COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF THE ADJUSTMENT
OF THE ELECTRIC RATES OF DUKE ENERGY KENTUCKY, INC.

CASE NO. 2019-00271

FILING REQUIREMENTS

VOLUME 17

Duke Energy Kentucky, Inc.
Case No. 2019-00271
Forecasted Test Period Filing Requirements
Table of Contents

Vol. #	Tab #	Filing Requirement	Description	Sponsoring Witness
1	1	KRS 278.180	30 days' notice of rates to PSC.	Amy B. Spiller
1	2	807 KAR 5:001 Section 7(1)	The original and 10 copies of application plus copy for anyone named as interested party.	Amy B. Spiller
1	3	807 KAR 5:001 Section 12(2)	(a) Amount and kinds of stock authorized. (b) Amount and kinds of stock issued and outstanding. (c) Terms of preference of preferred stock whether cumulative or participating, or on dividends or assets or otherwise. (d) Brief description of each mortgage on property of applicant, giving date of execution, name of mortgagor, name of mortgagee, or trustee, amount of indebtedness authorized to be secured thereby, and the amount of indebtedness actually secured, together with any sinking fund provisions. (e) Amount of bonds authorized, and amount issued, giving the name of the public utility which issued the same, describing each class separately, and giving date of issue, face value, rate of interest, date of maturity and how secured, together with amount of interest paid thereon during the last fiscal year. (f) Each note outstanding, giving date of issue, amount, date of maturity, rate of interest, in whose favor, together with amount of interest paid thereon during the last fiscal year. (g) Other indebtedness, giving same by classes and describing security, if any, with a brief statement of the devolution or assumption of any portion of such indebtedness upon or by person or corporation if the original liability has been transferred, together with amount of interest paid thereon during the last fiscal year. (h) Rate and amount of dividends paid during the five (5) previous fiscal years, and the amount of capital stock on which dividends were paid each year. (i) Detailed income statement and balance sheet.	Christopher M. Jacobi Danielle L. Weatherston
1	4	807 KAR 5:001 Section 14(1)	Full name, mailing address, and electronic mail address of applicant and reference to the particular provision of law requiring PSC approval.	Amy B. Spiller
1	5	807 KAR 5:001 Section 14(2)	If a corporation, the applicant shall identify in the application the state in which it is incorporated and the date of its incorporation, attest that it is currently in good standing in the state in which it is incorporated, and, if it is not a Kentucky corporation, state if it is authorized to transact business in Kentucky.	Amy B. Spiller

1	6	807 KAR 5:001 Section 14(3)	If a limited liability company, the applicant shall identify in the application the state in which it is organized and the date on which it was organized, attest that it is in good standing in the state in which it is organized, and, if it is not a Kentucky limited liability company, state if it is authorized to transact business in Kentucky.	Amy B. Spiller
1	7	807 KAR 5:001 Section 14(4)	If the applicant is a limited partnership, a certified copy of its limited partnership agreement and all amendments, if any, shall be annexed to the application, or a written statement attesting that its partnership agreement and all amendments have been filed with the commission in a prior proceeding and referencing the case number of the prior proceeding.	Amy B. Spiller
1	8	807 KAR 5:001 Section 16 (1)(b)(1)	Reason adjustment is required.	Amy B. Spiller William Don Wathen, Jr.
1	9	807 KAR 5:001 Section 16 (1)(b)(2)	Certified copy of certificate of assumed name required by KRS 365.015 or statement that certificate not necessary.	Amy B. Spiller
1	10	807 KAR 5:001 Section 16 (1)(b)(3)	New or revised tariff sheets, if applicable in a format that complies with 807 KAR 5:011 with an effective date not less than thirty (30) days from the date the application is filed	Jeff L. Kern
1	11	807 KAR 5:001 Section 16 (1)(b)(4)	Proposed tariff changes shown by present and proposed tariffs in comparative form or by indicating additions in italics or by underscoring and striking over deletions in current tariff.	Jeff L. Kern
1	12	807 KAR 5:001 Section 16 (1)(b)(5)	A statement that notice has been given in compliance with Section 17 of this administrative regulation with a copy of the notice.	Amy B. Spiller
1	13	807 KAR 5:001 Section 16(2)	If gross annual revenues exceed $5,000,000, written notice of intent filed at least 30 days, but not more than 60 days prior to application. Notice shall state whether application will be supported by historical or fully forecasted test period.	Amy B. Spiller
1	14	807 KAR 5:001 Section 16(3)	Notice given pursuant to Section 17 of this administrative regulation shall satisfy the requirements of 807 KAR 5:051, Section 2.	Amy B. Spiller
1	15	807 KAR 5:001 Section 16(6)(a)	The financial data for the forecasted period shall be presented in the form of pro forma adjustments to the base period.	Christopher M. Jacobi
1	16	807 KAR 5:001 Section 16(6)(b)	Forecasted adjustments shall be limited to the twelve (12) months immediately following the suspension period.	Sarah E. Lawler Melissa B. Abernathy Christopher M. Jacobi
1	17	807 KAR 5:001 Section 16(6)(c)	Capitalization and net investment rate base shall be based on a thirteen (13) month average for the forecasted period.	Sarah E. Lawler
1	18	807 KAR 5:001 Section 16(6)(d)	After an application based on a forecasted test period is filed, there shall be no revisions to the forecast, except for the correction of mathematical errors, unless the revisions reflect statutory or regulatory enactments that could not, with reasonable diligence, have been included in the forecast on the date it was filed. There shall be no revisions filed within thirty (30) days of a scheduled hearing on the rate application.	Christopher M. Jacobi

1	19	807 KAR 5:001 Section 16(6)(e)	The commission may require the utility to prepare an alternative forecast based on a reasonable number of changes in the variables, assumptions, and other factors used as the basis for the utility's forecast.	Christopher M. Jacobi
1	20	807 KAR 5:001 Section 16(6)(f)	The utility shall provide a reconciliation of the rate base and capital used to determine its revenue requirements.	Sarah E. Lawler
1	21	807 KAR 5:001 Section 16(7)(a)	Prepared testimony of each witness supporting its application including testimony from chief officer in charge of Kentucky operations on the existing programs to achieve improvements in efficiency and productivity, including an explanation of the purpose of the program.	All Witnesses
1	22	807 KAR 5:001 Section 16(7)(b)	Most recent capital construction budget containing at minimum 3 year forecast of construction expenditures.	Christopher M. Jacobi James Michael Mosley Ash M. Norton
1	23	807 KAR 5:001 Section 16(7)(c)	Complete description, which may be in prefiled testimony form, of all factors used to prepare forecast period. All econometric models, variables, assumptions, escalation factors, contingency provisions, and changes in activity levels shall be quantified, explained, and properly supported.	Christopher M. Jacobi
1	24	807 KAR 5:001 Section 16(7)(d)	Annual and monthly budget for the 12 months preceding filing date, base period and forecasted period.	Christopher M. Jacobi
1	25	807 KAR 5:001 Section 16(7)(e)	Attestation signed by utility's chief officer in charge of Kentucky operations providing: 1. That forecast is reasonable, reliable, made in good faith and that all basic assumptions used have been identified and justified; and 2. That forecast contains same assumptions and methodologies used in forecast prepared for use by management, or an identification and explanation for any differences; and 3. That productivity and efficiency gains are included in the forecast.	Amy B. Spiller
1	26	807 KAR 5:001 Section 16(7)(f)	For each major construction project constituting 5% or more of annual construction budget within 3 year forecast, following information shall be filed: 1. Date project began or estimated starting date; 2. Estimated completion date; 3. Total estimated cost of construction by year exclusive and inclusive of Allowance for Funds Used During construction ("AFUDC") or Interest During construction Credit; and 4. Most recent available total costs incurred exclusive and inclusive of AFUDC or Interest During Construction Credit.	Christopher M. Jacobi James Michael Mosley Ash M. Norton
1	27	807 KAR 5:001 Section 16(7)(g)	For all construction projects constituting less than 5% of annual construction budget within 3 year forecast, file aggregate of information requested in paragraph (f) 3 and 4 of this subsection.	Christopher M. Jacobi James Michael Mosley Ash M. Norton

1	28	807 KAR 5:001 Section 16(7)(h)	Financial forecast for each of 3 forecasted years included in capital construction budget supported by underlying assumptions made in projecting results of operations and including the following information: 1. Operating income statement (exclusive of dividends per share or earnings per share); 2. Balance sheet; 3. Statement of cash flows; 4. Revenue requirements necessary to support the forecasted rate of return; 5. Load forecast including energy and demand (electric); 6. Access line forecast (telephone); 7. Mix of generation (electric); 8. Mix of gas supply (gas); 9. Employee level; 10. Labor cost changes; 11. Capital structure requirements; 12. Rate base; 13. Gallons of water projected to be sold (water); 14. Customer forecast (gas, water); 15. MCF sales forecasts (gas); 16. Toll and access forecast of number of calls and number of minutes (telephone); and 17. A detailed explanation of any other information provided.	Christopher M. Jacobi John A. Verderame Benjamin W. B. Passty
1	29	807 KAR 5:001 Section 16(7)(i)	Most recent FERC or FCC audit reports.	Danielle L. Weatherston
1	30	807 KAR 5:001 Section 16(7)(j)	Prospectuses of most recent stock or bond offerings.	Christopher M. Jacobi
1	31	807 KAR 5:001 Section 16(7)(k)	Most recent FERC Form 1 (electric), FERC Form 2 (gas), or PSC Form T (telephone).	Danielle L. Weatherston
2	32	807 KAR 5:001 Section 16(7)(l)	Annual report to shareholders or members and statistical supplements for the most recent 2 years prior to application filing date.	Christopher M. Jacobi
3	33	807 KAR 5:001 Section 16(7)(m)	Current chart of accounts if more detailed than Uniform System of Accounts charts.	Danielle L. Weatherston
3	34	807 KAR 5:001 Section 16(7)(n)	Latest 12 months of the monthly managerial reports providing financial results of operations in comparison to forecast.	Danielle L. Weatherston
3	35	807 KAR 5:001 Section 16(7)(o)	Complete monthly budget variance reports, with narrative explanations, for the 12 months prior to base period, each month of base period, and subsequent months, as available.	Danielle L. Weatherston Christopher M. Jacobi
3-9	36	807 KAR 5:001 Section 16(7)(p)	SEC's annual report for most recent 2 years, Form 10-Ks and any Form 8-Ks issued during prior 2 years and any Form 10-Qs issued during past 6 quarters.	Danielle L. Weatherston
9	37	807 KAR 5:001 Section 16(7)(q)	Independent auditor's annual opinion report, with any written communication which indicates the existence of a material weakness in internal controls.	Danielle L. Weatherston
9	38	807 KAR 5:001 Section 16(7)(r)	Quarterly reports to the stockholders for the most recent 5 quarters.	Christopher M. Jacobi

10	39	807 KAR 5:001 Section 16(7)(s)	Summary of latest depreciation study with schedules itemized by major plant accounts, except that telecommunications utilities adopting PSC's average depreciation rates shall identify current and base period depreciation rates used by major plant accounts. If information has been filed in another PSC case, refer to that case's number and style.	John J. Spanos
10	40	807 KAR 5:001 Section 16(7)(t)	List all commercial or in-house computer software, programs, and models used to develop schedules and work papers associated with application. Include each software, program, or model; its use; identify the supplier of each; briefly describe software, program, or model; specifications for computer hardware and operating system required to run program	Sarah E. Lawler
10	41	807 KAR 5:001 Section 16(7)(u)	If utility had any amounts charged or allocated to it by affiliate or general or home office or paid any monies to affiliate or general or home office during the base period or during previous 3 calendar years, file: 1. Detailed description of method of calculation and amounts allocated or charged to utility by affiliate or general or home office for each allocation or payment; 2. method and amounts allocated during base period and method and estimated amounts to be allocated during forecasted test period; 3. Explain how allocator for both base and forecasted test period was determined; and 4. All facts relied upon, including other regulatory approval, to demonstrate that each amount charged, allocated or paid during base period is reasonable.	Jeffrey R. Setser
10	42	807 KAR 5:001 Section 16(7)(v)	If gas, electric or water utility with annual gross revenues greater than $5,000,000, cost of service study based on methodology generally accepted in industry and based on current and reliable data from single time period.	James E. Ziolkowski
10	43	807 KAR 5:001 Section 16(7)(w)	Local exchange carriers with fewer than 50,000 access lines need not file cost of service studies, except as specifically directed by PSC. Local exchange carriers with more than 50,000 access lines shall file: 1. Jurisdictional separations study consistent with Part 36 of the FCC's rules and regulations; and 2. Service specific cost studies supporting pricing of services generating annual revenue greater than $1,000,000 except local exchange access: a. Based on current and reliable data from single time period; and b. Using generally recognized fully allocated, embedded, or incremental cost principles.	N/A
10	44	807 KAR 5:001 Section 16(8)(a)	Jurisdictional financial summary for both base and forecasted periods detailing how utility derived amount of requested revenue increase.	Sarah E. Lawler

