0.21
31.5	9,554	545	0.0570	0.9430	0.16
32.5	9,009	1,679	0.1864	0.8136	0.15
33.5	7,330	156	0.0213	0.9787	0.12
34.5	4,502	1,396	0.3101	0.6899	0.12
35.5	3,106		0.0000	1.0000	0.08
36.5	4,948		0.0000	1.0000	0.08
37.5	4,948	534	0.1080	0.8920	0.08
38.5	4,413	2,325	0.5267	0.4733	0.07

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 392 TRANSPORTATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1931-2019			EXPERIENCE BAND 1931-2019			
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	2,089	437	0.2092	0.7908	0.03	
40.5	1,652		0.0000	1.0000	0.03	
41.5	1,652		0.0000	1.0000	0.03	
42.5	1,652		0.0000	1.0000	0.03	
43.5	1,652		0.0000	1.0000	0.03	
44.5	1,652		0.0000	1.0000	0.03	
45.5	1,652		0.0000	1.0000	0.03	
46.5	1,652		0.0000	1.0000	0.03	
47.5	1,652		0.0000	1.0000	0.03	
48.5	1,652	1,652	1.0000		0.03	
49.5						

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 392 TRANSPORTATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1950-2019

EXPERIENCE BAND 1990-2019

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	16,006,793		0.0000	1.0000	100.00
0.5	15,349,385	35,672	0.0023	0.9977	100.00
1.5	12,950,188	26,636	0.0021	0.9979	99.77
2.5	14,166,830	47,509	0.0034	0.9966	99.56
3.5	12,626,770	35,957	0.0028	0.9972	99.23
4.5	12,172,848	145,748	0.0120	0.9880	98.95
5.5	11,506,696	26,354	0.0023	0.9977	97.76
6.5	10,997,058	330,135	0.0300	0.9700	97.54
7.5	10,379,256	706,819	0.0681	0.9319	94.61
8.5	8,016,380	1,175,485	0.1466	0.8534	88.17
9.5	6,279,923	893,649	0.1423	0.8577	75.24
10.5	4,911,663	728,454	0.1483	0.8517	64.53
11.5	3,866,568	440,675	0.1140	0.8860	54.96
12.5	3,289,048	312,113	0.0949	0.9051	48.70
13.5	2,904,307	430,661	0.1483	0.8517	44.08
14.5	2,484,190	704,691	0.2837	0.7163	37.54
15.5	1,850,452	176,117	0.0952	0.9048	26.89
16.5	1,660,890	411,504	0.2478	0.7522	24.33
17.5	1,249,678	328,714	0.2630	0.7370	18.30
18.5	863,282	459,073	0.5318	0.4682	13.49
19.5	415,099	154,263	0.3716	0.6284	6.32
20.5	206,294	58,931	0.2857	0.7143	3.97
21.5	150,930	75,162	0.4980	0.5020	2.83
22.5	76,265	14,432	0.1892	0.8108	1.42
23.5	65,192	10,457	0.1604	0.8396	1.15
24.5	47,966	12,559	0.2618	0.7382	0.97
25.5	35,407	3,359	0.0949	0.9051	0.72
26.5	32,441	18,882	0.5820	0.4180	0.65
27.5	13,789	3,216	0.2333	0.7667	0.27
28.5	12,224	1,633	0.1336	0.8664	0.21
29.5	13,263	2,168	0.1634	0.8366	0.18
30.5	11,217	3,140	0.2799	0.7201	0.15
31.5	8,078	545	0.0674	0.9326	0.11
32.5	7,533	1,679	0.2229	0.7771	0.10
33.5	5,854		0.0000	1.0000	0.08
34.5	3,182	1,396	0.4387	0.5613	0.08
35.5	1,786		0.0000	1.0000	0.04
36.5	3,628		0.0000	1.0000	0.04
37.5	4,511	534	0.1185	0.8815	0.04
38.5	3,976	2,325	0.5846	0.4154	0.04

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 392 TRANSPORTATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1950-2019			EXPERIENCE BAND 1990-2019			
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	2,089	437	0.2092	0.7908	0.02	
40.5	1,652		0.0000	1.0000	0.01	
41.5	1,652		0.0000	1.0000	0.01	
42.5	1,652		0.0000	1.0000	0.01	
43.5	1,652		0.0000	1.0000	0.01	
44.5	1,652		0.0000	1.0000	0.01	
45.5	1,652		0.0000	1.0000	0.01	
46.5	1,652		0.0000	1.0000	0.01	
47.5	1,652		0.0000	1.0000	0.01	
48.5	1,652	1,652	1.0000		0.01	
49.5						

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 392 TRANSPORTATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1961-2019

EXPERIENCE BAND 2000-2019

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	13,551,358		0.0000	1.0000	100.00
0.5	12,555,274		0.0000	1.0000	100.00
1.5	10,122,954		0.0000	1.0000	100.00
2.5	11,295,795	47,413	0.0042	0.9958	100.00
3.5	9,760,206	23,351	0.0024	0.9976	99.58
4.5	9,755,452	145,748	0.0149	0.9851	99.34
5.5	9,293,818	26,354	0.0028	0.9972	97.86
6.5	8,714,077	320,556	0.0368	0.9632	97.58
7.5	7,983,616	638,931	0.0800	0.9200	93.99
8.5	5,955,251	923,047	0.1550	0.8450	86.47
9.5	5,090,266	791,715	0.1555	0.8445	73.07
10.5	4,025,625	548,253	0.1362	0.8638	61.70
11.5	3,143,637	337,986	0.1075	0.8925	53.30
12.5	2,679,528	186,227	0.0695	0.9305	47.57
13.5	2,440,475	325,156	0.1332	0.8668	44.26
14.5	2,180,534	539,136	0.2472	0.7528	38.37
15.5	1,702,494	167,429	0.0983	0.9017	28.88
16.5	1,567,422	408,366	0.2605	0.7395	26.04
17.5	1,161,559	289,364	0.2491	0.7509	19.26
18.5	812,448	437,025	0.5379	0.4621	14.46
19.5	393,522	144,256	0.3666	0.6334	6.68
20.5	196,587	57,938	0.2947	0.7053	4.23
21.5	138,649	74,485	0.5372	0.4628	2.98
22.5	65,908	13,935	0.2114	0.7886	1.38
23.5	51,972	10,457	0.2012	0.7988	1.09
24.5	35,864	10,719	0.2989	0.7011	0.87
25.5	25,146		0.0000	1.0000	0.61
26.5	26,778	17,388	0.6493	0.3507	0.61
27.5	9,935	2,594	0.2611	0.7389	0.21
28.5	8,737	1,633	0.1869	0.8131	0.16
29.5	9,776	1,863	0.1905	0.8095	0.13
30.5	7,913	1,744	0.2204	0.7796	0.10
31.5	6,170	545	0.0883	0.9117	0.08
32.5	5,625	1,557	0.2768	0.7232	0.07
33.5	4,068		0.0000	1.0000	0.05
34.5	1,530	1,396	0.9122	0.0878	0.05
35.5	134		0.0000	1.0000	0.00
36.5	1,976		0.0000	1.0000	0.00
37.5	1,976	134	0.0680	0.9320	0.00
38.5	3,493	1,842	0.5272	0.4728	0.00

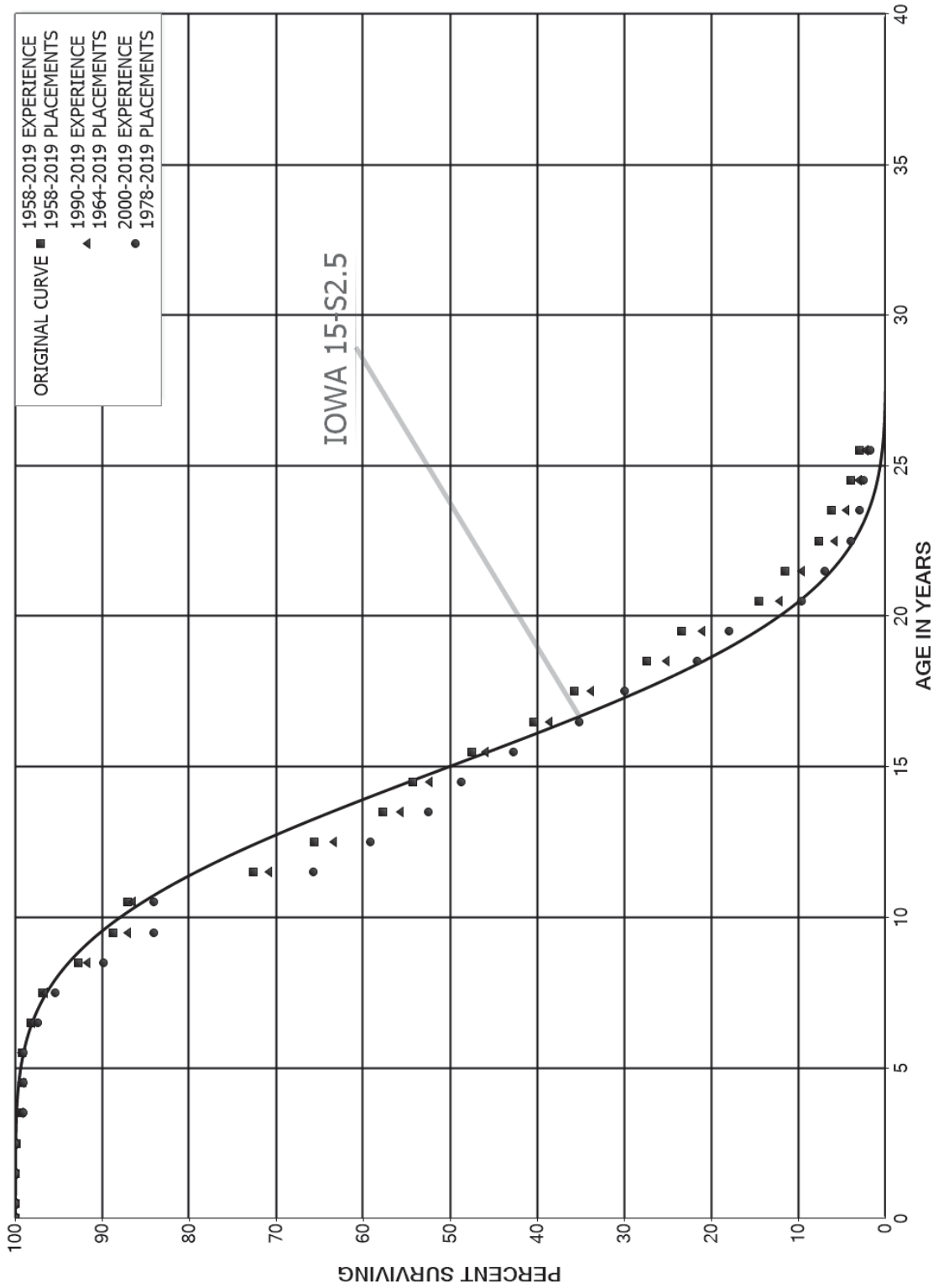
AMEREN MISSOURI
GAS DIVISION

ACCOUNT 392 TRANSPORTATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1961-2019			EXPERIENCE BAND 2000-2019		
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	1,652		0.0000	1.0000	0.00
40.5	1,652		0.0000	1.0000	0.00
41.5	1,652		0.0000	1.0000	0.00
42.5	1,652		0.0000	1.0000	0.00
43.5	1,652		0.0000	1.0000	0.00
44.5	1,652		0.0000	1.0000	0.00
45.5	1,652		0.0000	1.0000	0.00
46.5	1,652		0.0000	1.0000	0.00
47.5	1,652		0.0000	1.0000	0.00
48.5	1,652	1,652	1.0000		0.00
49.5					

AMEREN MISSOURI
 GAS DIVISION
 ACCOUNT 396 POWER OPERATED EQUIPMENT
 ORIGINAL AND SMOOTH SURVIVOR CURVES



AMEREN MISSOURI
GAS DIVISION

ACCOUNT 396 POWER OPERATED EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1958-2019			EXPERIENCE BAND 1958-2019		
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	7,141,893		0.0000	1.0000	100.00
0.5	7,005,583	1,536	0.0002	0.9998	100.00
1.5	7,026,251	11,275	0.0016	0.9984	99.98
2.5	6,925,925	40,365	0.0058	0.9942	99.82
3.5	6,550,738	4,513	0.0007	0.9993	99.24
4.5	6,313,194	10	0.0000	1.0000	99.17
5.5	6,363,438	65,334	0.0103	0.9897	99.17
6.5	6,087,973	80,025	0.0131	0.9869	98.15
7.5	5,419,250	231,048	0.0426	0.9574	96.86
8.5	4,901,308	209,667	0.0428	0.9572	92.73
9.5	4,182,396	79,689	0.0191	0.9809	88.76
10.5	3,876,241	642,217	0.1657	0.8343	87.07
11.5	3,147,153	305,247	0.0970	0.9030	72.65
12.5	2,741,025	328,289	0.1198	0.8802	65.60
13.5	2,412,736	142,818	0.0592	0.9408	57.74
14.5	2,269,918	283,128	0.1247	0.8753	54.32
15.5	2,033,744	306,916	0.1509	0.8491	47.55
16.5	1,726,828	200,827	0.1163	0.8837	40.37
17.5	1,476,457	340,892	0.2309	0.7691	35.68
18.5	1,085,968	158,679	0.1461	0.8539	27.44
19.5	927,289	353,352	0.3811	0.6189	23.43
20.5	537,686	112,045	0.2084	0.7916	14.50
21.5	414,251	139,335	0.3364	0.6636	11.48
22.5	248,404	48,515	0.1953	0.8047	7.62
23.5	220,402	79,297	0.3598	0.6402	6.13
24.5	141,106	37,021	0.2624	0.7376	3.93
25.5	87,952	37,701	0.4287	0.5713	2.90
26.5	50,251	7,564	0.1505	0.8495	1.65
27.5	42,687	938	0.0220	0.9780	1.41
28.5	21,236	20,443	0.9627	0.0373	1.37
29.5	793	793	1.0000		0.05
30.5					