10	45	807 KAR 5:001 Section 16(8)(b)	Jurisdictional rate base summary for both base and forecasted periods with supporting schedules which include detailed analyses of each component of the rate base.	Sarah E. Lawler Melissa B. Abernathy Christopher M. Jacobi John R. Panizza James E. Ziolkowski Danielle L. Weatherston
10	46	807 KAR 5:001 Section 16(8)(c)	Jurisdictional operating income summary for both base and forecasted periods with supporting schedules which provide breakdowns by major account group and by individual account.	Sarah E. Lawler
10	47	807 KAR 5:001 Section 16(8)(d)	Summary of jurisdictional adjustments to operating income by major account with supporting schedules for individual adjustments and jurisdictional factors.	Sarah E. Lawler Melissa B. Abernathy Christopher M. Jacobi James E. Ziolkowski
10	48	807 KAR 5:001 Section 16(8)(e)	Jurisdictional federal and state income tax summary for both base and forecasted periods with all supporting schedules of the various components of jurisdictional income taxes.	John R. Panizza
10	49	807 KAR 5:001 Section 16(8)(f)	Summary schedules for both base and forecasted periods (utility may also provide summary segregating items it proposes to recover in rates) of organization membership dues; initiation fees; expenditures for country club; charitable contributions; marketing, sales, and advertising; professional services; civic and political activities; employee parties and outings; employee gifts; and rate cases.	Sarah E. Lawler
10	50	807 KAR 5:001 Section 16(8)(g)	Analyses of payroll costs including schedules for wages and salaries, employee benefits, payroll taxes, straight time and overtime hours, and executive compensation by title.	Sarah E. Lawler Renee H. Metzler
10	51	807 KAR 5:001 Section 16(8)(h)	Computation of gross revenue conversion factor for forecasted period.	Sarah E. Lawler
10	52	807 KAR 5:001 Section 16(8)(i)	Comparative income statements (exclusive of dividends per share or earnings per share), revenue statistics and sales statistics for 5 calendar years prior to application filing date, base period, forecasted period, and 2 calendar years beyond forecast period.	Danielle L. Weatherston Christopher M. Jacobi
10	53	807 KAR 5:001 Section 16(8)(j)	Cost of capital summary for both base and forecasted periods with supporting schedules providing details on each component of the capital structure.	Christopher M. Jacobi
10	54	807 KAR 5:001 Section 16(8)(k)	Comparative financial data and earnings measures for the 10 most recent calendar years, base period, and forecast period.	Melissa B. Abernathy Christopher M. Jacobi Danielle L. Weatherston
10	55	807 KAR 5:001 Section 16(8)(l)	Narrative description and explanation of all proposed tariff changes.	Jeff L. Kern
10	56	807 KAR 5:001 Section 16(8)(m)	Revenue summary for both base and forecasted periods with supporting schedules which provide detailed billing analyses for all customer classes.	Jeff L. Kern
10	57	807 KAR 5:001 Section 16(8)(n)	Typical bill comparison under present and proposed rates for all customer classes.	Jeff L. Kern
10	58	807 KAR 5:001 Section 16(9)	The commission shall notify the applicant of any deficiencies in the application within thirty (30) days of the application's submission. An application shall not be accepted for filing until the utility has cured all noted deficiencies.	William Don Wathen, Jr.

10	59	807 KAR 5:001 Section 16(10)	Request for waivers from the requirements of this section shall include the specific reasons for the request. The commission shall grant the request upon good cause shown by the utility.	Legal
10	60	807 KAR 5:001 Section (17)(1)	(1) Public postings. (a) A utility shall post at its place of business a copy of the notice no later than the date the application is submitted to the commission. (b) A utility that maintains a Web site shall, within five (5) business days of the date the application is submitted to the commission, post on its Web sites: 1. A copy of the public notice; and 2. A hyperlink to the location on the commission's Web site where the case documents are available. (c) The information required in paragraphs (a) and (b) of this subsection shall not be removed until the commission issues a final decision on the application.	Amy B. Spiller
10	61	807 KAR 5:001 Section 17(2)	(2) Customer Notice. (a) If a utility has twenty (20) or fewer customers, the utility shall mail a written notice to each customer no later than the date on which the application is submitted to the commission. (b) If a utility has more than twenty (20) customers, it shall provide notice by: 1. Including notice with customer bills mailed no later than the date the application is submitted to the commission; 2. Mailing a written notice to each customer no later than the date the application is submitted to the commission; 3. Publishing notice once a week for three (3) consecutive weeks in a prominent manner in a newspaper of general circulation in the utility's service area, the first publication to be made no later than the date the application is submitted to the commission; or 4. Publishing notice in a trade publication or newsletter delivered to all customers no later than the date the application is submitted to the commission. (c) A utility that provides service in more than one (1) county may use a combination of the notice methods listed in paragraph (b) of this subsection.	Amy B. Spiller

10	62	807 KAR 5:001 Section 17(3)	(3) Proof of Notice. A utility shall file with the commission no later than forty-five (45) days from the date the application was initially submitted to the commission: (a) If notice is mailed to its customers, an affidavit from an authorized representative of the utility verifying the contents of the notice, that notice was mailed to all customers, and the date of the mailing; (b) If notice is published in a newspaper of general circulation in the utility's service area, an affidavit from the publisher verifying the contents of the notice, that the notice was published, and the dates of the notice's publication; or (c) If notice is published in a trade publication or newsletter delivered to all customers, an affidavit from an authorized representative of the utility verifying the contents of the notice, the mailing of the trade publication or newsletter, that notice was included in the publication or newsletter, and the date of mailing.	Amy B. Spiller

10	63	807 KAR 5:001 Section 17(4)	(4) Notice Content. Each notice issued in accordance with this section shall contain: (a) The proposed effective date and the date the proposed rates are expected to be filed with the commission; (b) The present rates and proposed rates for each customer classification to which the proposed rates will apply; (c) The amount of the change requested in both dollar amounts and percentage change for each customer classification to which the proposed rates will apply; (d) The amount of the average usage and the effect upon the average bill for each customer classification to which the proposed rates will apply, except for local exchange companies, which shall include the effect upon the average bill for each customer classification for the proposed rate change in basic local service; (e) A statement that a person may examine this application at the offices of (utility name) located at (utility address); (f) A statement that a person may examine this application at the commission's offices located at 211 Sower Boulevard, Frankfort, Kentucky, Monday through Friday, 8:00 a.m. to 4:30 p.m., or through the commission's Web site at http://psc.ky.gov; (g) A statement that comments regarding the application may be submitted to the Public Service Commission through its Web site or by mail to Public Service Commission, Post Office Box 615, Frankfort, Kentucky 40602; (h) A statement that the rates contained in this notice are the rates proposed by (utility name) but that the Public Service Commission may order rates to be charged that differ from the proposed rates contained in this notice; (i) A statement that a person may submit a timely written request for intervention to the Public Service Commission, Post Office Box 615, Frankfort, Kentucky 40602, establishing the grounds for the request including the status and interest of the party; and (j) A statement that if the commission does not receive a written request for intervention within thirty (30) days of initial publication or mailing of the notice, the commission may take final action on the application.	Jeff L. Kern
10	64	807 KAR 5:001 Section 17(5)	(5) Abbreviated form of notice. Upon written request, the commission may grant a utility permission to use an abbreviated form of published notice of the proposed rates, provided the notice includes a coupon that may be used to obtain all the required information.	N/A

11	-	807 KAR 5:001 Section 16(8)(a) through (k)	Schedule Book (Schedules A-K)	Various
12	-	807 KAR 5:001 Section 16(8)(l) through (n)	Schedule Book (Schedules L-N)	Jeff L. Kern
13	-	-	Work Papers	Various
14	-	807 KAR 5:001 Section 16(7)(a)	Testimony (Volume 1 of 4)	Various
15	-	807 KAR 5:001 Section 16(7)(a)	Testimony (Volume 2 of 4)	Various
16	-	807 KAR 5:001 Section 16(7)(a)	Testimony (Volume 3 of 4)	Various
17	-	807 KAR 5:001 Section 16(7)(a)	Testimony (Volume 4 of 4)	Various
18-19	-	KRS 278.2205(6)	Cost Allocation Manual	Legal

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

The Electronic Application of Duke Energy Kentucky, Inc., for: 1) An Adjustment of the Electric Rates; 2) Approval of New Tariffs; 3) Approval of Accounting Practices to Establish Regulatory Assets and Liabilities; and 4) All Other Required Approvals and Relief.	)))))))	Case No. 2019-00271

DIRECT TESTIMONY

OF

JOHN J. SPANOS

ON BEHALF OF

DUKE ENERGY KENTUCKY, INC

September 3, 2019

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I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND ADDRESS.

A. My name is John J. Spanos. My business address is 207 Senate Avenue, Camp Hill, Pennsylvania, 17011.

Q. ARE YOU ASSOCIATED WITH ANY FIRM?

A. Yes. I am associated with the firm of Gannett Fleming Valuation and Rate Consultants, LLC (Gannett Fleming).

Q. HOW LONG HAVE YOU BEEN ASSOCIATED WITH GANNETT FLEMING?

A. I have been associated with the firm since college graduation in June 1986.

Q. WHAT IS YOUR POSITION WITH THE FIRM?

A. I am President.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS CASE?

A. I am testifying on behalf of Duke Energy Kentucky, Inc. (Duke Energy Kentucky or the Company).

Q. PLEASE STATE YOUR QUALIFICATIONS.

A. I have over 33 years of depreciation experience which includes giving expert testimony in over 300 cases before 40 regulatory commissions in the United States and Canada, including this Commission. The cases include depreciation studies in the electric, gas, water, wastewater and pipeline industries. In addition to the cases where I have submitted testimony, I have supervised in over 600 other depreciation or valuation assignments. Please refer to Appendix A for additional information on my qualifications, which includes further information with respect to my work

history, case experience, and my leadership in the Society of Depreciation Professionals.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A. My testimony will support and explain the depreciation study conducted under my direction and supervision for the electric and common utility plant of Duke Energy Kentucky, which was prepared in satisfaction of Filing Requirement (FR) 16(7)(s). The study represents all electric and common plant assets.

II. DISCUSSION

Q. PLEASE DEFINE THE CONCEPT OF DEPRECIATION.

A. Depreciation refers to 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, against which the Company is not protected by insurance. Among the causes to be given consideration are wear and tear, decay, action of the elements, obsolescence, changes in the art, changes in demand and the requirements of public authorities.

Q. PLEASE IDENTIFY ATTACHMENT JJS-1.

A. Attachment JJS-1 is a report entitled, "2018 Depreciation Study - Calculated Annual Depreciation Accruals Related to Electric and Common Plant as of December 31, 2018." This report sets forth the results of my depreciation study for Duke Energy Kentucky.

Q. IS ATTACHMENT JJS-1 A TRUE AND ACCURATE COPY OF YOUR DEPRECIATION STUDY?

A. Yes.

Q. DOES ATTACHMENT JJS-1 ACCURATELY PORTRAY THE RESULTS OF YOUR DEPRECIATION STUDY AS OF DECEMBER 31, 2018?

A. Yes.

Q. WHAT WAS THE PURPOSE OF YOUR DEPRECIATION STUDY?

A. The purpose of the depreciation study was to estimate the annual depreciation accruals related to electric and common plant in service for ratemaking purposes and determine appropriate average service lives and net salvage percents for each plant account.

Q. PLEASE DESCRIBE THE CONTENTS OF YOUR REPORT.

A. The Depreciation Study is presented in nine parts. Part I, Introduction, presents the scope and basis for the Depreciation Study. Part II, Estimation of Survivor Curves, includes descriptions of the methodology of estimating survivor curves. Parts III and IV set forth the analysis for determining service life and net salvage estimates. Part V, Calculation of Annual and Accrued Depreciation, includes the concepts of depreciation and amortization using the remaining life. Part VI, Results of Study, presents a description of the results of my analysis and a summary of the depreciation calculations. Parts VII, VIII and IX include graphs and tables that relate to the service life and net salvage analyses, and the detailed depreciation calculations by account.