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 396 POWER OPERATED EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1964-2019

EXPERIENCE BAND 1990-2019

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	5,214,031		0.0000	1.0000	100.00
0.5	5,313,724	1,536	0.0003	0.9997	100.00
1.5	5,633,182		0.0000	1.0000	99.97
2.5	5,710,274	40,365	0.0071	0.9929	99.97
3.5	5,450,133	4,513	0.0008	0.9992	99.26
4.5	5,333,458	10	0.0000	1.0000	99.18
5.5	5,395,891	65,334	0.0121	0.9879	99.18
6.5	5,123,697	80,025	0.0156	0.9844	97.98
7.5	4,597,893	231,048	0.0503	0.9497	96.45
8.5	4,145,043	209,667	0.0506	0.9494	91.60
9.5	3,578,064	24,289	0.0068	0.9932	86.97
10.5	3,398,332	616,374	0.1814	0.8186	86.38
11.5	2,773,612	292,417	0.1054	0.8946	70.71
12.5	2,401,883	289,324	0.1205	0.8795	63.26
13.5	2,137,674	128,786	0.0602	0.9398	55.64
14.5	2,017,563	249,524	0.1237	0.8763	52.29
15.5	1,814,993	289,403	0.1595	0.8405	45.82
16.5	1,541,715	192,144	0.1246	0.8754	38.51
17.5	1,322,659	340,892	0.2577	0.7423	33.71
18.5	932,170	151,418	0.1624	0.8376	25.02
19.5	800,913	337,950	0.4220	0.5780	20.96
20.5	426,712	93,179	0.2184	0.7816	12.12
21.5	322,143	125,791	0.3905	0.6095	9.47
22.5	174,324	40,621	0.2330	0.7670	5.77
23.5	196,853	64,105	0.3256	0.6744	4.43
24.5	132,749	37,021	0.2789	0.7211	2.99
25.5	80,388	37,701	0.4690	0.5310	2.15
26.5	42,687		0.0000	1.0000	1.14
27.5	42,687	938	0.0220	0.9780	1.14
28.5	21,236	20,443	0.9627	0.0373	1.12
29.5	793	793	1.0000		0.04
30.5					

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 396 POWER OPERATED EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1978-2019

EXPERIENCE BAND 2000-2019

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	4,267,491		0.0000	1.0000	100.00
0.5	4,131,182		0.0000	1.0000	100.00
1.5	4,153,385		0.0000	1.0000	100.00
2.5	4,079,456	38,051	0.0093	0.9907	100.00
3.5	3,706,583		0.0000	1.0000	99.07
4.5	3,631,216		0.0000	1.0000	99.07
5.5	3,987,360	65,334	0.0164	0.9836	99.07
6.5	3,735,807	80,025	0.0214	0.9786	97.44
7.5	3,080,709	179,157	0.0582	0.9418	95.36
8.5	2,792,680	179,287	0.0642	0.9358	89.81
9.5	2,350,414		0.0000	1.0000	84.05
10.5	2,359,941	513,752	0.2177	0.7823	84.05
11.5	2,014,668	201,680	0.1001	0.8999	65.75
12.5	1,870,299	210,503	0.1126	0.8874	59.17
13.5	1,764,609	128,786	0.0730	0.9270	52.51
14.5	1,726,503	210,302	0.1218	0.8782	48.68
15.5	1,575,344	280,954	0.1783	0.8217	42.75
16.5	1,294,390	190,732	0.1474	0.8526	35.12
17.5	1,165,322	324,226	0.2782	0.7218	29.95
18.5	809,471	136,705	0.1689	0.8311	21.62
19.5	702,207	325,824	0.4640	0.5360	17.96
20.5	340,131	93,179	0.2740	0.7260	9.63
21.5	291,476	125,791	0.4316	0.5684	6.99
22.5	139,173	34,590	0.2485	0.7515	3.97
23.5	125,096	21,994	0.1758	0.8242	2.99
24.5	103,103	32,537	0.3156	0.6844	2.46
25.5	54,433	33,920	0.6231	0.3769	1.68
26.5	20,513		0.0000	1.0000	0.63
27.5	20,513		0.0000	1.0000	0.63
28.5					0.63

PART VIII. NET SALVAGE STATISTICS

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 367 MAINS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
1984		278				278-	
1985							
1986	20,833		0		0		0
1987	28,273		0	41	0	41	0
1988	3,750	259	7		0	259-	7-
1989	25,415		0		0		0
1990	16,214		0		0		0
1991	11,563		0		0		0
1992	1,467		0	972	66	972	66
1993	1,940	887	46		0	887-	46-
1994							
1995							
1996	18,444		0		0		0
1997	7,393		0		0		0
1998							
1999							
2000							
2001				1,103		1,103	
2002				222,880		222,880	
2003	12,242		0	837	7	837	7
2004				37,996		37,996	
2005	195		0	3,406		3,406	
2006							
2007				2,977-		2,977-	
2008							
2009	166		0	9,038-		9,038-	
2010				14,730		14,730	
2011				4,726-		4,726-	
2012				6,394-		6,394-	
2013				2,522-		2,522-	
2014			0	1,087-		1,087-	
2015				5,782-		5,782-	
2016				5,377		5,377	
2017				7,774-		7,774-	
2018	41,733		0	4,231-	10-	4,231-	10-
2019	81,504		0	6,624-	8-	6,624-	8-
TOTAL	271,132	1,424	1	236,188	87	234,764	87

THREE-YEAR MOVING AVERAGES

84-86	6,944	93	1		0	93-	1-
-------	-------	----	---	--	---	-----	----

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 367 MAINS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE		
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT	
THREE-YEAR MOVING AVERAGES								
85-87	16,369		0	14	0	14	0	
86-88	17,619	86	0	14	0	73-	0	
87-89	19,146	86	0	14	0	73-	0	
88-90	15,126	86	1		0	86-	1-	
89-91	17,731		0		0		0	
90-92	9,748		0	324	3	324	3	
91-93	4,990	296	6	324	6	28	1	
92-94	1,136	296	26	324	29	28	2	
93-95	647	296	46		0	296-	46-	
94-96	6,148		0		0		0	
95-97	8,612		0		0		0	
96-98	8,612		0		0		0	
97-99	2,464		0		0		0	
98-00								
99-01				368		368		
00-02				74,661		74,661		
01-03	4,081		0	74,940		74,940		
02-04	4,081		0	87,238		87,238		
03-05	4,146		0	14,080	340	14,080	340	
04-06	65		0	13,801		13,801		
05-07	65		0	143	221	143	221	
06-08				992-		992-		
07-09	55		0	4,005-		4,005-		
08-10	55		0	1,897		1,897		
09-11	55		0	322	580	322	580	
10-12				1,203		1,203		
11-13				4,547-		4,547-		
12-14			0	3,334-		3,334-		
13-15			0	3,130-		3,130-		
14-16			0	497-		497-		
15-17				2,726-		2,726-		
16-18	13,911		0	2,209-	16-	2,209-	16-	
17-19	41,079		0	6,210-	15-	6,210-	15-	
FIVE-YEAR AVERAGE								
15-19	24,647		0	3,807-	15-	3,807-	15-	

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 369 MEASURING AND REGULATING STATION EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
1985		394				394-	
1986		657				657-	
1987	4,401	66	1		0	66-	1-
1988	334	497	149		0	497-	149-
1989							
1990							
1991							
1992		3,098				3,098-	
1993							
1994	10,657		0		0		0
1995							
1996							
1997							
1998							
1999	3,270		0		0		0
2000							
2001							
2002				170		170	
2003							
2004	2,502		0		0		0
2005							
2006							
2007							
2008							
2009							
2010							
2011							
2012							
2013							
2014							
2015							
2016							
2017							
2018							
2019							
TOTAL	21,164	4,712	22	170	1	4,542-	21-

THREE-YEAR MOVING AVERAGES

85-87	1,467	372	25		0	372-	25-
86-88	1,578	407	26		0	407-	26-

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 369 MEASURING AND REGULATING STATION EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE		
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT	
THREE-YEAR MOVING AVERAGES								
87-89	1,578	188	12		0	188-	12-	
88-90	111	166	149		0	166-	149-	
89-91								
90-92		1,033				1,033-		
91-93		1,033				1,033-		
92-94	3,552	1,033	29		0	1,033-	29-	
93-95	3,552		0		0		0	
94-96	3,552		0		0		0	
95-97								
96-98								
97-99	1,090		0		0		0	
98-00	1,090		0		0		0	
99-01	1,090		0		0		0	
00-02				57		57		
01-03				57		57		
02-04	834		0	57	7	57	7	
03-05	834		0		0		0	
04-06	834		0		0		0	
05-07								
06-08								
07-09								
08-10								
09-11								
10-12								
11-13								
12-14								
13-15								
14-16								
15-17								
16-18								
17-19								

FIVE-YEAR AVERAGE

15-19

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 375 STRUCTURES AND IMPROVEMENTS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
1985	9,190		0		0		0
1986							
1987							
1988							
1989							
1990							
1991							
1992							
1993	964		0		0		0
1994							
1995							
1996	248		0		0		0
1997							
1998							
1999							
2000							
2001	6,308		0		0		0
2002	3,358		0		0		0
2003							
2004	6,201		0		0		0
2005							
2006							
2007							
2008	1,535		0		0		0
2009							
2010							
2011							
2012							
2013							
2014							
2015							
2016							
2017							
2018							
2019							
TOTAL	27,803		0		0		0

THREE-YEAR MOVING AVERAGES

85-87	3,063		0		0		0
86-88							

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 375 STRUCTURES AND IMPROVEMENTS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
87-89							
88-90							
89-91							
90-92							
91-93	321		0		0		0
92-94	321		0		0		0
93-95	321		0		0		0
94-96	83		0		0		0
95-97	83		0		0		0
96-98	83		0		0		0
97-99							
98-00							
99-01	2,103		0		0		0
00-02	3,222		0		0		0
01-03	3,222		0		0		0
02-04	3,186		0		0		0
03-05	2,067		0		0		0
04-06	2,067		0		0		0
05-07							
06-08	512		0		0		0
07-09	512		0		0		0
08-10	512		0		0		0
09-11							
10-12							
11-13							
12-14							
13-15							
14-16							
15-17							
16-18							
17-19							

FIVE-YEAR AVERAGE

15-19

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 376 MAINS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
1984	40,972	24,142	59	206	1	23,936-	58-
1985	238,037	32,908	14	280	0	32,628-	14-
1986	236,119	31,873	13	139	0	31,734-	13-
1987	404,690	34,272	8		0	34,272-	8-
1988	255,710	50,291	20	7	0	50,284-	20-
1989	278,047	58,001	21		0	58,001-	21-
1990	401,049	47,083	12		0	47,083-	12-
1991	327,184	52,269	16		0	52,269-	16-
1992	331,217	36,489	11	997-	0	37,486-	11-
1993	409,223	45,191	11		0	45,191-	11-
1994	649,681	31,046	5		0	31,046-	5-
1995	355,147	19,952	6	46	0	19,906-	6-
1996	331,435	312	0	440	0	128	0
1997	279,086	4,643	2	54,749	20	50,106	18
1998	276,474	3,025	1	31,618	11	28,593	10
1999	619,568	6,708	1	81,318	13	74,610	12
2000	410,818	4,026	1	419	0	3,606-	1-
2001	484,413	3,640	1	143,535	30	139,894	29
2002	915,096	23,210	3	314,758	34	291,548	32
2003	540,090	3,315	1	5,479	1	2,164	0
2004	442,179	5,397	1	54,278	12	48,881	11
2005	950,651	926	0	5,539	1	4,613	0
2006	852,204	1,914	0	170	0	1,744-	0
2007	976,197	10,372	1		0	10,372-	1-
2008	1,627,733	4,524	0	6,222	0	1,698	0
2009	601,378	13,490	2	19,686	3	6,196	1
2010	790,103	103	0	58,075	7	57,972	7
2011	790,924	9,905	1	4,451	1	5,454-	1-
2012	306,882	19,284	6	5,208-	2-	24,492-	8-
2013	310,335	4,091	1	10,365-	3-	14,456-	5-
2014	334,502	10,061	3	8,501-	3-	18,562-	6-
2015	295,963	3,058	1	11,408-	4-	14,466-	5-
2016	468,936	3,259-	1-	1,582	0	4,840	1
2017	383,820	2,540	1	15,160-	4-	17,700-	5-
2018	683,341	20,931	3	802	0	20,129-	3-
2019	680,844	5,540	1	7,116-	1-	12,656-	2-
TOTAL	18,280,048	621,273	3	725,045	4	103,772	1

THREE-YEAR MOVING AVERAGES

84-86	171,709	29,641	17	208	0	29,433-	17-
-------	---------	--------	----	-----	---	---------	-----

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 376 MAINS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
85-87	292,949	33,018	11	140	0	32,878-	11-
86-88	298,840	38,812	13	49	0	38,763-	13-
87-89	312,816	47,521	15	2	0	47,519-	15-
88-90	311,602	51,792	17	2	0	51,789-	17-
89-91	335,427	52,451	16		0	52,451-	16-
90-92	353,150	45,280	13	332-	0	45,613-	13-
91-93	355,875	44,650	13	332-	0	44,982-	13-
92-94	463,374	37,575	8	332-	0	37,908-	8-
93-95	471,350	32,063	7	15	0	32,048-	7-
94-96	445,421	17,103	4	162	0	16,941-	4-
95-97	321,889	8,302	3	18,412	6	10,109	3
96-98	295,665	2,660	1	28,936	10	26,276	9
97-99	391,709	4,792	1	55,895	14	51,103	13
98-00	435,620	4,586	1	37,785	9	33,199	8
99-01	504,933	4,791	1	75,091	15	70,299	14
00-02	603,442	10,292	2	152,904	25	142,612	24
01-03	646,533	10,055	2	154,591	24	144,536	22
02-04	632,455	10,641	2	124,839	20	114,198	18
03-05	644,307	3,213	0	21,765	3	18,553	3
04-06	748,345	2,746	0	19,996	3	17,250	2
05-07	926,351	4,404	0	1,903	0	2,501-	0
06-08	1,152,045	5,603	0	2,131	0	3,473-	0
07-09	1,068,436	9,462	1	8,636	1	826-	0
08-10	1,006,405	6,039	1	27,994	3	21,955	2
09-11	727,468	7,833	1	27,404	4	19,571	3
10-12	629,303	9,764	2	19,106	3	9,342	1
11-13	469,380	11,093	2	3,707-	1-	14,801-	3-
12-14	317,240	11,145	4	8,025-	3-	19,170-	6-
13-15	313,600	5,737	2	10,091-	3-	15,828-	5-
14-16	366,467	3,287	1	6,109-	2-	9,396-	3-
15-17	382,906	780	0	8,329-	2-	9,108-	2-
16-18	512,032	6,737	1	4,259-	1-	10,996-	2-
17-19	582,668	9,670	2	7,158-	1-	16,828-	3-
FIVE-YEAR AVERAGE							
15-19	502,581	5,762	1	6,260-	1-	12,022-	2-

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
1984		5,083		350		4,733-	
1985		4,591		125		4,466-	
1986	1,731	3,548	205		0	3,548-	205-
1987	17,585	2,771	16		0	2,771-	16-
1988	969	4,373	451		0	4,373-	451-
1989	516	30	6		0	30-	6-
1990	3,203	8,316	260	700	22	7,616-	238-
1991		3,042				3,042-	
1992	595	589	99		0	589-	99-
1993	6,996	3,373	48	10	0	3,363-	48-
1994		6,761				6,761-	
1995	26,560	1,600	6	435	2	1,165-	4-
1996	25,618		0	475	2	475	2
1997							
1998	1,333		0	5	0	5	0
1999	202,742		0	403	0	403	0
2000	400,556		0		0		0
2001	16,508	1,082	7	8,918	54	7,836	47
2002				14,534		14,534	
2003	27,528	12,356	45	825-	3-	13,181-	48-
2004	112,107	3,624	3	310	0	3,314-	3-
2005	10,712		0	127	1	127	1
2006	9,337	2,438	26		0	2,438-	26-
2007	26,254		0		0		0
2008	45,713	339	1		0	339-	1-
2009	3,501	7,570	216		0	7,570-	216-
2010	9,698		0		0		0
2011							
2012	8,006		0		0		0
2013				363-		363-	
2014	3,990		0	13-	0	13-	0
2015	3,798		0		0		0
2016							
2017							
2018	9,682		0		0		0
2019	1,488		0		0		0
TOTAL	976,727	71,486	7	25,190	3	46,296-	5-

THREE-YEAR MOVING AVERAGES

84-86	577	4,407	764	158	27	4,249-	736-
-------	-----	-------	-----	-----	----	--------	------

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE		
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT	
THREE-YEAR MOVING AVERAGES								
85-87	6,439	3,637	56	42	1	3,595-	56-	
86-88	6,762	3,564	53		0	3,564-	53-	
87-89	6,357	2,391	38		0	2,391-	38-	
88-90	1,563	4,240	271	233	15	4,006-	256-	
89-91	1,240	3,796	306	233	19	3,563-	287-	
90-92	1,266	3,982	315	233	18	3,749-	296-	
91-93	2,530	2,335	92	3	0	2,331-	92-	
92-94	2,530	3,574	141	3	0	3,571-	141-	
93-95	11,185	3,911	35	148	1	3,763-	34-	
94-96	17,393	2,787	16	303	2	2,484-	14-	
95-97	17,393	533	3	303	2	230-	1-	
96-98	8,984		0	160	2	160	2	
97-99	68,025		0	136	0	136	0	
98-00	201,544		0	136	0	136	0	
99-01	206,602	361	0	3,107	2	2,746	1	
00-02	139,021	361	0	7,818	6	7,457	5	
01-03	14,679	4,479	31	7,542	51	3,063	21	
02-04	46,545	5,327	11	4,673	10	654-	1-	
03-05	50,116	5,327	11	129-	0	5,456-	11-	
04-06	44,052	2,021	5	146	0	1,875-	4-	
05-07	15,435	813	5	42	0	770-	5-	
06-08	27,102	926	3		0	926-	3-	
07-09	25,156	2,636	10		0	2,636-	10-	
08-10	19,638	2,636	13		0	2,636-	13-	
09-11	4,400	2,523	57		0	2,523-	57-	
10-12	5,901		0		0		0	
11-13	2,669		0	121-	5-	121-	5-	
12-14	3,999		0	125-	3-	125-	3-	
13-15	2,596		0	125-	5-	125-	5-	
14-16	2,596		0	4-	0	4-	0	
15-17	1,266		0		0		0	
16-18	3,227		0		0		0	
17-19	3,723		0		0		0	
FIVE-YEAR AVERAGE								
15-19	2,993		0		0		0	

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 379 MEASURING AND REGULATING STATION EQUIPMENT - CITY GATE

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
1984		83				83-	
1985							
1986							
1987	802		0		0		0
1988	275		0		0		0
1989							
1990							
1991							
1992							
1993							
1994							
1995							
1996	1,119		0		0		0
1997							
1998							
1999							
2000	21		0		0		0
2001	18		0		0		0
2002	16,979		0		0		0
2003							
2004	11,707		0		0		0
2005							
2006							
2007							
2008							
2009	2,129		0		0		0
2010							
2011							
2012	27,832		0		0		0
2013							
2014	1,986		0		0		0
2015							
2016	5,724		0		0		0
2017							
2018							
2019							
TOTAL	68,592	83	0		0	83-	0

THREE-YEAR MOVING AVERAGES

84-86	28	28-
-------	----	-----

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 379 MEASURING AND REGULATING STATION EQUIPMENT - CITY GATE

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
85-87	267		0		0		0
86-88	359		0		0		0
87-89	359		0		0		0
88-90	92		0		0		0
89-91							
90-92							
91-93							
92-94							
93-95							
94-96	373		0		0		0
95-97	373		0		0		0
96-98	373		0		0		0
97-99							
98-00	7		0		0		0
99-01	13		0		0		0
00-02	5,673		0		0		0
01-03	5,666		0		0		0
02-04	9,562		0		0		0
03-05	3,902		0		0		0
04-06	3,902		0		0		0
05-07							
06-08							
07-09	710		0		0		0
08-10	710		0		0		0
09-11	710		0		0		0
10-12	9,277		0		0		0
11-13	9,277		0		0		0
12-14	9,939		0		0		0
13-15	662		0		0		0
14-16	2,570		0		0		0
15-17	1,908		0		0		0
16-18	1,908		0		0		0
17-19							
FIVE-YEAR AVERAGE							
15-19	1,145		0		0		0

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 380 SERVICES

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
1984	110,713	126,556	114	569	1	125,987-	114-
1985	301,002	131,217	44	799	0	130,418-	43-
1986	95,939	119,335	124	120	0	119,215-	124-
1987	253,417	150,214	59	27	0	150,187-	59-
1988	222,404	183,622	83	19	0	183,603-	83-
1989	145,705	150,079	103		0	150,079-	103-
1990	178,756	158,685	89		0	158,685-	89-
1991	183,823	164,437	89	35	0	164,402-	89-
1992	220,493	143,137	65	1,995-	1-	145,132-	66-
1993	201,563	184,553	92	5,481	3	179,072-	89-
1994	228,718	203,022	89		0	203,022-	89-
1995	188,256	87,319	46	404	0	86,915-	46-
1996	240,574	14,746	6	2,556	1	12,190-	5-
1997	227,023	9,932	4	741	0	9,191-	4-
1998	234,645	48,878	21	2,833	1	46,045-	20-
1999	180,560	85,104	47	42,320	23	42,785-	24-
2000	308,793	4,398	1	2,742	1	1,656-	1-
2001	327,008	6,374	2	8,216-	3-	14,590-	4-
2002	419,881	23,944	6	257	0	23,687-	6-
2003	248,447	7,568	3	7,808	3	240	0
2004	183,654	4,523	2	713-	0	5,236-	3-
2005	521,587	5,601	1	643	0	4,958-	1-
2006	743,709	9,400	1	3	0	9,397-	1-
2007	563,543	12,513	2	115-	0	12,628-	2-
2008	2,007,228	9,231	0	369-	0	9,600-	0
2009	1,417,207	23,583	2	1,042	0	22,541-	2-
2010	1,509,852	14,140	1	10,907	1	3,232-	0
2011	1,180,116	9,365	1	13,449	1	4,084	0
2012	623,826	22,027	4	13	0	22,014-	4-
2013	508,915	23,109	5	1-	0	23,110-	5-
2014	536,169	16,299	3	1,076	0	15,222-	3-
2015	645,631	28,346	4	348	0	27,998-	4-
2016	675,363	39,427	6	602	0	38,825-	6-
2017	502,750	54,012	11	2,887	1	51,124-	10-
2018	872,865	123,713	14	8	0	123,705-	14-
2019	954,213	35,033	4	2,827	0	32,205-	3-
TOTAL	17,964,345	2,433,442	14	89,110	0	2,344,332-	13-

THREE-YEAR MOVING AVERAGES

84-86	169,218	125,703	74	496	0	125,207-	74-
-------	---------	---------	----	-----	---	----------	-----

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 380 SERVICES

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
85-87	216,786	133,589	62	315	0	133,273-	61-
86-88	190,587	151,057	79	55	0	151,002-	79-
87-89	207,175	161,305	78	15	0	161,290-	78-
88-90	182,288	164,129	90	6	0	164,122-	90-
89-91	169,428	157,734	93	12	0	157,722-	93-
90-92	194,357	155,420	80	653-	0	156,073-	80-
91-93	201,960	164,042	81	1,174	1	162,869-	81-
92-94	216,925	176,904	82	1,162	1	175,742-	81-
93-95	206,179	158,298	77	1,962	1	156,336-	76-
94-96	219,183	101,696	46	987	0	100,709-	46-
95-97	218,618	37,332	17	1,234	1	36,098-	17-
96-98	234,081	24,519	10	2,044	1	22,475-	10-
97-99	214,076	47,971	22	15,298	7	32,673-	15-
98-00	241,333	46,127	19	15,965	7	30,162-	12-
99-01	272,120	31,959	12	12,282	5	19,677-	7-
00-02	351,894	11,572	3	1,739-	0	13,311-	4-
01-03	331,779	12,629	4	50-	0	12,679-	4-
02-04	283,994	12,012	4	2,451	1	9,561-	3-
03-05	317,896	5,897	2	2,579	1	3,318-	1-
04-06	482,983	6,508	1	22-	0	6,530-	1-
05-07	609,613	9,171	2	177	0	8,994-	1-
06-08	1,104,827	10,381	1	160-	0	10,541-	1-
07-09	1,329,326	15,109	1	186	0	14,923-	1-
08-10	1,644,762	15,651	1	3,860	0	11,791-	1-
09-11	1,369,058	15,696	1	8,466	1	7,230-	1-
10-12	1,104,598	15,177	1	8,123	1	7,054-	1-
11-13	770,952	18,167	2	4,487	1	13,680-	2-
12-14	556,303	20,478	4	363	0	20,116-	4-
13-15	563,572	22,585	4	474	0	22,110-	4-
14-16	619,054	28,024	5	675	0	27,349-	4-
15-17	607,915	40,595	7	1,279	0	39,316-	6-
16-18	683,659	72,384	11	1,166	0	71,218-	10-
17-19	776,609	70,919	9	1,908	0	69,012-	9-
FIVE-YEAR AVERAGE							
15-19	730,164	56,106	8	1,335	0	54,772-	8-