The Depreciation Study also includes several tables and tabulations of data and calculations. Table 1 on pages VI-4 through VI-6 of the Depreciation Study

presents the estimated survivor curve, the net salvage percent, the original cost as of December 31, 2018, the book depreciation reserve, and the calculated annual depreciation accrual and rate for each account or subaccount. The section beginning on page VII-2 presents the results of the retirement rate analyses prepared as the historical bases for the service life estimates. The section beginning on page VIII-2 presents the results of the net salvage analysis. The section beginning on page IX-2 presents the depreciation calculations related to surviving original cost as of December 31, 2018.

Q. PLEASE EXPLAIN HOW YOU PERFORMED YOUR DEPRECIATION STUDY.

A. I used the straight line remaining life method of depreciation, with the average service life procedure for all plant assets except some general plant accounts. The annual depreciation is based on a method of depreciation accounting that seeks to distribute the unrecovered cost of fixed capital assets over the estimated remaining useful life of each unit, or group of assets, in a systematic and rational manner.

For Common Plant Accounts 1910, 1911, 1940, 1970, and 1980 and for General Plant Accounts 3910, 3911, 3940 and 3970, I used the straight line remaining life method of amortization. The annual amortization is based on amortization accounting that distributes the unrecovered cost of fixed capital assets over the remaining amortization period selected for each account and vintage.

Q. HOW DID YOU DETERMINE THE RECOMMENDED ANNUAL DEPRECIATION ACCRUAL RATES?

A. I did this in two phases. In the first phase, I estimated the service life and net salvage characteristics for each depreciable group, that is, each plant account or subaccount identified as having similar characteristics. In the second phase, I calculated the composite remaining lives and annual depreciation accrual rates based on the service life and net salvage estimates determined in the first phase.

Q. PLEASE DESCRIBE THE FIRST PHASE OF THE DEPRECIATION STUDY, IN WHICH YOU ESTIMATED THE SERVICE LIFE AND NET SALVAGE CHARACTERISTICS FOR EACH DEPRECIABLE GROUP.

A. The service life and net salvage study consisted of compiling historic data from records related to Duke Energy Kentucky's plant; analyzing these data to obtain historic trends of survivor and net salvage characteristics; obtaining supplementary information from Duke Energy Kentucky's management, and operating personnel concerning practices and plans as they relate to plant operations; and interpreting the above data and the estimates used by other electric utilities to form judgments of average service life and net salvage characteristics.

Q. WHAT HISTORIC DATA DID YOU ANALYZE FOR THE PURPOSE OF ESTIMATING SERVICE LIFE CHARACTERISTICS?

A. I analyzed the Company's accounting entries that record plant transactions during the period 1956 through 2018. The transactions included additions, retirements, transfers and the related balances. The Company records also included surviving dollar value by year installed for each plant account as of December 31, 2018.

Q. WHAT METHOD DID YOU USE TO ANALYZE THIS SERVICE LIFE DATA?

A. I used the retirement rate method. This is the most appropriate method when aged retirement data are available, because this method determines the average rates of retirement actually experienced by the Company during the period of time covered by the study.

Q. PLEASE DESCRIBE HOW YOU USED THE RETIREMENT RATE METHOD TO ANALYZE DUKE ENERGY KENTUCKY'S SERVICE LIFE DATA.

A. I applied the retirement rate method to each different group of property in the study. For each property group, I used the retirement rate method to form a life table which, when plotted, shows an original survivor curve for that property group. Each original survivor curve represents the average survivor pattern experienced by the several vintage groups during the experience band studied. The survivor patterns do not necessarily describe the life characteristics of the property group; therefore, interpretation of the original survivor curves is required in order to use them as valid considerations in estimating service life. The Iowa-type survivor curves were used to perform these interpretations.

Q. WHAT IS AN "IOWA-TYPE SURVIVOR CURVE" AND HOW DID YOU USE SUCH CURVES TO ESTIMATE THE SERVICE LIFE CHARACTERISTICS FOR EACH PROPERTY GROUP?

A. Iowa type curves are a widely used group of generalized survivor curves that contain the range of survivor characteristics usually experienced by utilities and other

industrial companies. The Iowa curves were developed at the Iowa State College Engineering Experiment Station through an extensive process of observing and classifying the ages at which various types of property used by utilities and other industrial companies had been retired.

Iowa type curves are used to smooth and extrapolate original survivor curves determined by the retirement rate method. The Iowa curves and truncated Iowa curves were used in this study to describe the forecasted rates of retirement based on the observed rates of retirement and the outlook for future retirements.

The estimated survivor curve designations for each depreciable property group indicate the average service life, the family within the Iowa system to which the property group belongs, and the relative height of the mode. For example, the Iowa 54-R0.5 indicates an average service life of fifty-four years; a right-moded, or R, type curve (the mode occurs after average life for right-moded curves); and a low height, 0.5, for the mode (possible modes for R type curves range from 0.5 to 5).

Q. WHAT APPROACH DID YOU USE TO ESTIMATE THE LIVES OF SIGNIFICANT PRODUCTION FACILITIES?

A. I used the life span technique to estimate the lives of significant facilities for which concurrent retirement of the entire facility is anticipated. In this technique, the survivor characteristics of such facilities are described by the use of interim survivor curves and estimated probable retirement dates. The interim survivor curve describes the rate of retirement related to the replacement of elements of the facility, such as, for a power plant, the retirement of assets such as pumps, motors and piping that occur during the life of the facility. The probable retirement date provides the rate of

final retirement for each year of installation for the facility by truncating the interim survivor curve for each installation year at its attained age at the date of probable retirement. The use of interim survivor curves truncated at the date of probable retirement provides a consistent method for estimating the lives of the several years of installation for a particular facility inasmuch as a single concurrent retirement for all years of installation will occur when it is retired.

Q. IS THIS APPROACH WIDELY ACCEPTED FOR ESTIMATING THE SERVICE LIVES OF PRODUCTION FACILITIES?

A. Yes. The life span has been used previously for Duke Energy Kentucky. My firm has also used the life span technique in performing depreciation studies presented to many other public utility commissions across the United States and Canada.

Q. HOW ARE THE LIFE SPANS ESTIMATED FOR DUKE ENERGY KENTUCKY'S PRODUCTION FACILITIES?

A. The life span estimates are based on informed judgment that incorporates factors for each facility such as the technology of the facility, management plans and outlook for the facility, and the estimates for similar facilities for other utilities.

Q. ARE THE FACTORS CONSIDERED IN YOUR ESTIMATES OF SERVICE LIFE AND NET SALVAGE PERCENTS PRESENTED IN ATTACHMENT JJS-1?

A. Yes. A discussion of the factors considered in the estimation of service lives and net salvage percents are presented in Part III and Part IV of Attachment JJS-1.

Q. HAVE YOU PHYSICALLY OBSERVED DUKE ENERGY KENTUCKY'S PLANT AND EQUIPMENT AS PART OF YOUR DEPRECIATION STUDIES?

A. Yes. I have most recently made field reviews of Duke Energy Kentucky's property during January 2017 to observe representative portions of plant. I have also made field visits during previous studies since 1990. Field reviews are conducted to become familiar with Company operations and obtain an understanding of the function of the plant and information with respect to the reasons for past retirements and the expected future causes of retirements. This knowledge was incorporated in the interpretation and extrapolation of the statistical analyses.

Q. WOULD YOU PLEASE EXPLAIN THE CONCEPT OF "NET SALVAGE"?

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

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

For example, the full recovery of the service value of a $2,000 line transformer will include not only the $2,000 of original cost, but also, on average, $350 to remove the line transformer at the end of its life and $50 in salvage value. In this example, the net salvage component is negative $300 ($50 - $350), and the net salvage percent is negative 15% (($50 - $350)/$2,000).

Q. PLEASE DESCRIBE HOW YOU ESTIMATED NET SALVAGE PERCENTAGES.

A. The net salvage percentages estimated in the Depreciation Study were based on informed judgment that incorporated factors such as the statistical analyses of historical net salvage data; information provided to me by the Company's operating personnel, general knowledge and experience of the industry practices; and trends in the industry in general. The statistical net salvage analyses incorporates the Company's actual historical data for the period 1990 through 2018, and considers the cost of removal and gross salvage ratios to the associated retirements during the 29-year period. Trends of these data are also measured based on three-year moving averages and the most recent five-year indications.

Q. WERE THE NET SALVAGE PERCENTAGES FOR GENERATING FACILITIES BASED ON THE SAME ANALYSES?

A. Yes, for the interim net salvage estimates. The net salvage percentages for generating facilities were based on two components, the interim net salvage percentage and the final net salvage percentage. The interim net salvage percentage is determined based on the historical indications from the period 1990 to 2018 of the cost of removal and gross salvage amounts as a percentage of the associated plant retired. The final net

salvage or dismantlement component was determined based on the retirement activities associated with the assets anticipated to be retired at the concurrent date of final retirement.

Q. HAVE YOU INCLUDED A DISMANTLEMENT OR DECOMMISSIONING COMPONENT INTO THE OVERALL RECOVERY OF GENERATING FACILITIES?

A. Yes. A dismantlement or decommissioning component has been included to the net salvage percentage for steam and other production facilities.

Q. CAN YOU EXPLAIN HOW THE FINAL NET SALVAGE COMPONENT IS INCLUDED IN THE DEPRECIATION STUDY?

A. Yes. The dismantlement component is part of the overall net salvage for each location within the production assets. Based on studies for other utilities and the cost estimates of Duke Energy Kentucky, it was determined that the dismantlement or decommissioning costs for steam and other production facilities is best calculated by dividing the dismantlement cost by the surviving plant at final retirement. These amounts at a location basis are added to the interim net salvage percentage of the assets anticipated to be retired on an interim basis to produce the weighted net salvage percentage for each location. The detailed calculations of the overall net salvage for each location is set forth on page VIII-3 of the Depreciation Study.

Q. WHAT IS THE BASIS OF THE DISMANTLEMENT OR DECOMMISSIONING COST ESTIMATES?

A. The decommissioning cost estimates are based on decommissioning studies of each generating site performed by Burns and McDonnell. These estimates are based on

the current cost to decommission the facility. However, the costs to decommission power plants has tended to increase over time (as have construction costs in general). For this reason, in order to recover the full decommissioning costs for each site, these costs need to be escalated to the time of retirement. The calculations of the escalation of these costs have been provided in the table set forth on page VIII-4 of the Depreciation Study.

Q. PLEASE DESCRIBE THE SECOND PHASE OF THE PROCESS THAT YOU USED IN THE DEPRECIATION STUDY IN WHICH YOU CALCULATED COMPOSITE REMAINING LIVES AND ANNUAL DEPRECIATION ACCRUAL RATES.

A. After I estimated the service life and net salvage characteristics for each depreciable property group, I calculated the annual depreciation accrual rates for each depreciable group based on the straight line remaining life method, using remaining lives weighted consistent with the average service life procedure. The calculation of annual depreciation accrual rates were developed as of December 31, 2018.

Q. PLEASE DESCRIBE THE STRAIGHT LINE REMAINING LIFE METHOD OF DEPRECIATION.

A. The straight line remaining life method of depreciation allocates the original cost of the property, less accumulated depreciation, less future net salvage, in equal amounts to each year of remaining service life.

Q. PLEASE DESCRIBE THE AVERAGE SERVICE LIFE PROCEDURE FOR CALCULATING REMAINING LIFE ACCRUAL RATES.

A. The average service life procedure defines the group or account for which the remaining life annual accrual is determined. Under this procedure, the annual accrual rate is determined for the entire group or account based on its average remaining life and the rate is then applied to the surviving balance of the group's cost. The average remaining life of the group is calculated by first dividing the future book accruals (original cost less allocated book reserve less future net salvage) by the average remaining life for each vintage. The average remaining life for each vintage is derived from the area under the survivor curve between the attained age of the vintage and the maximum age. The sum of the future book accruals is then divided by the sum of the annual accruals to determine the average remaining life of the entire group for use in calculating the annual depreciation accrual rate.