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 381 METERS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
1984				451		451	
1985				427		427	
1986	21,617	1,436	7	546	3	890-	4-
1987	263,870		0	112	0	112	0
1988		2,434				2,434-	
1989	151,882	1,750	1		0	1,750-	1-
1990	8,368	422	5		0	422-	5-
1991	78,260		0	5	0	5	0
1992				1,667		1,667	
1993				200-		200-	
1994							
1995	26,256		0	934	4	934	4
1996	30,247		0	415	1	415	1
1997	9,112		0	5,481	60	5,481	60
1998	42,228		0	3,560	8	3,560	8
1999	106,496		0	22-	0	22-	0
2000	89,185		0		0		0
2001	338,570		0		0		0
2002	264,408		0		0		0
2003	225,621		0	8,616	4	8,616	4
2004	325,793		0	1,616	0	1,616	0
2005	151,951		0	6,478	4	6,478	4
2006	8,185		0	31,422	384	31,422	384
2007	2,708,322		0	27,223	1	27,223	1
2008	384,109		0	28,311	7	28,311	7
2009	451,829		0	9,616	2	9,616	2
2010	538,122		0	23,441	4	23,441	4
2011	564,346		0	31,124	6	31,124	6
2012	834,327		0	44,654	5	44,654	5
2013	619,553		0	63,376	10	63,376	10
2014	1,039,289		0	86,094	8	86,094	8
2015	576,940		0	14,598	3	14,598	3
2016	523,643		0	9,183	2	9,183	2
2017	305,062		0	7,220	2	7,220	2
2018	284,743		0	7,484	3	7,484	3
2019	319,792		0	4,554	1	4,554	1
TOTAL	11,292,124	6,042	0	418,385	4	412,343	4

THREE-YEAR MOVING AVERAGES

84-86	7,206	479	7	475	7	4-	0
-------	-------	-----	---	-----	---	----	---

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 381 METERS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
85-87	95,162	479	1	362	0	117-	0
86-88	95,162	1,290	1	219	0	1,071-	1-
87-89	138,584	1,395	1	37	0	1,357-	1-
88-90	53,417	1,535	3		0	1,535-	3-
89-91	79,503	724	1	2	0	722-	1-
90-92	28,876	141	0	557	2	417	1
91-93	26,087		0	491	2	491	2
92-94				489		489	
93-95	8,752		0	245	3	245	3
94-96	18,834		0	450	2	450	2
95-97	21,872		0	2,276	10	2,276	10
96-98	27,196		0	3,152	12	3,152	12
97-99	52,612		0	3,006	6	3,006	6
98-00	79,303		0	1,179	1	1,179	1
99-01	178,084		0	7-	0	7-	0
00-02	230,721		0		0		0
01-03	276,200		0	2,872	1	2,872	1
02-04	271,941		0	3,411	1	3,411	1
03-05	234,455		0	5,570	2	5,570	2
04-06	161,977		0	13,172	8	13,172	8
05-07	956,153		0	21,708	2	21,708	2
06-08	1,033,539		0	28,985	3	28,985	3
07-09	1,181,420		0	21,716	2	21,716	2
08-10	458,020		0	20,456	4	20,456	4
09-11	518,099		0	21,393	4	21,393	4
10-12	645,598		0	33,073	5	33,073	5
11-13	672,742		0	46,385	7	46,385	7
12-14	831,056		0	64,708	8	64,708	8
13-15	745,260		0	54,689	7	54,689	7
14-16	713,290		0	36,625	5	36,625	5
15-17	468,548		0	10,333	2	10,333	2
16-18	371,149		0	7,962	2	7,962	2
17-19	303,199		0	6,419	2	6,419	2
FIVE-YEAR AVERAGE							
15-19	402,036		0	8,608	2	8,608	2

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 383 HOUSE REGULATORS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
1984	149	22	15	87	58	65	44
1985				438		438	
1986		690		20		670-	
1987	4,733		0		0		0
1988	2,456	732	30		0	732-	30-
1989	1,470	939	64		0	939-	64-
1990	2,653		0		0		0
1991	334		0		0		0
1992	1,303		0	1,252	96	1,252	96
1993	4,677		0		0		0
1994	10,581		0		0		0
1995	267		0	556	208	556	208
1996	144,697	715	0	2,682	2	1,967	1
1997	32,995		0	725	2	725	2
1998	19,440	305	2	1,386	7	1,081	6
1999	24,505	238	1	268	1	30	0
2000	18,369		0	589	3	589	3
2001	16,189		0	1,671	10	1,671	10
2002	26,607		0	128-	0	128-	0
2003	25,820		0		0		0
2004	27,848	1,745	6	48	0	1,697-	6-
2005	30,352	2,753	9	2,021	7	732-	2-
2006	36,063	4,801	13	251	1	4,550-	13-
2007	43,129	16,187	38	1,720-	4-	17,907-	42-
2008	43,778	9,990	23	2,332	5	7,658-	17-
2009	46,007	14,765	32	1,850	4	12,915-	28-
2010	54,124	34,296	63	18,373	34	15,923-	29-
2011	45,337	49,643	109	1,121	2	48,521-	107-
2012	45,925	61,706	134	2,286	5	59,420-	129-
2013	380,500	55,444	15	276	0	55,168-	14-
2014	30,494	84,361	277	122	0	84,239-	276-
2015	33,248	138,675	417	175	1	138,501-	417-
2016	20,699	115,362	557	1,449-	7-	116,811-	564-
2017	26,441	115,025	435	691-	3-	115,716-	438-
2018	44,181	118,250	268	1,466	3	116,784-	264-
2019	23,599	117,343	497		0	117,343-	497-
TOTAL	1,268,970	943,988	74	36,008	3	907,980-	72-

THREE-YEAR MOVING AVERAGES

84-86	50	237	478	182	366	56-	112-
-------	----	-----	-----	-----	-----	-----	------

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 383 HOUSE REGULATORS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
85-87	1,578	230	15	153	10	77-	5-
86-88	2,396	474	20	7	0	467-	20-
87-89	2,886	557	19		0	557-	19-
88-90	2,193	557	25		0	557-	25-
89-91	1,486	313	21		0	313-	21-
90-92	1,430		0	417	29	417	29
91-93	2,105		0	417	20	417	20
92-94	5,520		0	417	8	417	8
93-95	5,175		0	185	4	185	4
94-96	51,848	238	0	1,080	2	841	2
95-97	59,320	238	0	1,321	2	1,083	2
96-98	65,711	340	1	1,598	2	1,258	2
97-99	25,647	181	1	793	3	612	2
98-00	20,771	181	1	748	4	567	3
99-01	19,688	79	0	843	4	763	4
00-02	20,388		0	710	3	710	3
01-03	22,872		0	514	2	514	2
02-04	26,758	582	2	27-	0	608-	2-
03-05	28,006	1,499	5	690	2	810-	3-
04-06	31,421	3,100	10	773	2	2,326-	7-
05-07	36,515	7,914	22	184	1	7,730-	21-
06-08	40,990	10,326	25	288	1	10,038-	24-
07-09	44,305	13,647	31	821	2	12,826-	29-
08-10	47,970	19,684	41	7,518	16	12,165-	25-
09-11	48,489	32,901	68	7,115	15	25,786-	53-
10-12	48,462	48,548	100	7,260	15	41,288-	85-
11-13	157,254	55,598	35	1,228	1	54,370-	35-
12-14	152,306	67,170	44	895	1	66,276-	44-
13-15	148,081	92,827	63	191	0	92,636-	63-
14-16	28,147	112,799	401	384-	1-	113,184-	402-
15-17	26,796	123,021	459	655-	2-	123,676-	462-
16-18	30,441	116,212	382	225-	1-	116,437-	383-
17-19	31,407	116,873	372	258	1	116,614-	371-
FIVE-YEAR AVERAGE							
15-19	29,634	120,931	408	100-	0	121,031-	408-

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 385 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
1988	589		0		0		0
1989							
1990							
1991							
1992							
1993							
1994							
1995				4		4	
1996	7,293		0	374	5	374	5
1997							
1998							
1999				30		30	
2000							
2001							
2002				7,104		7,104	
2003	146,507		0		0		0
2004	21,831		0		0		0
2005							
2006				7,507		7,507	
2007							
2008							
2009	11,581	686	6		0	686-	6-
2010							
2011							
2012							
2013							
2014	9,223		0		0		0
2015							
2016	1,097-		0		0		0
2017							
2018							
2019							
TOTAL	195,926	686	0	15,020	8	14,334	7

THREE-YEAR MOVING AVERAGES

88-90	196		0		0		0
89-91							
90-92							
91-93							
92-94							

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 385 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
93-95				1		1	
94-96	2,431		0	126	5	126	5
95-97	2,431		0	126	5	126	5
96-98	2,431		0	125	5	125	5
97-99				10		10	
98-00				10		10	
99-01				10		10	
00-02				2,368		2,368	
01-03	48,836		0	2,368	5	2,368	5
02-04	56,113		0	2,368	4	2,368	4
03-05	56,113		0		0		0
04-06	7,277		0	2,502	34	2,502	34
05-07				2,502		2,502	
06-08				2,502		2,502	
07-09	3,860	229	6		0	229-	6-
08-10	3,860	229	6		0	229-	6-
09-11	3,860	229	6		0	229-	6-
10-12							
11-13							
12-14	3,074		0		0		0
13-15	3,074		0		0		0
14-16	2,709		0		0		0
15-17	366-		0		0		0
16-18	366-		0		0		0
17-19							
FIVE-YEAR AVERAGE							
15-19	219-		0		0		0

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 390 STRUCTURES AND IMPROVEMENTS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
1998	1,740		0		0		0
1999	1,742		0		0		0
2000	3,602		0		0		0
2001							
2002	5,369		0		0		0
2003	473		0		0		0
2004							
2005	3,217-	7,921	246-		0	7,921-	246
2006	21,928	3,961-	18-		0	3,961	18
2007	344		0		0		0
2008							
2009							
2010							
2011							
2012	3,648	24,476	671		0	24,476-	671-
2013	15,638	1,024	7		0	1,024-	7-
2014	490,009	19,118	4		0	19,118-	4-
2015	3,201	33	1		0	33-	1-
2016							
2017							
2018							
2019	74,761		0		0		0
TOTAL	619,239	48,612	8		0	48,612-	8-

THREE-YEAR MOVING AVERAGES

98-00	2,361		0		0		0
99-01	1,781		0		0		0
00-02	2,990		0		0		0
01-03	1,947		0		0		0
02-04	1,947		0		0		0
03-05	915-	2,640	289-		0	2,640-	289
04-06	6,237	1,320	21		0	1,320-	21-
05-07	6,352	1,320	21		0	1,320-	21-
06-08	7,424	1,320-	18-		0	1,320	18
07-09	115		0		0		0
08-10							
09-11							
10-12	1,216	8,159	671		0	8,159-	671-
11-13	6,429	8,500	132		0	8,500-	132-
12-14	169,765	14,873	9		0	14,873-	9-

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 390 STRUCTURES AND IMPROVEMENTS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
13-15	169,616	6,725	4		0	6,725-	4-
14-16	164,403	6,384	4		0	6,384-	4-
15-17	1,067	11	1		0	11-	1-
16-18							
17-19	24,920		0		0		0
FIVE-YEAR AVERAGE							
15-19	15,592		7		0	7-	0

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 392 TRANSPORTATION EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
1984				4,912		4,912	
1985	24,558		0		0		0
1986	59,881		0	11,283	19	11,283	19
1987	82,357		0	25,960	32	25,960	32
1988	87,603		0	4,998	6	4,998	6
1989	74,574		0	3,769	5	3,769	5
1990	252,985		0	17,202	7	17,202	7
1991	183,412		0	20,670	11	20,670	11
1992	117,393		0	13,326	11	13,326	11
1993	86,868		0	7,884	9	7,884	9
1994	75,918		0	10,579	14	10,579	14
1995	183,241		0	7,864	4	7,864	4
1996	201,890		0	10,519	5	10,519	5
1997							
1998	127,193		0		0		0
1999	53,642		0		0		0
2000	5,222-		0	29	1-	29	1-
2001	14,830		0	12	0	12	0
2002	301,144		0		0		0
2003	103,199		0	3,435	3	3,435	3
2004	143,778		0	6,620	5	6,620	5
2005	121,270		0	10,838	9	10,838	9
2006	282,668		0	16,882	6	16,882	6
2007	388,569		0	72,312	19	72,312	19
2008	70,042		0	48,918	70	48,918	70
2009	743,600		0	27,342	4	27,342	4
2010	277,240		0	22,330	8	22,330	8
2011	409,384		0	63,296	15	63,296	15
2012	788,894		0	222,828	28	222,828	28
2013	432,391		0	78,397	18	78,397	18
2014	594,104		0	50,790	9	50,790	9
2015	722,488		0	160,234	22	160,234	22
2016	300,442		0	82,026	27	82,026	27
2017	144,504		0	26,505	18	26,505	18
2018	231,751		0	74,818	32	74,818	32
2019	398,942		0	59,520	15	59,520	15
TOTAL	8,075,533		0	1,166,097	14	1,166,097	14