Q. PLEASE DESCRIBE AMORTIZATION ACCOUNTING.

A. Amortization accounting is used for accounts with a large number of units, but small asset values. In amortization accounting, units of property are capitalized in the same manner as they are in depreciation accounting. However, depreciation accounting is difficult for these assets because periodic inventories are required to properly reflect plant in service. Consequently, retirements are recorded when a vintage is fully amortized rather than as the units are removed from service. That is, there is no dispersion of retirement. All units are retired when the age of the vintage reaches the amortization period. Each plant account or group of assets is assigned a fixed period which represents an anticipated life during which the asset will render service. For

example, in amortization accounting, assets that have a 15-year amortization period will be fully recovered after 15 years of service and taken off the Company books, but not necessarily removed from service. In contrast, assets that are taken out of service before 15 years remain on the books until the amortization period for that vintage has expired.

Q. AMORTIZATION ACCOUNTING IS BEING IMPLEMENTED FOR WHICH PLANT ACCOUNTS?

A. Amortization accounting is only appropriate for certain Common and General Plant accounts. These accounts are 1910, 1911, 1940, 1970 and 1980 for Common Plant and 3910, 3911, 3940, and 3970 for General Plant which represents approximately one percent of depreciable plant.

Q. PLEASE USE AN EXAMPLE TO ILLUSTRATE THE DEVELOPMENT OF THE ANNUAL DEPRECIATION ACCRUAL RATE FOR A PARTICULAR GROUP OF PROPERTY IN YOUR DEPRECIATION STUDY.

A. I will use Account 3650, Overhead Conductors and Devices, as an example because it is one of the largest depreciable groups and represents an easily understood asset.

The retirement rate method was used to analyze the survivor characteristics of this property group. Aged plant accounting data were compiled from 1956 through 2018 and analyzed in periods that best represent the overall service life of this property. The life tables for the 1956-2018 and 1989-2018 experience bands are presented in the depreciation study on pages VII-98 through VII-103. Each life table displays the retirement and surviving ratios of the aged plant data exposed to retirement by age interval. For example, page VII-98 of Attachment JJS-1, shows

$484,750 retired during age interval 0.5-1.5 with $124,966,402 exposed to retirement at the beginning of the interval. Consequently, the retirement ratio is 0.0039 ($484,750/$124,966,402) and the survivor ratio is 0.9961 (1-0.0039). The life tables, or original survivor curves, are plotted along with the estimated smooth survivor curve, the 52-O1, on page VII-97 of Attachment JJS-1.

The net salvage percent is presented on pages VIII-37 and VIII-38. The percentage is based on the result of annual gross salvage minus the cost to remove plant assets as compared to the original cost of plant retired during the period 1990 through 2018. The 29-year period experienced $9,452,178 ($1,102,399 - $10,554,577) in net salvage for $25,151,697 plant retired. The result is negative net salvage of 38 percent ($9,452,178/$25,151,697). Recent trends have shown indications of negative 47 percent; therefore, it was determined that based on industry ranges, historical indications and Company expectations, that negative 40 percent was the most appropriate estimate. The negative 40 percent estimate balances the overall average of 38 percent and more recent averages of negative 47 percent.

My calculation of the annual depreciation related to original cost of electric utility plant at December 31, 2018 for Account 3650 is presented on pages IX-47 through IX-49 of Attachment JJS-1. The calculation is based on the 52-O1 survivor curve, 40% negative net salvage, the attained age, and the allocated book reserve. The tabulation sets forth the installation year, the original cost, calculated accrued depreciation, allocated book reserve, future accruals, remaining life and annual accrual. These totals are brought forward to Table 1 on page VI-5.

Q. HAVE YOU DEVELOPED RATES FOR FUTURE ASSETS?

A. Yes. There are plans to add new energy storage assets for generation, transmission, and distribution plant. The rates for these assets will be based on a 15-L3 survivor curve and zero percent net salvage. The rate for these assets are presented on page VI-6 of Attachment JJS-1.

Q. ARE THERE OTHER SPECIAL RECOVERY AMOUNTS THAT WERE INCLUDED IN THE STUDY?

A. Yes. The overall recovery of steam assets includes the remaining net plant of Miami Fort Unit 6. There was $12,966,986 ($16,640,000 - $3,643,014) still to be recovered at time of retirement which related to the established decommissioning cost minus the previously accumulated reserve. Based on group depreciation, the remaining amount to be recovered for Miami Fort Unit 6 should be recovered over the remaining life of the surviving assets.

The second special recovery amount is the unrecovered reserve amortization established for certain general and common plant accounts. In order to achieve a more stable accrual for general and common plant accounts in the future, I have recommended a five-year amortization to adjust unrecovered reserve. This approach will achieve consistent amortization rates for existing assets as well as future assets. The reserve for each of these accounts is segregated into two components. The first component is the amount required to achieve the proper rate for the amortization period. The remaining amount, which could be negative, is amortized over 5 years separately from the assets.

III. CONCLUSION

Q. WAS ATTACHMENT JJS-1 IN SATISFACTION OF FR 16(7)(s) PREPARED UNDER YOUR DIRECTION AND CONTROL?

A. Yes.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

VERIFICATION

COMMONWEALTH OF PENNSYLVANIA)
) SS:
COUNTY OF CUMBERLAND)

The undersigned, John J. Spanos, President of Gannett Fleming Valuation and Rate Consultants, LLC, being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing testimony and that it is true and correct to the best of his knowledge, information and belief.

John J. Spanos

John J. Spanos Affiant

Subscribed and sworn to before me by John J. Spanos on this 9th day of August, 2019.

NOTARY PUBLIC

My Commission Expires: February 20, 2023

Commonwealth of Pennsylvania - Notary Seal
Cheryl Ann Rutter, Notary Public
Cumberland County
My commission expires February 20, 2023
Commission number 1143028
Member, Pennsylvania Association of Notaries

2018 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO ELECTRIC AND COMMON PLANT AS OF DECEMBER 31, 2018

Prepared by:

Excellence Delivered ***As Promised***

DUKE ENERGY KENTUCKY

Cincinnati, Ohio

2018 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS
RELATED TO ELECTRIC AND COMMON PLANT
AS OF DECEMBER 31, 2018

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC
Harrisburg, Pennsylvania

Gannett Fleming

Excellence Delivered ***As Promised***

July 30, 2019

Duke Energy Kentucky, Inc.
139 East Fourth Street
Cincinnati, OH 45201-0960

Attention David L. Doss Jr.
Director Asset Accounting

Ladies and Gentlemen:

Pursuant to your request, we have conducted a depreciation study related to the electric and common plant of Duke Energy Kentucky as of December 31, 2018. 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 and accrued depreciation.

Respectfully submitted,

GANNETT FLEMING VALUATION
AND RATE CONSULTANTS, LLC

John J. Spanos

JOHN J. SPANOS
President

JJS:mle

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DUKE ENERGY KENTUCKY, INC.

DEPRECIATION STUDY

EXECUTIVE SUMMARY

Pursuant to Duke Energy Kentucky, Inc.'s ("Duke Energy Kentucky" or "Company") request, Gannett Fleming Valuation and Rate Consultants, LLC ("Gannett Fleming") conducted a depreciation study related to the electric and common plant as of December 31, 2018. The purpose of this study was to determine the annual depreciation accrual rates and amounts for book and ratemaking purposes.

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

Duke Energy Kentucky's accounting policy has not changed since the last depreciation study was prepared. However, there have been changes in plans of some assets as well as additions of capital investment in all plant categories. The service lives for transmission and distribution plant have become slightly longer, however, the net salvage for many accounts has become more negative. The capital additions at East Bend have increased rates for steam assets.

Gannett Fleming recommends the calculated annual depreciation accrual rates set forth herein apply specifically to electric and common plant in service as of December 31, 2018 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 $49.5 million when applied to depreciable plant balances as of December 31, 2018. 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, 2018	PROPOSED RATE	PROPOSED EXPENSE
Common Plant	$ 26,185,416.64	3.30	$ 864,066
Electric Plant			
Steam Production Plant	$ 816,290,379.48	2.95	$ 24,109,898
Other Production Plant	308,003,988.62	3.76	11,566,183
Transmission Plant	57,974,799.20	2.05	1,187,436
Distribution Plant	476,016,246.55	2.43	11,585,174
General Plant	9,867,421.47	9.31	918,852
Common Plant Reserve Amortization	-	-	(709,142)
General Plant Reserve Amortization	-	-	(16,066)
Total	**$1,694,338,251.96**	**2.92**	**$49,506,401**

PART I. INTRODUCTION

DUKE ENERGY KENTUCKY, INC.
DEPRECIATION STUDY

PART I. INTRODUCTION

SCOPE

This report sets forth the results of the depreciation study for Duke Energy Kentucky, Inc. ("Company"), to determine the annual depreciation accrual rates and amounts for book purposes applicable to the original cost of electric and common plant as of December 31, 2018. The rates and amounts are based on the straight line remaining life method of depreciation. This report also describes the concepts, methods and judgments which underlie the recommended annual depreciation accrual rates related to electric and common plant in service as of December 31, 2018.

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 2018, a review of Company practice and outlook as they relate to plant operation and retirement, and consideration of current practice in the electric industry, including knowledge of service lives and net salvage estimates used for other electric companies.

PLAN OF REPORT

Part I, Introduction, contains statements with respect to the plan of the report, and the basis of the study. Part II, Estimation of Survivor Curves, presents descriptions of the considerations and the methods used in the service life 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 electric 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 annual depreciation was 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 accepted in Kentucky. 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-4 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 electric utility industry, and comparisons of the service life and net salvage estimates from our studies of other electric utilities. The use of survivor curves to reflect the expected dispersion of retirement provides a consistent method of estimating depreciation for electric 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.

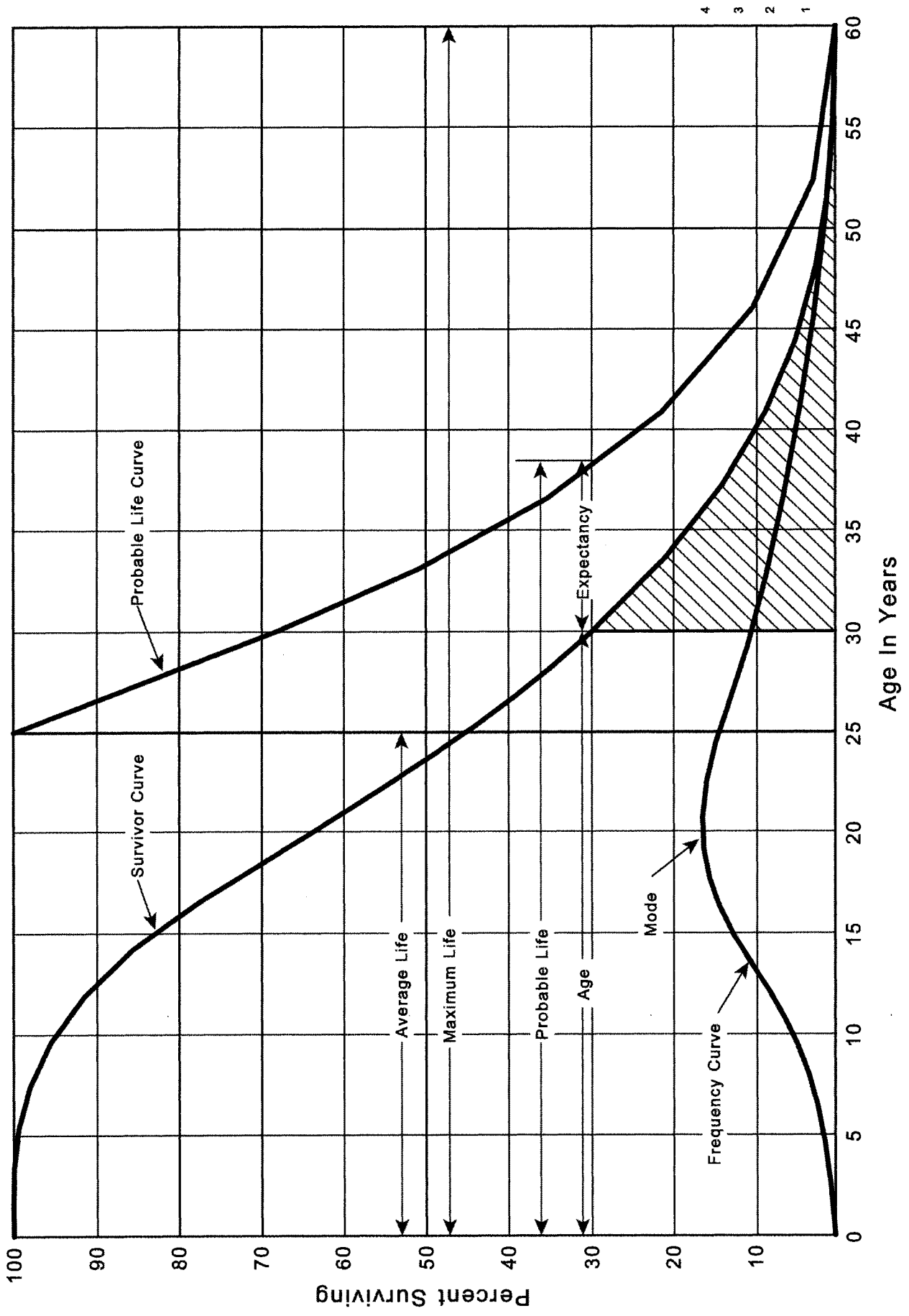


Figure 1. A Typical Survivor Curve and Derived Curves

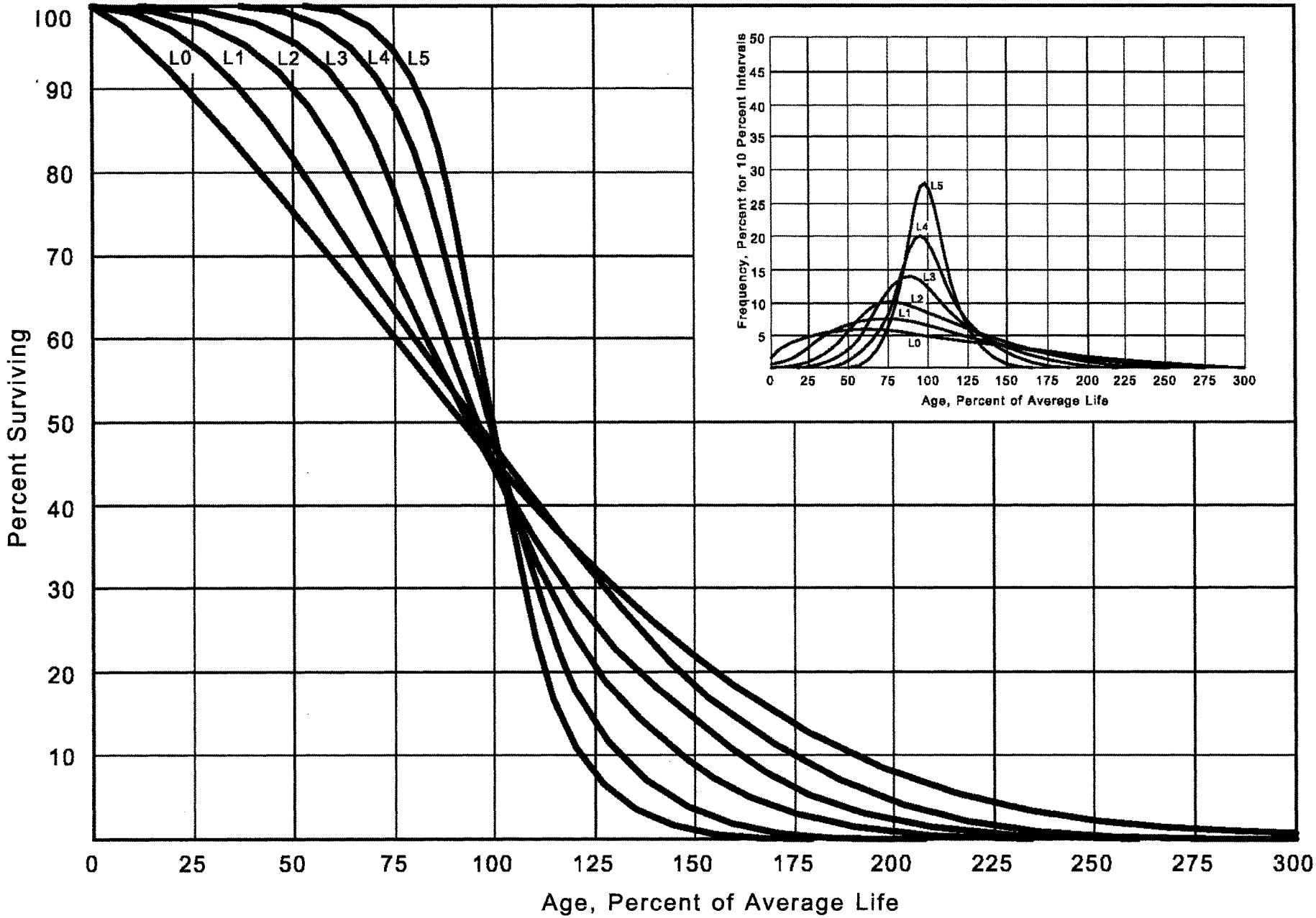


Figure 2. Left Modal or "L" Iowa Type Survivor Curves

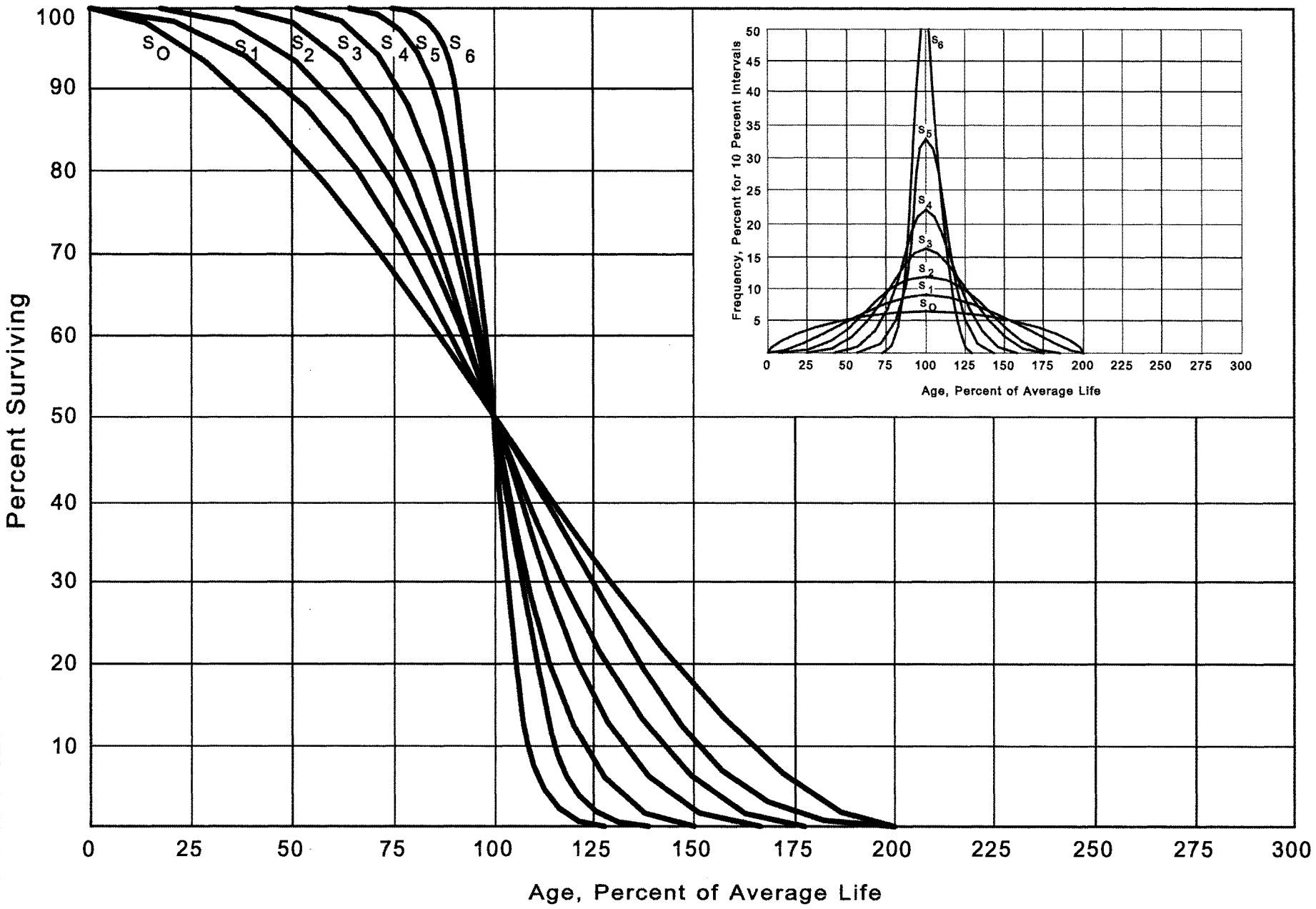


Figure 3. Symmetrical or "S" Iowa Type Survivor Curves

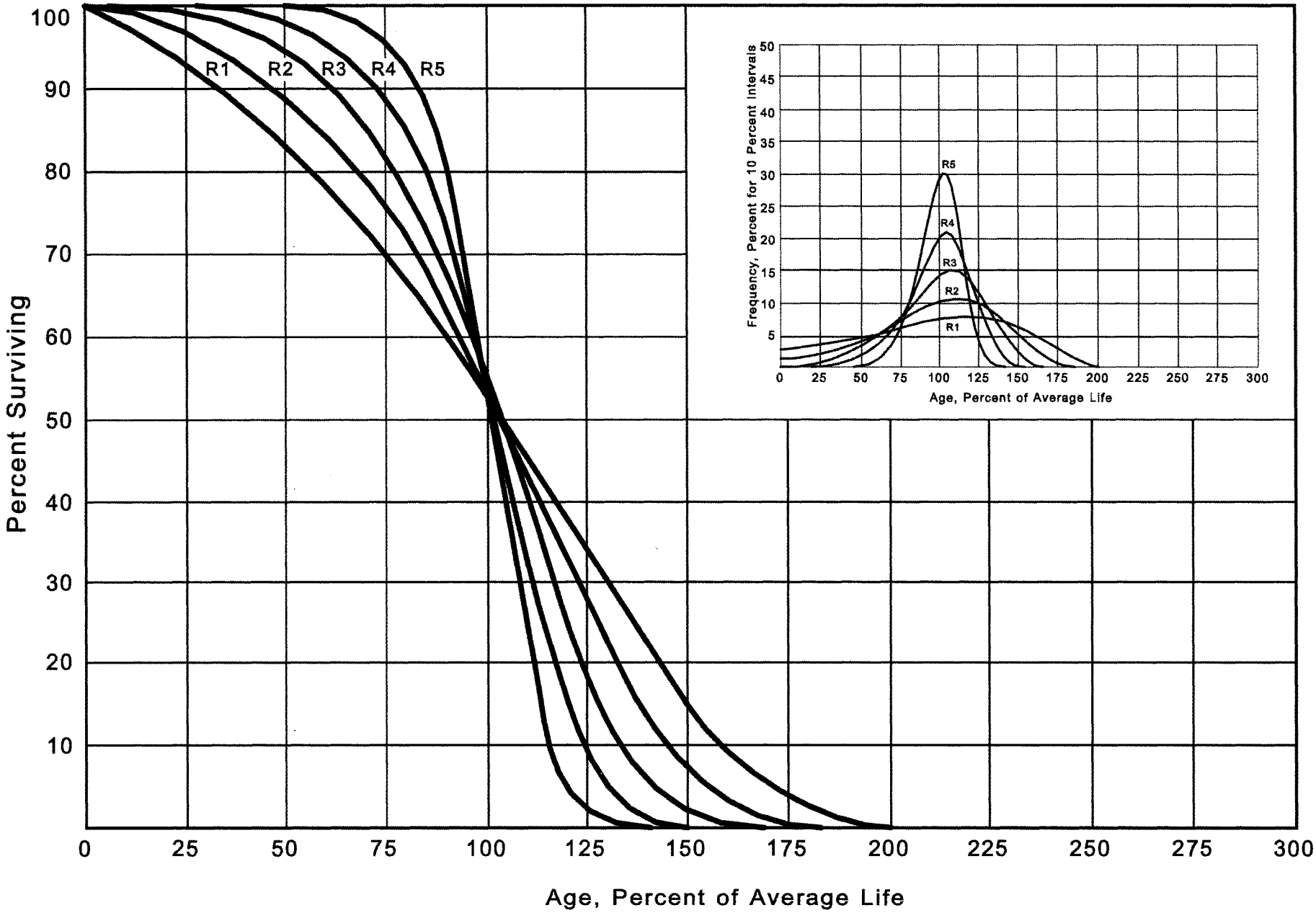


Figure 4. Right Modal or "R" Iowa Type Survivor Curves

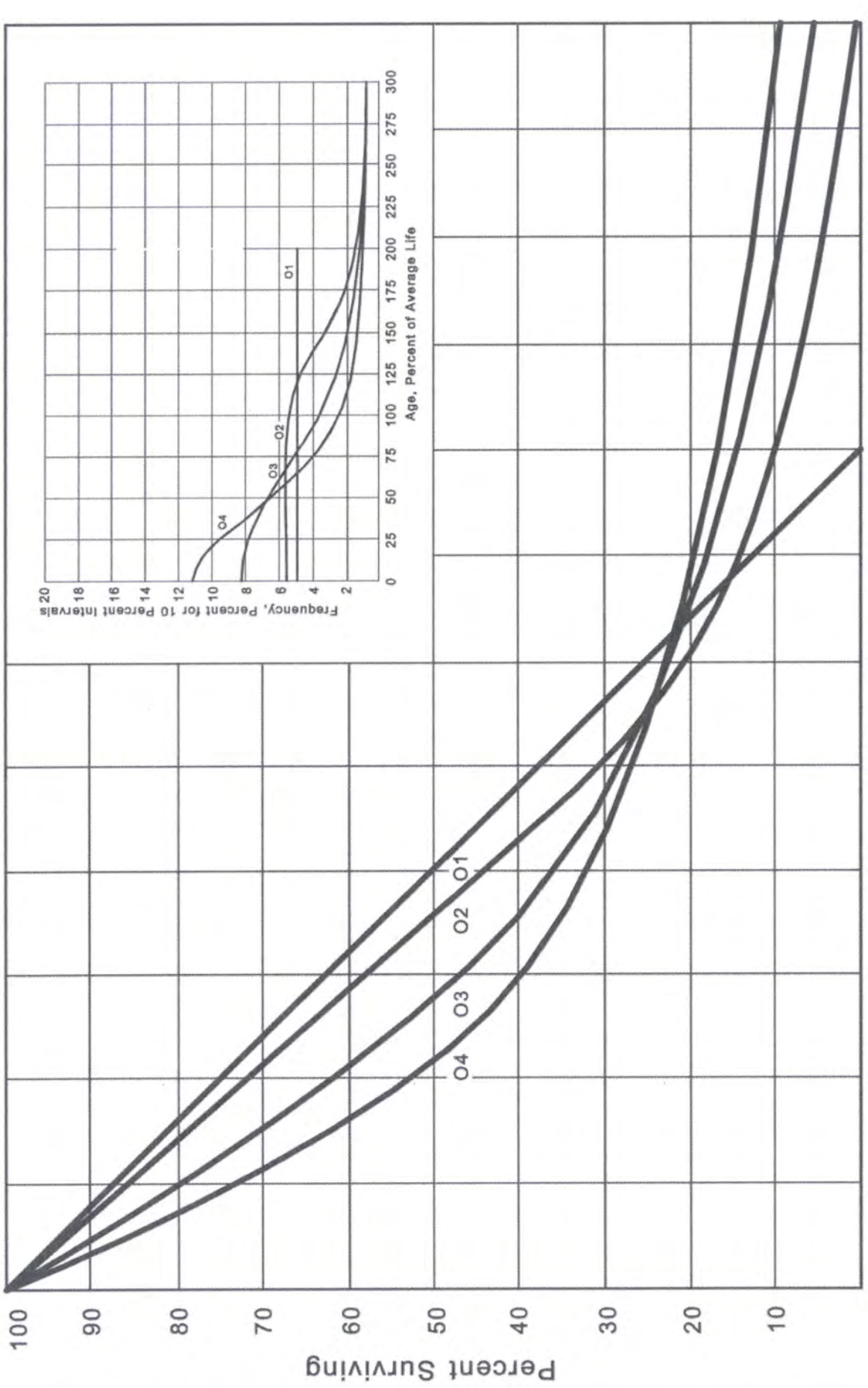


Figure 5. Origin Modal or "O" Iowa Type Survivor Curves

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.

---

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

[2]Winfrey, Robley, Supra Note 1.

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

[4]Wolf, 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 2009-2018 during which there were placements during the years 2004-2018. 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 2004 were retired in 2009. 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 2009 retirements of 2004 installations and ending with the 2018 retirements of the 2013 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 2009-2018
SUMMARIZED BY AGE INTERVAL

Experience Band 2009-2018

Placement Band 2004-2018

Year Placed	Retirements, Thousands of Dollars During Year										Total During Age Interval	Age Interval
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2004	10	11	12	13	14	16	23	24	25	26	26	13½-14½
2005	11	12	13	15	16	18	20	21	22	19	44	12½-13½
2006	11	12	13	14	16	17	19	21	22	18	64	11½-12½
2007	8	9	10	11	11	13	14	15	16	17	83	10½-11½
2008	9	10	11	12	13	14	16	17	19	20	93	9½-10½
2009	4	9	10	11	12	13	14	15	16	20	105	8½-9½
2010		5	11	12	13	14	15	16	18	20	113	7½-8½
2011			6	12	13	15	16	17	19	19	124	6½-7½
2012				6	13	15	16	17	19	19	131	5½-6½
2013					7	14	16	17	19	20	143	4½-5½
2014						8	18	20	22	23	146	3½-4½
2015							9	20	22	25	150	2½-3½
2016								11	23	25	151	1½-2½
2017									11	24	153	½-1½
2018										13	80	0-½
Total	53	68	86	106	128	157	196	231	273	308	1,606	

SCHEDULE 2. OTHER TRANSACTIONS FOR EACH YEAR 2009-2018
SUMMARIZED BY AGE INTERVAL

Experience Band 2009-2018 Placement Band 2004-2018

Year Placed	Acquisitions, Transfers and Sales, Thousands of Dollars During Year										Total During Age Interval	Age Interval