THREE-YEAR MOVING AVERAGES

84-86	28,146		0	5,398	19	5,398	19
-------	--------	--	---	-------	----	-------	----

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 392 TRANSPORTATION EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
85-87	55,599		0	12,414	22	12,414	22
86-88	76,614		0	14,080	18	14,080	18
87-89	81,511		0	11,576	14	11,576	14
88-90	138,387		0	8,656	6	8,656	6
89-91	170,324		0	13,880	8	13,880	8
90-92	184,597		0	17,066	9	17,066	9
91-93	129,224		0	13,960	11	13,960	11
92-94	93,393		0	10,596	11	10,596	11
93-95	115,342		0	8,776	8	8,776	8
94-96	153,683		0	9,654	6	9,654	6
95-97	128,377		0	6,128	5	6,128	5
96-98	109,694		0	3,506	3	3,506	3
97-99	60,278		0		0		0
98-00	58,538		0	10	0	10	0
99-01	21,084		0	14	0	14	0
00-02	103,584		0	14	0	14	0
01-03	139,724		0	1,149	1	1,149	1
02-04	182,707		0	3,352	2	3,352	2
03-05	122,749		0	6,964	6	6,964	6
04-06	182,572		0	11,446	6	11,446	6
05-07	264,169		0	33,344	13	33,344	13
06-08	247,093		0	46,037	19	46,037	19
07-09	400,737		0	49,524	12	49,524	12
08-10	363,628		0	32,863	9	32,863	9
09-11	476,741		0	37,656	8	37,656	8
10-12	491,839		0	102,818	21	102,818	21
11-13	543,557		0	121,507	22	121,507	22
12-14	605,130		0	117,338	19	117,338	19
13-15	582,995		0	96,474	17	96,474	17
14-16	539,011		0	97,683	18	97,683	18
15-17	389,145		0	89,588	23	89,588	23
16-18	225,565		0	61,116	27	61,116	27
17-19	258,399		0	53,614	21	53,614	21
FIVE-YEAR AVERAGE							
15-19	359,625		0	80,621	22	80,621	22

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 396 POWER OPERATED EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
		AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
1984	3,256		0		0		0
1985	9,474		0		0		0
1986	37,200		0	7,567	20	7,567	20
1987	39,212		0	1,100	3	1,100	3
1988	163,774		0	43,289	26	43,289	26
1989	46,884		0	500	1	500	1
1990	140,137		0	11,097	8	11,097	8
1991	97,163		0	19,174	20	19,174	20
1992	73,934		0	5,870	8	5,870	8
1993	57,599		0	7,138	12	7,138	12
1994	77,094		0	4,467	6	4,467	6
1995	26,079		0	3,105	12	3,105	12
1996	20,388		0	8,613	42	8,613	42
1997	11,869		0		0		0
1998	3,781		0		0		0
1999	20,044		0		0		0
2000	23,310		0	20,701	89	20,701	89
2001	24,404		0	2,975	12	2,975	12
2002	159,499		0		0		0
2003	211,812		0	28,318	13	28,318	13
2004	231,567		0	4,637	2	4,637	2
2005							
2006	92,585		0	25,468	28	25,468	28
2007	314,388		0	15,345	5	15,345	5
2008	232,102		0	30,830	13	30,830	13
2009	179,185		0	10,245	6	10,245	6
2010	270,709		0	34,214	13	34,214	13
2011	140,238		0	47,613	34	47,613	34
2012	196,680		0	59,004	30	59,004	30
2013	275,080		0	42,920	16	42,920	16
2014	99,196		0	90,675	91	90,675	91
2015	374,341		0	136,561	36	136,561	36
2016	175,898		0	73,108	42	73,108	42
2017	39,071		0	17,298	44	17,298	44
2018	80,131		0	31,062	39	31,062	39
2019	287,133		0	83,002	29	83,002	29
TOTAL	4,235,217		0	865,895	20	865,895	20

THREE-YEAR MOVING AVERAGES

84-86	16,643		0	2,522	15	2,522	15
-------	--------	--	---	-------	----	-------	----

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 396 POWER OPERATED EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
85-87	28,629		0	2,889	10	2,889	10
86-88	80,062		0	17,319	22	17,319	22
87-89	83,290		0	14,963	18	14,963	18
88-90	116,932		0	18,295	16	18,295	16
89-91	94,728		0	10,257	11	10,257	11
90-92	103,745		0	12,047	12	12,047	12
91-93	76,232		0	10,727	14	10,727	14
92-94	69,542		0	5,825	8	5,825	8
93-95	53,591		0	4,903	9	4,903	9
94-96	41,187		0	5,395	13	5,395	13
95-97	19,446		0	3,906	20	3,906	20
96-98	12,013		0	2,871	24	2,871	24
97-99	11,898		0		0		0
98-00	15,711		0	6,900	44	6,900	44
99-01	22,586		0	7,892	35	7,892	35
00-02	69,071		0	7,892	11	7,892	11
01-03	131,905		0	10,431	8	10,431	8
02-04	200,959		0	10,985	5	10,985	5
03-05	147,793		0	10,985	7	10,985	7
04-06	108,051		0	10,035	9	10,035	9
05-07	135,658		0	13,604	10	13,604	10
06-08	213,025		0	23,881	11	23,881	11
07-09	241,892		0	18,806	8	18,806	8
08-10	227,332		0	25,096	11	25,096	11
09-11	196,711		0	30,691	16	30,691	16
10-12	202,542		0	46,944	23	46,944	23
11-13	203,999		0	49,846	24	49,846	24
12-14	190,319		0	64,200	34	64,200	34
13-15	249,539		0	90,052	36	90,052	36
14-16	216,478		0	100,114	46	100,114	46
15-17	196,436		0	75,656	39	75,656	39
16-18	98,366		0	40,489	41	40,489	41
17-19	135,445		0	43,788	32	43,788	32
FIVE-YEAR AVERAGE							
15-19	191,315		0	68,206	36	68,206	36

**PART IX. DETAILED DEPRECIATION
CALCULATIONS**

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 367 MAINS

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

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R3						
NET SALVAGE PERCENT.. -10						
1967	857,158.90	690,345	942,464	411	16.07	26
1969	13,002.36	10,186	13,906	397	17.27	23
1995	232,045.52	98,016	133,812	121,438	36.96	3,286
1998	5,729.88	2,142	2,924	3,379	39.61	85
1999	322,447.49	115,215	157,292	197,400	40.51	4,873
2001	3,519,605.05	1,140,834	1,557,477	2,314,089	42.32	54,681
2005	44,914.39	11,512	15,716	33,690	46.02	732
2006	1,807.13	432	590	1,398	46.96	30
2008	106,031.30	21,674	29,589	87,045	48.85	1,782
2017	185,169.26	8,351	11,401	192,285	57.54	3,342
2018	96,569.29	2,621	3,578	102,648	58.52	1,754
2019	1,194,061.72	10,731	14,650	1,298,817	59.51	21,825
	6,578,542.29	2,112,059	2,883,399	4,352,997		92,439
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						47.1 1.41

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 369 MEASURING AND REGULATING STATION EQUIPMENT

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

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R2.5						
NET SALVAGE PERCENT.. -5						
1967	15,138.53	13,126	15,895			
1968	2,504.54	2,152	2,630			
1982	7,781.39	5,496	8,170			
1986	2,318.94	1,502	2,435			
1998	4,540.20	2,011	4,392	375	26.02	14
2005	8,616.48	2,648	5,782	3,265	31.83	103
	40,900.08	26,935	39,304	3,641		117
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					31.1	0.29

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 375 STRUCTURES AND IMPROVEMENTS

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

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R2						
NET SALVAGE PERCENT.. -5						
1939	438.71	453	143	318	0.79	318
1949	1,602.48	1,549	489	1,194	3.56	335
1950	650.72	625	197	486	3.85	126
1959	2,602.83	2,338	739	1,994	6.51	306
1962	1,288.75	1,129	357	996	7.47	133
1971	742.05	591	187	592	10.86	55
1986	9,239.90	5,653	1,786	7,916	18.78	422
1993	11,514.18	5,798	1,832	10,258	23.42	438
1994	2,391.26	1,164	368	2,143	24.13	89
2004	3,148.16	976	308	2,998	31.71	95
2010	42,181.14	8,208	2,593	41,697	36.66	1,137
2015	108,348.31	10,163	3,211	110,555	40.98	2,698
	184,148.49	38,647	12,210	181,146		6,152
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						29.4 3.34

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 376 MAINS

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

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 58-S1.5						
NET SALVAGE PERCENT.. -10						
1907	108.52	117	119			
1912	54.73	58	60			
1914	177.43	186	195			
1922	0.30					
1929	323.55	316	356			
1930	1,788.21	1,736	1,967			
1931	9,615.07	9,289	10,577			
1932	454.94	437	500			
1933	2,272.33	2,172	2,500			
1934	5.13	5	6			
1935	99.21	94	109			
1937	15.13	14	17			
1938	47.44	44	52			
1939	6,189.47	5,726	6,808			
1940	11,830.69	10,882	13,014			
1941	12,264.75	11,214	13,491			
1942	1,930.01	1,754	2,120	3	10.08	
1943	1,846.75	1,668	2,016	15	10.37	1
1944	69.62	63	76	1	10.66	
1945	989.70	883	1,067	22	10.96	2
1946	12,852.83	11,391	13,768	370	11.27	33
1947	6,836.62	6,019	7,275	245	11.58	21
1948	6,121.15	5,353	6,470	263	11.89	22
1949	2,115.68	1,837	2,220	107	12.21	9
1950	24,777.85	21,368	25,827	1,429	12.53	114
1951	6,537.01	5,596	6,764	427	12.86	33
1952	69,650.09	59,192	71,544	5,071	13.19	384
1953	31,089.02	26,220	31,692	2,506	13.53	185
1954	85,558.80	71,592	86,532	7,583	13.88	546
1955	99,941.52	82,964	100,277	9,659	14.23	679
1956	44,016.80	36,247	43,811	4,607	14.58	316
1957	52,394.89	42,779	51,706	5,928	14.95	397
1958	81,970.68	66,366	80,216	9,952	15.31	650
1959	77,212.52	61,957	74,886	10,048	15.69	640
1960	59,632.01	47,421	57,317	8,278	16.07	515
1961	541,796.72	426,844	515,919	80,057	16.46	4,864
1962	226,407.28	176,652	213,516	35,532	16.86	2,107
1963	450,739.89	348,265	420,942	74,872	17.26	4,338
1964	206,570.11	157,961	190,925	36,302	17.68	2,053
1965	759,804.56	574,962	694,947	140,838	18.10	7,781
1966	1,082,368.25	810,231	979,313	211,292	18.53	11,403

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 376 MAINS

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

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 58-S1.5						
NET SALVAGE PERCENT.. -10						
1967	4,768,204.08	3,530,426	4,267,169	977,855	18.96	51,575
1968	1,042,686.73	763,115	922,365	224,590	19.41	11,571
1969	877,138.71	634,477	766,882	197,971	19.86	9,968
1970	398,561.66	284,744	344,165	94,253	20.33	4,636
1971	1,137,915.59	802,820	970,356	281,351	20.80	13,526
1972	350,859.12	244,276	295,252	90,693	21.29	4,260
1973	298,950.28	205,357	248,212	80,633	21.78	3,702
1974	423,167.05	286,673	346,497	118,987	22.28	5,341
1975	374,042.48	249,707	301,817	109,630	22.80	4,808
1976	329,852.73	216,952	262,226	100,612	23.32	4,314
1977	479,204.15	310,276	375,026	152,099	23.86	6,375
1978	865,413.38	551,315	666,365	285,590	24.41	11,700
1979	462,365.44	289,730	350,192	158,410	24.96	6,347
1980	919,049.31	565,963	684,070	326,884	25.53	12,804
1981	1,155,381.24	698,574	844,355	426,564	26.12	16,331
1982	1,130,993.15	671,163	811,224	432,868	26.71	16,206
1983	1,214,436.46	706,640	854,104	481,776	27.32	17,635
1984	1,516,887.43	864,790	1,045,258	623,318	27.94	22,309
1985	2,483,983.80	1,386,438	1,675,765	1,056,617	28.57	36,983
1986	3,351,745.80	1,829,487	2,211,271	1,475,649	29.22	50,501
1987	3,747,762.96	1,998,731	2,415,834	1,706,705	29.88	57,119
1988	3,080,204.84	1,603,579	1,938,220	1,450,005	30.55	47,463
1989	2,686,233.16	1,363,814	1,648,420	1,306,436	31.23	41,833
1990	4,067,597.08	2,011,134	2,430,825	2,043,532	31.93	64,000
1991	3,682,112.41	1,770,964	2,140,535	1,909,789	32.64	58,511
1992	3,848,329.41	1,797,655	2,172,796	2,060,366	33.37	61,743
1993	4,981,033.91	2,256,857	2,727,826	2,751,311	34.11	80,660
1994	5,869,217.01	2,575,806	3,113,335	3,342,804	34.86	95,892
1995	6,755,232.79	2,865,968	3,464,049	3,966,707	35.63	111,331
1996	8,170,246.70	3,345,422	4,043,557	4,943,714	36.41	135,779
1997	8,580,958.96	3,383,429	4,089,496	5,349,559	37.21	143,767
1998	5,136,373.93	1,947,333	2,353,710	3,296,301	38.01	86,722
1999	7,206,326.53	2,618,592	3,165,050	4,761,909	38.84	122,603
2000	7,178,768.48	2,495,577	3,016,363	4,880,282	39.67	123,022
2001	7,180,155.06	2,380,351	2,877,092	5,021,079	40.52	123,916
2002	7,965,800.34	2,510,860	3,034,836	5,727,544	41.38	138,413
2003	8,808,987.08	2,631,288	3,180,395	6,509,491	42.25	154,071
2004	8,347,506.49	2,352,586	2,843,533	6,338,724	43.14	146,934
2005	13,218,577.89	3,502,209	4,233,063	10,307,373	44.03	234,099
2006	11,310,023.95	2,801,346	3,385,941	9,055,085	44.94	201,493
2007	7,899,579.24	1,818,807	2,198,363	6,491,174	45.86	141,543