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2004	-	-	-	-	-	-	60[a]	-	-	-	-	13½-14½
2005	-	-	-	-	-	-	-	-	-	-	-	12½-13½
2006	-	-	-	-	-	-	-	-	-	-	-	11½-12½
2007	-	-	-	-	-	-	-	(5)[b]	-	-	60	10½-11½
2008	-	-	-	-	-	-	-	6[a]	-	-	-	9½-10½
2009	-	-	-	-	-	-	-	-	-	-	(5)	8½-9½
2010		-	-	-	-	-	-	-	-	-	6	7½-8½
2011			-	-	-	-	-	-	-	-	-	6½-7½
2012				-	-	-	-	(12)[b]	-	-	-	5½-6½
2013					-	-	-	-	22[a]	-	-	4½-5½
2014						-	-	(19)[b]	-	-	10	3½-4½
2015							-	-	-	-	-	2½-3½
2016								-	-	(102)[c]	(121)	1½-2½
2017									-	-	-	½-1½
2018											-	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 2009 through 2018 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 2014 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 2009-2018
SUMMARIZED BY AGE INTERVAL

Experience Band 2009-2018

Placement Band 2004-2018

Year Placed	Exposures, Thousands of Dollars — Annual Survivors at the Beginning of the Year										Total at Beginning of Age Interval	Age Interval
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2004	255	245	234	222	209	195	239	216	192	167	167	13½-14½
2005	279	268	256	243	228	212	194	174	153	131	323	12½-13½
2006	307	296	284	271	257	241	224	205	184	162	531	11½-12½
2007	338	330	321	311	300	289	276	262	242	226	823	10½-11½
2008	376	367	357	346	334	321	307	297	280	261	1,097	9½-10½
2009	420[a]	416	407	397	386	374	361	347	332	316	1,503	8½-9½
2010		460[a]	455	444	432	419	405	390	374	356	1,952	7½-8½
2011			510[a]	504	492	479	464	448	431	412	2,463	6½-7½
2012				580[a]	574	561	546	530	501	482	3,057	5½-6½
2013					660[a]	653	639	623	628	609	3,789	4½-5½
2014						750[a]	742	724	685	663	4,332	3½-4½
2015							850[a]	841	821	799	4,955	2½-3½
2016								960[a]	949	926	5,719	1½-2½
2017									1,080[a]	1,069	6,579	½-1½
2018										1,220[a]	7,490	0-½
Total	1,975	2,382	2,824	3,318	3,872	4,494	5,247	6,017	6,852	7,799	44,780	

[a]Additions during the year

For the entire experience band 2009-2018, 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 2009-2018 Placement Band 2004-2018

(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	167	26	0.1557	0.8443	42.24
					35.66
Total	44,780	1,606			

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

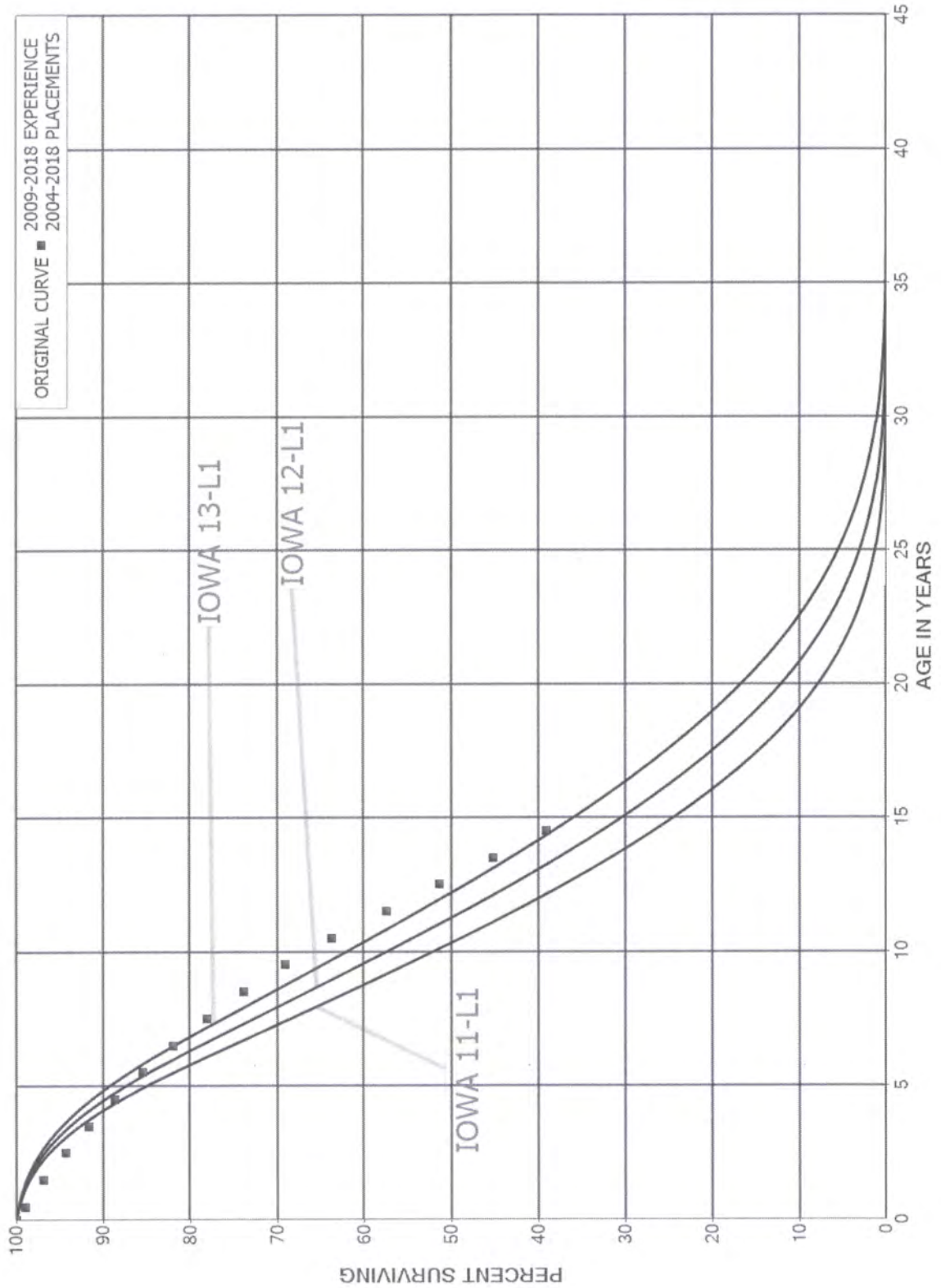


FIGURE 7. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN S0 IOWA TYPE CURVE
ORIGINAL AND SMOOTH SURVIVOR CURVES

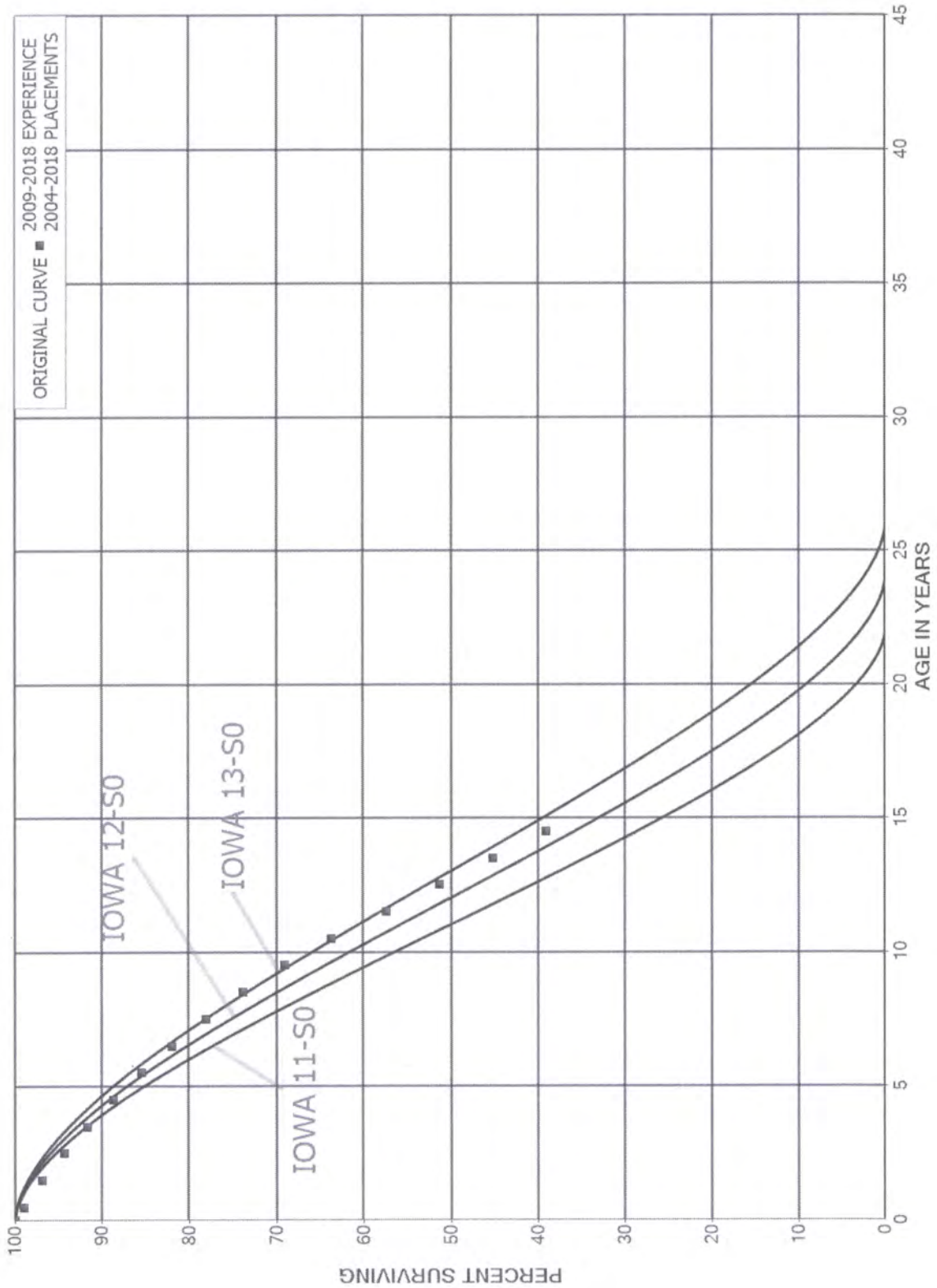


FIGURE 8. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN R1 IOWA TYPE CURVE
ORIGINAL AND SMOOTH SURVIVOR CURVES

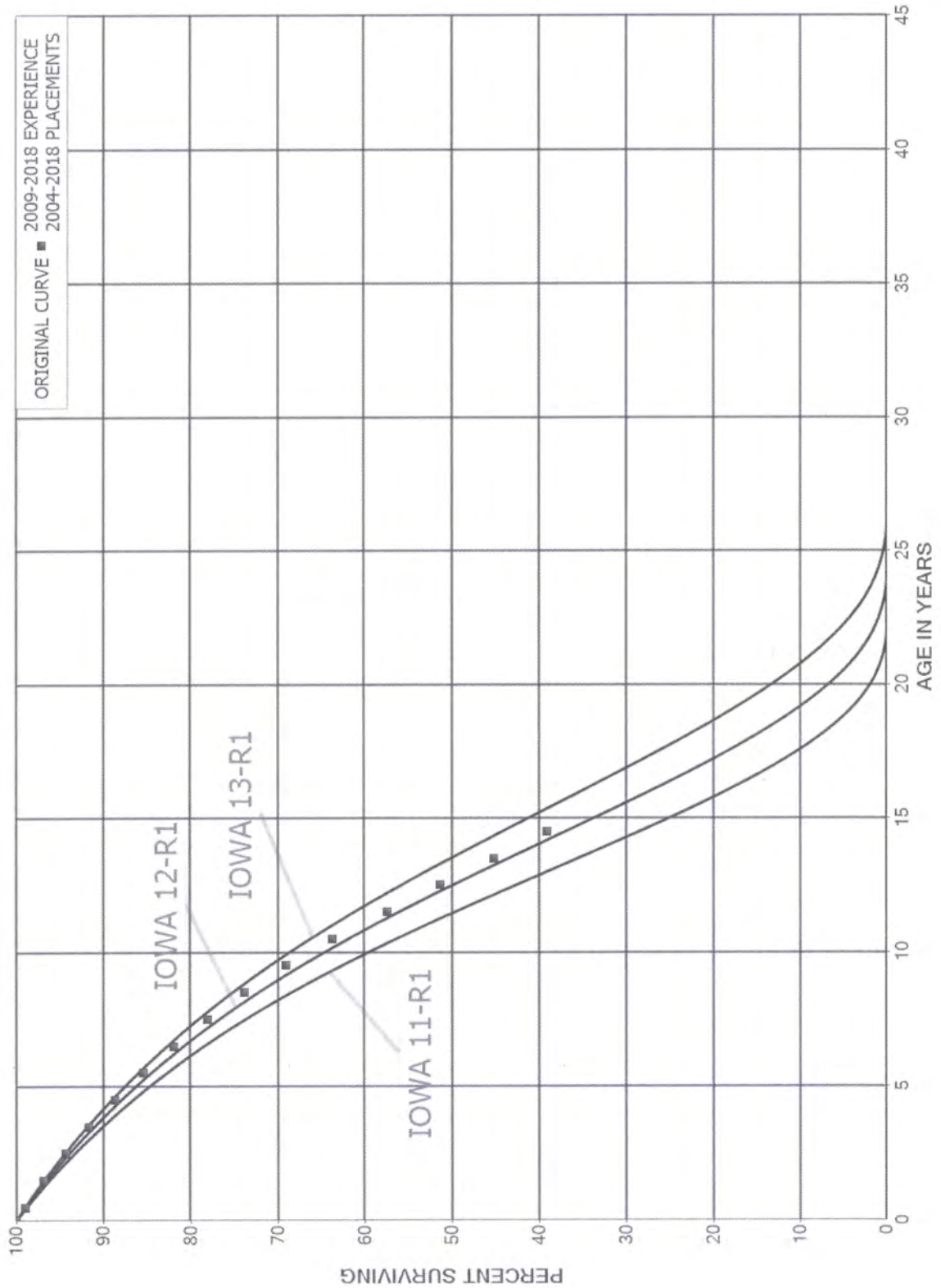
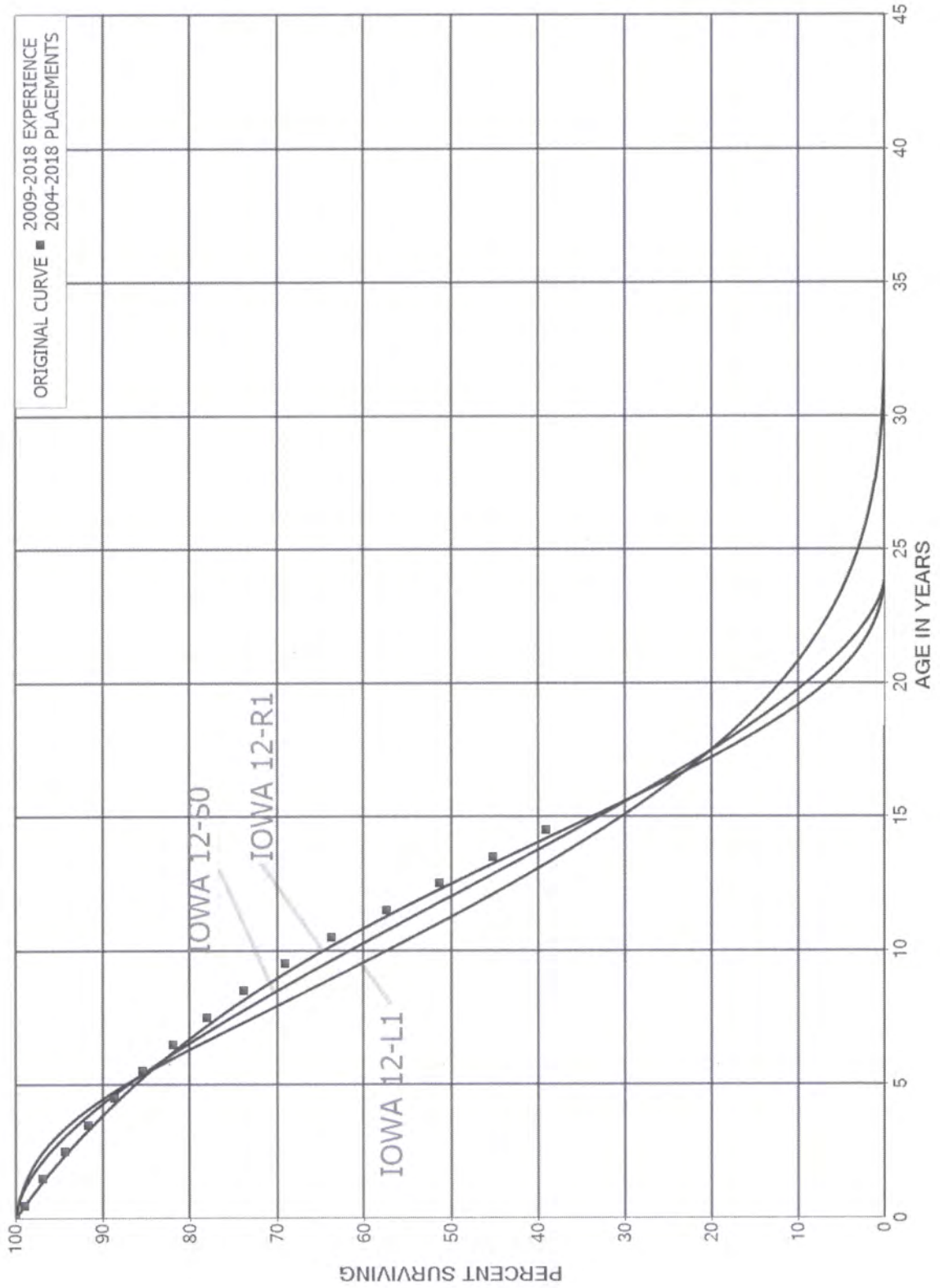


FIGURE 9. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN L1, S0 AND R1 IOWA TYPE CURVE
ORIGINAL AND SMOOTH SURVIVOR CURVES



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, field trips have been conducted numerous times. A general understanding of the function of the plant and information with respect to the reasons for past retirements and the expected future causes of retirements are obtained during field trips. This knowledge and information were incorporated in the interpretation and extrapolation of the statistical analyses.