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 376 MAINS

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

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 58-S1.5						
NET SALVAGE PERCENT.. -10						
2008	15,761,950.11	3,354,064	4,054,003	13,284,142	46.78	283,971
2009	10,603,254.15	2,067,253	2,498,655	9,164,925	47.72	192,056
2010	8,660,771.65	1,532,489	1,852,295	7,674,554	48.67	157,686
2011	4,919,391.88	780,909	943,872	4,467,459	49.63	90,015
2012	4,414,826.25	620,442	749,918	4,106,391	50.59	81,170
2013	7,091,278.65	866,079	1,046,816	6,753,591	51.56	130,985
2014	16,162,732.82	1,673,716	2,022,993	15,756,013	52.54	299,886
2015	7,305,262.76	620,684	750,211	7,285,578	53.52	136,128
2016	6,225,634.31	412,056	498,045	6,350,153	54.51	116,495
2017	11,791,325.54	559,027	675,687	12,294,771	55.50	221,527
2018	14,348,255.82	408,150	493,324	15,289,757	56.50	270,615
2019	17,875,819.09	169,499	204,871	19,458,530	57.50	338,409
	292,440,847.10	81,277,474	98,237,417	223,447,515		5,037,842
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						44.4 1.72

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

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

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R2						
NET SALVAGE PERCENT.. -5						
1940	122.00	125	128			
1945	432.17	429	454			
1946	393.01	388	412	1	2.69	
1947	446.67	438	465	4	2.98	1
1948	866.80	844	895	15	3.27	5
1949	3,552.50	3,435	3,644	86	3.56	24
1950	4,246.22	4,077	4,325	134	3.85	35
1951	1,965.25	1,874	1,988	76	4.14	18
1952	5,269.05	4,988	5,292	241	4.43	54
1953	6,891.99	6,478	6,873	364	4.72	77
1954	1,846.34	1,723	1,828	111	5.01	22
1955	3,948.94	3,658	3,881	265	5.30	50
1956	8,112.84	7,458	7,913	605	5.60	108
1957	6,612.76	6,033	6,401	542	5.90	92
1958	3,086.03	2,794	2,964	276	6.20	45
1959	5,729.67	5,146	5,460	556	6.51	85
1960	10,052.66	8,956	9,502	1,053	6.82	154
1961	34,674.62	30,631	32,498	3,910	7.14	548
1962	21,046.99	18,431	19,554	2,545	7.47	341
1963	19,423.71	16,855	17,882	2,513	7.81	322
1964	10,661.50	9,167	9,726	1,469	8.15	180
1965	21,903.72	18,655	19,792	3,207	8.50	377
1966	25,395.66	21,409	22,714	3,951	8.87	445
1967	73,787.37	61,568	65,321	12,156	9.24	1,316
1968	43,316.17	35,749	37,928	7,554	9.63	784
1969	20,904.22	17,057	18,097	3,852	10.03	384
1970	19,093.34	15,397	16,335	3,713	10.44	356
1971	44,198.75	35,209	37,355	9,054	10.86	834
1972	14,601.53	11,482	12,182	3,150	11.30	279
1973	28,227.65	21,900	23,235	6,404	11.75	545
1974	54,206.77	41,474	44,002	12,915	12.21	1,058
1975	13,566.75	10,228	10,851	3,394	12.69	267
1976	17,351.45	12,883	13,668	4,551	13.18	345
1977	12,828.96	9,375	9,946	3,524	13.68	258
1978	8,702.04	6,256	6,637	2,500	14.19	176
1979	10,655.14	7,528	7,987	3,201	14.72	217
1980	8,784.01	6,096	6,468	2,755	15.26	181
1981	107,112.73	72,929	77,374	35,094	15.82	2,218
1982	200,738.91	134,007	142,175	68,601	16.39	4,186
1983	332,125.19	217,221	230,461	118,270	16.97	6,969
1984	34,088.74	21,826	23,156	12,637	17.56	720

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 378 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

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

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R2						
NET SALVAGE PERCENT.. -5						
1985	41,928.35	26,258	27,858	16,167	18.16	890
1986	132,354.75	80,975	85,910	53,062	18.78	2,825
1987	76,959.74	45,953	48,754	32,054	19.41	1,651
1988	69,910.25	40,699	43,180	30,226	20.05	1,508
1989	39,230.23	22,244	23,600	17,592	20.70	850
1990	77,104.73	42,513	45,104	35,856	21.37	1,678
1991	49,535.58	26,538	28,156	23,856	22.04	1,082
1992	53,239.34	27,665	29,351	26,550	22.73	1,168
1993	116,160.55	58,491	62,056	59,913	23.42	2,558
1994	66,821.42	32,540	34,523	35,639	24.13	1,477
1995	18,729.10	8,810	9,347	10,319	24.84	415
1996	31,720.01	14,381	15,258	18,048	25.57	706
1997	98,736.84	43,083	45,709	57,965	26.30	2,204
1998	99,755.46	41,781	44,328	60,415	27.05	2,233
1999	106,265.75	42,648	45,247	66,332	27.80	2,386
2000	248,333.72	95,203	101,006	159,744	28.57	5,591
2001	223,362.39	81,617	86,591	147,940	29.34	5,042
2003	163,676.46	53,811	57,091	114,769	30.91	3,713
2004	235,018.01	72,878	77,320	169,449	31.71	5,344
2005	256,985.83	74,895	79,460	190,375	32.51	5,856
2006	48,848.72	13,313	14,124	37,167	33.32	1,115
2007	108,490.97	27,466	29,140	84,776	34.15	2,482
2008	182,450.86	42,658	45,258	146,315	34.98	4,183
2009	108,577.36	23,282	24,701	89,305	35.81	2,494
2010	22,545.89	4,387	4,654	19,019	36.66	519
2011	74,261.34	12,978	13,769	64,205	37.51	1,712
2013	101,492.75	13,664	14,497	92,070	39.23	2,347
2014	290,685.27	33,235	35,261	269,959	40.10	6,732
2015	751,681.32	70,505	74,802	714,463	40.98	17,434
2016	13,829.40	1,013	1,075	13,446	41.86	321
2017	209,602.74	11,004	11,675	208,408	42.75	4,875
2018	618,840.00	19,493	20,681	629,101	43.65	14,412
2019	263,311.24	2,765	2,933	273,543	44.55	6,140
	6,241,417.19	2,120,923	2,250,188	4,303,300		138,019

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 31.2 2.21

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 379 MEASURING AND REGULATING STATION EQUIPMENT - CITY GATE

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

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R2						
NET SALVAGE PERCENT.. -5						
1963	7,509.11	6,516	6,683	1,202	7.81	154
1964	442.71	381	391	74	8.15	9
1965	16,904.70	14,397	14,765	2,985	8.50	351
1966	1,497.51	1,262	1,294	278	8.87	31
1967	1,651.86	1,378	1,413	321	9.24	35
1970	3,146.70	2,537	2,602	702	10.44	67
1971	14,847.13	11,827	12,129	3,460	10.86	319
1984	5,861.50	3,753	3,849	2,306	17.56	131
1985	33,568.31	21,023	21,561	13,686	18.16	754
1986	892.37	546	560	377	18.78	20
1987	696.09	416	427	304	19.41	16
1991	24,886.64	13,333	13,674	12,457	22.04	565
1994	21,558.65	10,498	10,766	11,871	24.13	492
1996	16,874.40	7,650	7,846	9,872	25.57	386
1997	3,799.98	1,658	1,700	2,290	26.30	87
1998	924.03	387	397	573	27.05	21
1999	25,997.39	10,434	10,701	16,596	27.80	597
2000	12,647.46	4,849	4,973	8,307	28.57	291
2001	25,341.14	9,260	9,497	17,111	29.34	583
2002	7,163.03	2,487	2,551	4,970	30.12	165
2003	63,694.61	20,941	21,476	45,403	30.91	1,469
2004	26,575.19	8,241	8,452	19,452	31.71	613
2005	63,586.25	18,531	19,005	47,761	32.51	1,469
2006	26,918.29	7,336	7,523	20,741	33.32	622
2010	29,166.50	5,676	5,821	24,804	36.66	677
2013	55,336.41	7,450	7,640	50,463	39.23	1,286
2015	202,616.81	19,005	19,491	193,257	40.98	4,716
	694,104.77	211,772	217,187	511,623		15,926

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 32.1 2.29

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 380 SERVICES

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

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 47-S0.5						
NET SALVAGE PERCENT.. -10						
1929	42.19	45	46			
1930	63.97	68	70			
1931	7,488.94	7,898	8,238			
1932	7,023.09	7,349	7,725			
1933	2,385.21	2,477	2,624			
1934	6,280.08	6,473	6,908			
1935	6,585.87	6,736	7,244			
1936	5,354.09	5,433	5,889			
1937	14,866.61	14,972	16,353			
1938	566.53	566	623			
1939	865.59	858	952			
1940	99.34	98	109			
1944	454.11	432	500			
1945	135.06	128	149			
1946	473.86	444	521			
1947	490.16	455	539			
1948	935.14	861	1,029			
1949	403.21	368	444			
1950	1,694.67	1,533	1,864			
1951	290.20	260	319			
1952	941.58	836	1,036			
1953	383.66	338	422			
1954	1,620.87	1,413	1,783			
1955	5,619.34	4,850	6,181			
1956	4,595.90	3,928	5,055			
1957	6,598.14	5,584	7,258			
1958	11,607.37	9,725	12,768			
1959	13,094.19	10,858	14,404			
1960	4,855.58	3,984	5,341			
1961	6,696.42	5,437	7,366			
1962	5,774.46	4,637	6,352			
1963	22,170.01	17,605	24,387			
1964	4,100.64	3,220	4,511			
1965	38,038.19	29,521	41,842			
1966	59,259.21	45,449	65,185			
1967	552,881.52	418,859	608,170			
1968	275,427.87	206,084	302,971			
1969	294,345.98	217,483	323,781			
1970	321,389.48	234,382	353,528			
1971	346,168.25	249,049	380,785			
1972	261,003.23	185,213	287,104			

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 380 SERVICES

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

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 47-S0.5						
NET SALVAGE PERCENT.. -10						
1973	150,696.45	105,455	165,766			
1974	172,225.28	118,788	189,448			
1975	268,087.73	182,208	294,897			
1976	312,259.82	208,942	343,486			
1977	272,528.71	179,551	299,782			
1978	449,884.73	291,658	494,873			
1979	668,624.97	426,266	730,865	4,622	19.76	234
1980	772,729.32	484,136	830,088	19,914	20.23	984
1981	843,187.43	519,005	889,873	37,633	20.70	1,818
1982	1,066,845.53	644,690	1,105,370	68,160	21.18	3,218
1983	968,765.56	574,541	985,094	80,548	21.66	3,719
1984	1,169,870.66	680,117	1,166,112	120,746	22.16	5,449
1985	1,400,281.93	797,680	1,367,683	172,627	22.66	7,618
1986	1,647,557.29	919,260	1,576,141	236,172	23.16	10,197
1987	2,083,786.70	1,137,304	1,949,994	342,171	23.68	14,450
1988	2,252,711.30	1,201,549	2,060,147	417,835	24.21	17,259
1989	2,142,703.11	1,116,310	1,913,998	442,975	24.74	17,905
1990	2,576,045.97	1,309,515	2,245,262	588,389	25.28	23,275
1991	2,642,432.02	1,308,614	2,243,718	662,957	25.84	25,656
1992	2,718,934.13	1,310,880	2,247,603	743,225	26.40	28,152
1993	3,214,103.45	1,506,730	2,583,402	952,112	26.97	35,303
1994	4,115,571.93	1,873,462	3,212,192	1,314,937	27.55	47,729
1995	4,432,695.37	1,956,627	3,354,785	1,521,180	28.14	54,058
1996	4,006,122.91	1,711,135	2,933,870	1,472,865	28.75	51,230
1997	3,896,933.54	1,608,857	2,758,507	1,528,120	29.36	52,048
1998	4,151,391.31	1,652,673	2,833,633	1,732,897	29.99	57,782
1999	4,089,018.54	1,567,570	2,687,717	1,810,203	30.62	59,118
2000	3,520,203.34	1,295,956	2,222,015	1,650,209	31.27	52,773
2001	3,426,293.05	1,207,676	2,070,652	1,698,270	31.94	53,171
2002	3,902,057.58	1,314,162	2,253,230	2,039,033	32.61	62,528
2003	4,178,765.22	1,339,875	2,297,317	2,299,325	33.30	69,049
2004	4,437,481.32	1,350,148	2,314,931	2,566,298	34.00	75,479
2005	5,632,399.19	1,618,797	2,775,550	3,420,089	34.72	98,505
2006	4,264,595.12	1,152,780	1,976,528	2,714,527	35.45	76,573
2007	1,917,528.75	484,692	831,041	1,278,241	36.20	35,311
2008	6,302,933.56	1,481,076	2,539,417	4,393,810	36.96	118,880
2009	5,855,922.91	1,269,107	2,175,980	4,265,535	37.74	113,024
2010	4,291,128.15	849,643	1,456,777	3,263,464	38.54	84,677
2011	4,122,035.05	738,038	1,265,422	3,268,817	39.35	83,070
2012	3,423,445.72	546,454	936,937	2,828,853	40.18	70,405
2013	2,888,160.59	404,207	693,043	2,483,934	41.02	60,554

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 380 SERVICES

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

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 47-S0.5						
NET SALVAGE PERCENT.. -10						
2014	3,510,490.16	419,827	719,825	3,141,714	41.89	74,999
2015	3,682,480.05	364,566	625,076	3,425,652	42.77	80,095
2016	3,615,548.35	281,778	483,130	3,493,973	43.67	80,009
2017	4,795,099.80	269,322	461,773	4,812,837	44.60	107,911
2018	5,603,297.85	191,442	328,241	5,835,387	45.54	128,138
2019	7,762,523.36	89,059	152,698	8,386,077	46.51	180,307
	141,911,454.62	43,778,037	74,566,265	81,536,335		2,222,660
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						36.7 1.57

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 381 METERS

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

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 30-S0						
NET SALVAGE PERCENT.. +2						
1942	311.51	305	305			
1946	77.88	76	76			
1955	967.43	948	948			
1956	2,033.35	1,993	1,993			
1957	1,490.58	1,461	1,461			
1958	764.55	749	749			
1959	30.83	30	30			
1960	1,466.14	1,427	615	822	0.20	822
1961	5,311.17	5,108	2,200	3,005	0.56	3,005
1962	6,289.92	5,975	2,573	3,591	0.92	3,591
1963	7,498.83	7,033	3,029	4,320	1.29	3,349
1964	1,582.39	1,465	631	920	1.66	554
1965	3,373.59	3,082	1,327	1,979	2.03	975
1966	6,388.60	5,760	2,481	3,780	2.40	1,575
1967	20,880.25	18,566	7,996	12,467	2.78	4,485
1968	84,279.54	73,922	31,835	50,759	3.15	16,114
1969	63,994.26	55,335	23,830	38,884	3.53	11,015
1970	56,645.23	48,259	20,783	34,729	3.92	8,859
1971	63,518.25	53,326	22,965	39,283	4.30	9,136
1972	49,478.55	40,909	17,618	30,871	4.69	6,582
1973	26,579.41	21,637	9,318	16,730	5.08	3,293
1974	4,935.44	3,955	1,703	3,134	5.47	573
1975	6,979.24	5,504	2,370	4,470	5.86	763
1976	8,530.63	6,616	2,849	5,511	6.26	880
1977	27,576.72	21,026	9,055	17,970	6.66	2,698
1978	16,198.53	12,139	5,228	10,647	7.06	1,508
1979	47,902.75	35,271	15,190	31,755	7.46	4,257
1980	37,451.11	27,074	11,660	25,042	7.87	3,182
1981	89,894.27	63,782	27,468	60,628	8.28	7,322
1982	69,173.19	48,131	20,728	47,062	8.70	5,409
1983	51,110.70	34,878	15,020	35,068	9.11	3,849
1984	8,869.01	5,928	2,553	6,139	9.54	644
1985	8,920.05	5,839	2,515	6,227	9.96	625
1986	114,596.17	73,410	31,614	80,690	10.39	7,766
1987	40,551.60	25,407	10,942	28,799	10.82	2,662
1988	80,331.79	49,177	21,178	57,547	11.26	5,111
1989	79,020.34	47,238	20,343	57,097	11.70	4,880
1990	163,567.99	95,376	41,074	119,223	12.15	9,813
1991	204,431.55	116,199	50,042	150,301	12.60	11,929
1992	221,969.30	122,833	52,899	164,631	13.06	12,606
1993	233,757.47	125,842	54,195	174,887	13.52	12,935

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 381 METERS

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

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 30-S0						
NET SALVAGE PERCENT.. +2						
1994	404,723.66	211,669	91,156	305,473	13.99	21,835
1995	904,778.36	459,009	197,675	689,008	14.47	47,616
1996	551,000.09	270,892	116,661	423,319	14.95	28,316
1997	395,779.99	188,242	81,068	306,796	15.44	19,870
1998	605,746.49	278,413	119,900	473,732	15.93	29,738
1999	1,193,347.32	528,605	227,647	941,833	16.44	57,289
2000	1,171,872.56	499,569	215,142	933,293	16.95	55,062
2001	993,589.37	406,693	175,145	798,573	17.47	45,711
2002	518,965.65	203,435	87,610	420,976	18.00	23,388
2003	761,244.44	284,979	122,728	623,292	18.54	33,619
2004	653,873.43	233,038	100,359	540,437	19.09	28,310
2005	830,010.99	280,627	120,854	692,557	19.65	35,245
2006	1,092,163.96	348,925	150,267	920,054	20.22	45,502
2007	442,826.77	132,938	57,251	376,719	20.81	18,103
2008	1,020,481.87	286,351	123,319	876,753	21.41	40,951
2009	753,279.65	196,121	84,461	653,753	22.03	29,676
2010	473,221.73	113,467	48,865	414,892	22.66	18,309
2011	718,228.31	156,729	67,496	636,368	23.32	27,289
2012	1,052,212.80	206,574	88,962	942,207	23.99	39,275
2013	693,958.47	120,598	51,936	628,143	24.68	25,451
2014	1,001,087.08	150,427	64,782	916,283	25.40	36,074
2015	1,278,100.12	160,738	69,223	1,183,315	26.15	45,251
2016	1,011,768.85	101,464	43,696	947,837	26.93	35,196
2017	821,338.01	60,634	26,112	778,799	27.74	28,075
2018	761,782.01	34,841	15,005	731,541	28.60	25,578
2019	595,107.44	9,331	4,018	579,187	29.52	19,620
	22,619,219.53	7,197,300	3,102,727	19,064,108		1,033,116
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						18.5 4.57

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 383 HOUSE REGULATORS

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

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R3						
NET SALVAGE PERCENT.. -25						
1932	30.51	38	38			
1949	266.01	323	240	93	1.32	70
1950	238.49	288	214	84	1.56	54
1952	1,676.09	1,999	1,488	607	2.07	293
1954	1,074.04	1,266	942	401	2.57	156
1955	2,212.65	2,592	1,929	837	2.83	296
1956	6,114.15	7,118	5,297	2,346	3.09	759
1957	7,895.89	9,135	6,798	3,072	3.35	917
1958	5,671.29	6,522	4,853	2,236	3.60	621
1959	8,468.78	9,678	7,202	3,384	3.86	877
1960	5,595.34	6,354	4,728	2,266	4.12	550
1961	8,339.19	9,409	7,002	3,422	4.38	781
1962	5,544.03	6,214	4,624	2,306	4.65	496
1963	14,206.62	15,817	11,770	5,988	4.92	1,217
1964	8,981.66	9,927	7,387	3,840	5.21	737
1965	9,287.46	10,190	7,583	4,026	5.50	732
1966	10,642.97	11,589	8,624	4,680	5.80	807
1967	18,091.12	19,538	14,539	8,075	6.12	1,319
1968	34,829.71	37,287	27,747	15,790	6.46	2,444
1969	37,615.65	39,904	29,694	17,326	6.81	2,544
1970	23,695.15	24,893	18,524	11,095	7.18	1,545
1971	27,523.06	28,624	21,300	13,104	7.56	1,733
1972	22,273.15	22,910	17,048	10,793	7.97	1,354
1973	11,549.95	11,742	8,738	5,699	8.40	678
1974	9,082.73	9,121	6,787	4,566	8.85	516
1975	20,125.16	19,946	14,843	10,313	9.32	1,107
1976	17,873.84	17,472	13,002	9,340	9.81	952
1977	14,570.67	14,036	10,445	7,768	10.32	753
1978	19,198.86	18,212	13,552	10,447	10.85	963
1979	36,255.56	33,828	25,173	20,146	11.41	1,766
1980	43,900.12	40,266	29,964	24,911	11.98	2,079
1981	39,257.17	35,364	26,316	22,755	12.57	1,810
1982	56,785.57	50,176	37,338	33,644	13.19	2,551
1983	63,392.15	54,905	40,857	38,383	13.82	2,777
1984	66,179.78	56,143	41,778	40,947	14.46	2,832
1985	100,349.60	83,263	61,959	63,478	15.13	4,196
1986	112,135.97	90,924	67,660	72,510	15.81	4,586
1987	120,588.38	95,432	71,015	79,720	16.51	4,829
1988	89,538.29	69,093	51,415	60,508	17.22	3,514
1989	173,777.16	130,622	97,201	120,020	17.94	6,690
1990	344,989.06	252,226	187,692	243,544	18.68	13,038

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 383 HOUSE REGULATORS

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

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R3						
NET SALVAGE PERCENT.. -25						
1991	173,149.34	122,936	91,482	124,955	19.44	6,428
1992	253,473.63	174,615	129,938	186,904	20.20	9,253
1993	366,582.90	244,593	182,012	276,217	20.98	13,166
1994	909,041.08	586,581	436,499	699,802	21.77	32,145
1995	401,096.88	249,903	185,963	315,408	22.57	13,975
1996	1,213,587.67	728,820	542,345	974,640	23.38	41,687
1997	784,498.34	453,048	337,132	643,491	24.21	26,580
1998	613,757.11	340,298	253,230	513,966	25.04	20,526
1999	553,790.45	293,973	218,758	473,480	25.89	18,288
2000	456,534.96	231,566	172,318	398,351	26.74	14,897
2001	435,336.17	210,289	156,485	387,685	27.61	14,041
2002	182,542.87	83,716	62,297	165,882	28.49	5,822
2003	49,407.38	21,451	15,963	45,796	29.37	1,559
2004	213,956.62	87,543	65,144	202,302	30.27	6,683
2005	750,456.38	288,297	214,534	723,536	31.17	23,213
2006	520,434.39	186,777	138,989	511,554	32.08	15,946
2007	169,642.86	56,548	42,080	169,974	33.00	5,151
2008	601,826.21	185,062	137,712	614,571	33.93	18,113
2009	573,241.60	161,461	120,150	596,402	34.86	17,108
2010	452,646.83	115,549	85,985	479,824	35.81	13,399
2012	2,799,489.13	566,897	421,851	3,077,510	37.71	81,610
2013	228,675.27	40,210	29,922	255,922	38.67	6,618
2014	326,609.46	48,718	36,253	372,009	39.63	9,387
2015	636,354.50	77,778	57,878	737,565	40.60	18,167
2016	852,142.73	81,188	60,415	1,004,763	41.57	24,170
2017	840,038.61	57,165	42,539	1,007,509	42.55	23,678
2018	1,036,349.57	42,322	31,493	1,263,944	43.53	29,036
2019	873,916.64	11,896	8,853	1,083,543	44.51	24,344
	18,868,402.61	7,113,586	5,293,526	18,291,978		610,929

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 29.9 3.24

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 385 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT

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

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 40-R1						
NET SALVAGE PERCENT.. 0						
1965	2,039.40	1,608	2,039			
1968	1,089.67	827	1,090			
1969	3,190.55	2,391	3,191			
1971	3,120.05	2,274	3,120			
1982	120.93	73	104	17	15.93	1
1984	586.83	338	481	106	16.96	6
1985	4,851.80	2,730	3,882	970	17.49	55
1986	5,946.94	3,266	4,644	1,303	18.03	72
1987	876.19	469	667	209	18.58	11
1988	7,305.46	3,812	5,420	1,885	19.13	99
1990	11,026.90	5,439	7,734	3,293	20.27	162
1991	17,729.79	8,488	12,069	5,661	20.85	272
1992	24,277.89	11,265	16,018	8,260	21.44	385
1993	20,145.94	9,046	12,863	7,283	22.04	330
1994	20,493.55	8,894	12,647	7,847	22.64	347
1995	45,696.25	19,124	27,193	18,503	23.26	795
1996	198,821.74	80,125	113,933	84,889	23.88	3,555
1997	245,310.16	94,996	135,079	110,231	24.51	4,497
1998	122,273.55	45,425	64,592	57,682	25.14	2,294
1999	6,775.45	2,409	3,425	3,350	25.78	130
2000	6,792.57	2,304	3,276	3,517	26.43	133
2001	90,229.91	29,122	41,410	48,820	27.09	1,802
2002	18,700.94	5,727	8,144	10,557	27.75	380
2003	34,445.32	9,981	14,192	20,253	28.41	713
2004	15,481.84	4,227	6,011	9,471	29.08	326
2005	29,552.87	7,573	10,768	18,785	29.75	631
2006	71,277.64	17,053	24,248	47,030	30.43	1,546
2007	4,942.61	1,098	1,561	3,382	31.11	109
2008	20,939.71	4,293	6,105	14,835	31.80	467
2009	24,423.98	4,586	6,521	17,903	32.49	551
2010	11,923.33	2,033	2,891	9,032	33.18	272
2012	209,527.78	28,391	40,371	169,157	34.58	4,892
2013	42,368.69	5,000	7,110	35,259	35.28	999
2016	31,267.19	2,009	2,856	28,411	37.43	759
2018	0.02		0			
	1,353,553.44	426,396	605,655	747,898		26,591

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 28.1 1.96

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 390 STRUCTURES AND IMPROVEMENTS

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

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 38-R2						
NET SALVAGE PERCENT.. -5						
1967	6,942.56	6,317	4,262	3,028	5.07	597
1968	3,840.04	3,462	2,336	1,696	5.37	316
1972	3,470.00	3,005	2,027	1,616	6.66	243
1973	3,149.19	2,697	1,819	1,488	7.01	212
1977	57,426.65	46,763	31,548	28,750	8.53	3,370
1979	1,411.68	1,117	754	728	9.37	78
1980	19,510.75	15,192	10,249	10,237	9.82	1,042
1981	6,395.41	4,899	3,305	3,410	10.28	332
1982	2,848.31	2,145	1,447	1,544	10.75	144
1985	2,227.83	1,584	1,069	1,270	12.27	104
1986	491.47	342	231	285	12.81	22
1987	41,382.30	28,175	19,008	24,443	13.36	1,830
1988	205,981.02	136,996	92,422	123,858	13.93	8,891
1989	42,018.80	27,261	18,391	25,729	14.52	1,772
1991	18,212.37	11,207	7,561	11,562	15.73	735
1992	3,642.75	2,178	1,469	2,356	16.36	144
2005	19,961.49	6,812	4,596	16,364	25.65	638
2012	31,454.26	5,736	3,870	29,157	31.40	929
2013	8,419,892.51	1,337,803	902,523	7,938,364	32.25	246,151
2014	30,243.72	4,078	2,751	29,005	33.12	876
2015	4,821.84	534	360	4,703	33.99	138
2017	358,446.09	22,285	15,034	361,334	35.75	10,107
2018	616,708.45	23,007	15,522	632,022	36.65	17,245
	9,900,479.49	1,693,595	1,142,554	9,252,950		295,916

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 31.3 2.99

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 391 OFFICE FURNITURE AND EQUIPMENT

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

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
FULLY ACCRUED						
NET SALVAGE PERCENT.. 0						
2000	15,394.45	15,394	15,394			
2001	4,029.25	4,029	4,029			
2004	2,191.18	2,191	2,191			
	21,614.88	21,614	21,615			
AMORTIZED						
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2005	775.99	750	749	27	0.50	27
2009	12,585.28	8,810	8,797	3,788	4.50	842
2013	325,218.31	140,927	140,725	184,494	8.50	21,705
2014	1,806.19	662	661	1,145	9.50	121
2015	7,456.97	2,237	2,234	5,223	10.50	497
2016	14,032.10	3,274	3,269	10,763	11.50	936
2017	83,933.57	13,989	13,969	69,965	12.50	5,597
2018	13,981.14	1,398	1,396	12,585	13.50	932
	459,789.55	172,047	171,800	287,990		30,657
	481,404.43	193,661	193,415	287,990		30,657
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						9.4 6.37

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 391.2 OFFICE FURNITURE AND EQUIPMENT - COMPUTERS

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

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 5-SQUARE						
NET SALVAGE PERCENT.. 0						
2015	7,776.20	6,999	6,960	816	0.50	816
2016	150,315.65	105,221	104,631	45,685	1.50	30,457
2017	48,200.23	24,100	23,965	24,235	2.50	9,694
2018	601,061.09	180,318	179,307	421,754	3.50	120,501
2019	423,754.39	42,375	42,137	381,617	4.50	84,804
	1,231,107.56	359,013	357,000	874,108		246,272
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						3.5 20.00

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 392 TRANSPORTATION EQUIPMENT

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

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 13-S1.5						
NET SALVAGE PERCENT.. +15						
1985	2,672.06	2,271	2,271			
1999	67,404.23	51,080	57,294			
2001	8,625.02	6,237	7,331			
2002	25,307.83	17,838	21,512			
2006	103,797.92	64,203	86,051	2,177	3.54	615
2007	249,363.08	147,718	197,987	13,972	3.94	3,546
2008	370,988.73	209,339	280,578	34,762	4.37	7,955
2009	582,923.88	311,011	416,849	78,636	4.84	16,247
2010	683,363.80	341,365	457,532	123,327	5.36	23,009
2011	1,554,298.34	718,509	963,020	358,134	5.93	60,394
2012	551,327.04	232,510	311,634	156,994	6.55	23,969
2013	572,815.58	215,733	289,147	197,746	7.24	27,313
2014	404,691.70	132,831	178,034	165,954	7.98	20,796
2015	519,921.39	143,460	192,280	249,653	8.78	28,434
2016	619,861.03	135,772	181,975	344,907	9.65	35,742
2017	664,687.32	106,042	142,129	422,855	10.56	40,043
2018	825,818.75	80,457	107,836	594,110	11.51	51,617
2019	994,313.23	32,505	43,567	801,599	12.50	64,128
	8,802,180.93	2,948,881	3,937,027	3,544,827		403,808
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						8.8 4.59

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 394 TOOLS, SHOP AND GARAGE EQUIPMENT

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

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
FULLY ACCRUED						
NET SALVAGE PERCENT.. 0						
1993	117,278.02	117,278	117,278			
1994	98,346.97	98,347	98,347			
1995	62,438.94	62,439	62,439			
1996	43,968.49	43,968	43,968			
1997	35,002.49	35,002	35,002			
1998	59,462.56	59,463	59,463			
1999	42,982.30	42,982	42,982			
	459,479.77	459,479	459,480			
AMORTIZED						
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2000	53,813.33	52,468	52,246	1,567	0.50	1,567
2001	63,347.14	58,596	58,348	4,999	1.50	3,333
2002	381,252.91	333,596	332,185	49,068	2.50	19,627
2003	15,775.20	13,015	12,960	2,815	3.50	804
2004	23,626.54	18,311	18,234	5,393	4.50	1,198
2005	48,122.37	34,889	34,741	13,381	5.50	2,433
2006	117,581.22	79,367	79,031	38,550	6.50	5,931
2008	86,424.76	49,694	49,484	36,941	8.50	4,346
2009	68,250.26	35,831	35,679	32,571	9.50	3,429
2010	214,116.91	101,706	101,276	112,841	10.50	10,747
2011	54,013.30	22,956	22,859	31,154	11.50	2,709
2012	139,628.46	52,361	52,140	87,489	12.50	6,999
2013	182,081.49	59,176	58,926	123,156	13.50	9,123
2014	154,250.11	42,419	42,240	112,011	14.50	7,725
2015	169,390.50	38,113	37,952	131,439	15.50	8,480
2016	168,292.11	29,451	29,326	138,966	16.50	8,422
2017	237,814.62	29,727	29,601	208,213	17.50	11,898
2018	173,690.36	13,027	12,972	160,718	18.50	8,687
2019	232,997.04	5,825	5,800	227,197	19.50	11,651
	2,584,468.63	1,070,528	1,066,000	1,518,469		129,109
	3,043,948.40	1,530,007	1,525,480	1,518,469		129,109
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						11.8 4.24

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 395 LABORATORY EQUIPMENT

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

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
FULLY ACCRUED						
NET SALVAGE PERCENT.. 0						
1996	7,257.76	7,258	7,258			
1997	1,347.48	1,347	1,347			
	8,605.24	8,605	8,605			
AMORTIZED						
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2000	13,064.62	12,738	12,476	588	0.50	588
2008	19,290.09	11,092	10,864	8,426	8.50	991
2009	23,021.42	12,086	11,838	11,184	9.50	1,177
2010	4,007.12	1,903	1,864	2,143	10.50	204
2012	5,110.07	1,916	1,877	3,233	12.50	259
2015	11,981.40	2,696	2,641	9,341	15.50	603
2016	13,654.95	2,390	2,341	11,314	16.50	686
	90,129.67	44,821	43,900	46,230		4,508
	98,734.91	53,426	52,505	46,230		4,508
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						10.3 4.57

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 396 POWER OPERATED EQUIPMENT

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

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 15-S2.5						
NET SALVAGE PERCENT.. +20						
1991	20,512.90	16,115	14,775	1,635	0.27	1,635
1994	16,133.08	12,192	11,178	1,728	0.83	1,728
1997	15,121.98	10,969	10,057	2,041	1.40	1,458
1999	7,892.99	5,552	5,090	1,224	1.81	676
2001	49,597.56	33,647	30,850	8,828	2.28	3,872
2002	5,609.18	3,721	3,412	1,075	2.56	420
2007	100,880.11	56,547	51,846	28,858	4.49	6,427
2008	152,186.88	81,004	74,269	47,481	5.02	9,458
2009	185,386.37	92,644	84,942	63,367	5.63	11,255
2010	537,907.67	249,589	228,839	201,487	6.30	31,982
2011	204,077.46	86,746	79,534	83,728	7.03	11,910
2012	588,697.60	225,118	206,402	264,556	7.83	33,787
2013	216,170.99	72,749	66,701	106,236	8.69	12,225
2014	100,218.47	28,863	26,463	53,712	9.60	5,595
2015	181,960.58	43,282	39,684	105,884	10.54	10,046
2016	334,822.19	62,143	56,976	210,882	11.52	18,306
2017	141,276.90	18,837	17,271	95,751	12.50	7,660
2018	340,378.11	27,230	24,966	247,336	13.50	18,321
2019	316,261.07	8,433	7,732	245,276	14.50	16,916
	3,515,092.09	1,135,381	1,040,987	1,771,086		203,677
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						8.7 5.79

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 397 COMMUNICATION EQUIPMENT

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

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
FULLY ACCRUED						
NET SALVAGE PERCENT.. 0						
1999	2,395.40	2,395	2,395			
2001	71,990.53	71,991	71,991			
2003	16,818.67	16,819	16,819			
	91,204.60	91,205	91,205			
AMORTIZED						
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2005	158,620.44	153,334	149,649	8,971	0.50	8,971
2006	64,614.99	58,153	56,756	7,859	1.50	5,239
2007	17,624.91	14,687	14,334	3,291	2.50	1,316
2009	20,301.37	14,211	13,870	6,432	4.50	1,429
2010	10,201.78	6,461	6,306	3,896	5.50	708
2012	90,130.67	45,065	43,982	46,149	7.50	6,153
2013	92,080.35	39,901	38,942	53,138	8.50	6,252
2014	220,901.30	80,998	79,052	141,850	9.50	14,932
2017	28,283.69	4,714	4,601	23,683	12.50	1,895
2019	18,732.98	624	609	18,124	14.50	1,250
	721,492.48	418,148	408,100	313,392		48,145
	812,697.08	509,353	499,305	313,392		48,145
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						6.5 5.92

AMEREN MISSOURI
GAS DIVISION

ACCOUNT 398 MISCELLANEOUS EQUIPMENT

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

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2008	3,335.88	2,558	2,557	779	3.50	223
	3,335.88	2,558	2,557	779		223
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						3.5 6.67

Schedules MJL-D14 through MJL-D18

filed as separate attachment

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

In the Matter of Union Electric Company)
d/b/a Ameren Missouri's Tariffs to Adjust)
Its Revenues for Gas Service.)

Case No. GR-2021-0241

AFFIDAVIT OF MITCHELL LANSFORD

STATE OF MISSOURI)
) ss
CITY OF ST. LOUIS)

Mitchell Lansford, being first duly sworn on his oath, states:

My name is Mitchell Lansford, and on his oath declare that he is of sound mind and lawful age; that he has prepared the foregoing *Direct Testimony*; and further, under the penalty of perjury, that the same is true and correct to the best of my knowledge and belief.

/s/ Mitchell Lansford

Mitchell Lansford

Sworn to me this 31st day of March, 2021.