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

January 30, 2017
- Donaldson Substation
- Constance Substation
- Crescent Substation
- Erlanger Operations Center
- East Bend Generating Plant

June 17-18, 2013
- Miami Fort Generating Substation
- East Bend Generating Station
- Woodsdale Generating Station
- Crescent Substation
- Hebron Substation
- Richwood Substation
- Limaburg Substation

SERVICE LIFE ANALYSIS

The service life estimates were based on informed 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 electric companies.

For many of the plant accounts and subaccounts for which survivor curves were estimated, the statistical analyses using the retirement rate method resulted in good to excellent indications of the survivor patterns experienced. These accounts represent 72 percent of depreciable plant. Generally, the information external to the statistics led to no significant departure from the indicated survivor curves for the accounts listed below. The statistical support for the service life estimates is presented in the section beginning on page VII-2.

STEAM PRODUCTION PLANT
- 3110 Structures and Improvements
- 3120 Boiler Plant Equipment
- 3140 Turbogenerator Units
- 3160 Miscellaneous Power Plant Equipment

OTHER PRODUCTION PLANT
- 3460 Miscellaneous Power Plant Equipment

TRANSMISSION PLANT
- 3530 Station Equipment
- 3532 Station Equipment - Major
- 3550 Poles and Fixtures
- 3560 Overhead Conductors and Devices

DISTRIBUTION PLANT
- 3620 Station Equipment
- 3622 Station Equipment - Major
- 3640 Poles, Towers and Fixtures
- 3650 Overhead Conductors and Devices
- 3670 Underground Conductors and Devices
- 3680 Line Transformers
- 3682 Line Transformers - Customer
- 3692 Services - Overhead
- 3700 Meters and Metering Equipment
- 3731 Street Lighting - Overhead
- 3732 Street Lighting - Boulevard
- 3733 Street Lighting - Customer Poles

GENERAL PLANT
- 3920 Transportation Equipment
- 3921 Transportation Equipment – Trailers
- 3960 Power Operated Equipment

Account 3640, Poles, Towers and Fixtures, and Account 3650, Overhead Conductors and Devices are used to illustrate the manner in which the study was conducted for the groups in the preceding list. Account 3640 represents 4 percent, and Account 3650 represents 7 percent of the total depreciable plant. Aged plant accounting data have been compiled for the years 1956 through 2018. These data have been coded in the course of the Company's normal record keeping according to account or property group, type of transaction, year in which the transaction took place, and year in which the electric 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 Account 3640, Poles, Towers and Fixtures, is the 54-R0.5 and is based on the statistical indication for the period 1956 through 2018. The 54-R0.5 is an excellent fit of the significant portion of the original survivor curve as set forth on page VII-93 consistent with management outlook for a continuation of historical experience, and at the upper end of the typical service life range of 40 to 55 years for distribution poles and fixtures.

The survivor curve estimate for Account 3650, Overhead Conductors and Devices, is based on the statistical indications for the period 1956-2016 and 1989-2018. The Iowa 52-O1 is an excellent fit of the original survivor curve. The 52 year service life is within the typical service life range of 40 to 55 years for conductors. The 52-year life reflects the Company's continued practices of steady retirements for all vintages. The previous estimate was the Iowa 50-O1.

Life Span Estimates

The life span technique was used for the Company's Power Production accounts, as well as major structures in Account 1900. The life span procedure is appropriate for

these accounts since many of the assets within the plant will be retired concurrently. Probable retirement dates were estimated for each generating facility and structure. Life spans for each Steam and Other Production Plant were the result of considering experienced life spans of similar generating units, the age of surviving units, general operating characteristics of the units, major refurbishing, and discussions with management personnel concerning the probable long-term outlook for the units, and the estimate of the operating partner, if applicable.

The depreciable life span estimate for steam, base-load units at East Bend is 60 years. The typical range of life spans for such units in the past has been 50 to 65 years. This life span represents the expected depreciable life of the facility under its current configuration. Future capital expenditures can extend a facility's depreciable life, however, such changes to depreciable life would not be prudent until the capital expenditures are actually put into plant in service. A life span of 40 years was estimated for the combustion turbines at Woodsdale. Life span estimates are typically 35 to 45 years for combustion turbines which are used primarily as peaking units.

The life span and probable retirement dates used for steam and other production plants are as follows:

Depreciable Group	Major Year in Service	Depreciable Life Date	Depreciable Life Span
Steam Production Plant			
East Bend	1981	2041	60
Other Production Plant			
Woodsdale	1992	2032	40

The survivor curve estimates for the remaining accounts were based on judgment incorporating the statistical analyses and previous studies for this and other electric utilities.

Similar studies were performed for the remaining plant accounts. 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 electric companies.

The selected amortization periods for other General Plant accounts are described in the section "Calculated Annual and Accrued Amortization."

PART IV. NET SALVAGE CONSIDERATIONS

PART IV. NET SALVAGE CONSIDERATIONS

SALVAGE ANALYSIS

The estimates of net salvage by account were based in part on historical data compiled for the years 1990 through 2018. Cost of removal and salvage were expressed as percents of the original cost of plant retired, both on annual and three-year moving average bases. The most recent five-year average also was calculated for consideration. The net salvage estimates by account are expressed as a percent of the original cost of plant retired.

Net Salvage Considerations

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

The analyses of historical cost of removal and salvage data are presented in the section titled "Net Salvage Statistics" for the plant accounts for which the net salvage estimate relied partially on those analyses.

Statistical analyses of historical data for the period 1990 through 2018 contributed significantly toward the net salvage estimates for 26 plant accounts, representing 79 percent of the depreciable plant, as follows:

STEAM PRODUCTION PLANT

3110	Structures and Improvements
3120	Power Plant Equipment
3140	Turbogenerator Units
3150	Accessory Electric Equipment
3160	Miscellaneous Power Plant Equipment

OTHER PRODUCTION PLANT
- 3410 Structures and Improvements
- 3420 Fuel Holders, Producers and Accessories
- 3450 Accessory Electric Equipment
- 3460 Miscellaneous Power Plant Equipment

TRANSMISSION PLANT
- 3530 Station Equipment
- 3532 Station Equipment - Major
- 3550 Poles and Fixtures
- 3560 Overhead Conductors and Devices

DISTRIBUTION PLANT
- 3620 Station Equipment
- 3622 Station Equipment - Major
- 3640 Poles, Towers and Fixtures
- 3650 Overhead Conductors and Devices
- 3670 Underground Conductors and Devices
- 3680 Line Transformers
- 3682 Line Transformers - Customer
- 3692 Services - Overhead
- 3700 Meters and Metering Equipment
- 3731 Street Lighting - Overhead
- 3732 Street Lighting - Boulevard
- 3733 Street Lighting - Customer Poles

GENERAL PLANT
- 3921 Transportation Equipment - Trailers

Account 3650, Overhead Conductors and Devices, is used to illustrate the manner in which the study was conducted for the groups in the preceding list. Net salvage data for the period 1990 through 2018 were analyzed for this account. The data include cost of removal, gross salvage and net salvage amounts and each of these amounts is expressed as a percent of the original cost of regular retirements. Three-year moving averages for the 1990-1992 through 2016-2018 periods were computed to smooth the annual amounts.

Cost of removal was high during the early 1990s and in the years 1997, 2003, 2005, 2010 and 2018. The high removal cost in the early 1990s related to practices during that time. The high removal in 2003 and 2005 related to location of the assets. The high cost of removal in 2010 related to the high labor needed to remove assets due to the events of the flood. The high removal in 2018 related to the high labor needed to replace conductor. Cost of removal for the most recent five years averaged 48 percent.

Gross salvage has diminished drastically since 1999. The most recent five-year average of 1 percent gross salvage reflects recent trends of minimal salvage value for conductor.

The net salvage percent based on the overall period 1990 through 2018 is 38 percent negative net salvage. The range of estimates made by other electric companies for overhead conductor is negative 20 to negative 50 percent. The net salvage estimate for overhead conductor is negative 40 percent, is within the range of estimates for other electric companies, reflects the trend to higher cost of removal and reflects the overall experience for negative net salvage.

The overall net salvage estimates for the Company's production facilities, for which the life span method is used, is based on estimates of both final net salvage and interim net salvage. Final net salvage is the net salvage experienced at the end of a production plant's life span. Interim net salvage is the net salvage experienced for interim retirements that occur prior to the final retirement of the plant. The final net salvage estimates in the study were based on decommissioning analyses performed by various engineering organizations. The interim net salvage estimates were based in part on analysis of historical interim retirement and net salvage data. Based on informed judgment that incorporated these interim net salvage analyses for each plant account, an interim net

salvage estimate of negative 20 percent was used for steam plant accounts, and a negative 6 percent estimate was used for all other production plant accounts.

The interim survivor curve estimates for each account and production facility were used to calculate the percentage of plant expected to be retired as interim retirements and final retirements. These are shown on Table 1 in the Net Salvage Statistics section on page VIII-2. These percentages were used to determine the weighted net salvage estimate for each account and production facility based on the interim and final net salvage estimates. These calculations, as well as the estimated final net salvage amounts and interim net salvage percents, are shown on Table 2 of the Net Salvage Statistics section on page VIII-3.

The net salvage percents for the remaining accounts were based on judgment incorporating estimates of previous studies of this and other electric utilities.

Generally, the net salvage estimates for the general plant accounts were zero percent, consistent with amortization accounting.

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, 2018, 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, 2018, 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:

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

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:

Account		Amortization Period, Years
1910	Office Furniture and Equipment	20
1911	Electric Data Processing	5
1940	Tools, Shop and Garage Equipment	25
1970	Communication Equipment	15
1980	Miscellaneous Equipment	15
3910	Office Furniture and Equipment	20
3911	Electric Data Processing	5
3940	Tools, Shop and Garage Equipment	25
3970	Communication Equipment	15

For the purpose of calculating annual amortization amounts as of December 31, 2018, 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 electric and common plant in service as of December 31, 2018. For most plant accounts, the application of such rates to future balances that reflect additions subsequent to December 31, 2018, is reasonable for a period of three to five years.

DESCRIPTION OF DETAILED TABULATIONS

Table 1 sets forth a summary of the results of the study as applied to the original cost of electric and common plant at December 31, 2018. These results are presented on pages VI-4 through VI-6 of this report. The schedule sets forth the original cost, the book depreciation reserve, future accruals, the calculated annual depreciation rate and amount, and the composite remaining life related to electric and common plant.

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 electric 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, 2018 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.

DUKE ENERGY KENTUCKY
TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVES, NET SALVAGE PERCENT, ORIGINAL COST, BOOK RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO ELECTRIC PLANT AS OF DECEMBER 31, 2018

	ACCOUNT	SURVIVOR CURVE	NET SALVAGE PERCENT	ORIGINAL COST	BOOK RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)=(7)/(4)	(9)=(6)/(7)
	COMMON PLANT								
1900	STRUCTURES AND IMPROVEMENTS								
	ERLANGER OPERATIONS CENTER	90-R1 *	0	11,977,502.84	3,505,656	8,471,847	199,667	1.67	42.4
	KENTUCKY SERVICE BUILDING - 19TH AND AUGUSTINE	90-R1 *	0	2,025,074.98	1,858,375	166,700	7,374	0.36	22.6
	MINOR STRUCTURES	40-R1	(10)	3,166,756.13	1,121,592	2,361,840	66,229	2.09	35.7
	TOTAL STRUCTURES AND IMPROVEMENTS			17,169,333.95	6,485,623	11,000,387	273,270	1.59	40.3
1910	OFFICE FURNITURE AND EQUIPMENT	20-SQ	0	757,962.63	68,159	689,803	37,907	5.00	18.2
1911	ELECTRONIC DATA PROCESSING	5-SQ	0	40,534.72	21,055	19,480	8,108	20.00	2.4
1940	TOOLS, SHOP AND GARAGE EQUIPMENT	25-SQ	0	119,489.82	48,939	70,551	4,783	4.00	14.8
1970	COMMUNICATION EQUIPMENT	15-SQ	0	8,056,591.51	4,827,623	3,228,969	537,231	6.67	6.0
1980	MISCELLANEOUS EQUIPMENT	15-SQ	0	41,504.01	21,505	19,999	2,767	6.67	7.2
	TOTAL COMMON PLANT			**26,185,416.64**	**11,472,905**	**15,029,189**	**864,066**	**3.30**	**17.4**
	STEAM PRODUCTION PLANT								
3110	STRUCTURES AND IMPROVEMENTS	85-S1 *	(15)	125,620,074.55	43,331,885	101,131,200	4,558,273	3.63	22.2
3120	BOILER PLANT EQUIPMENT	45-S0.5 *	(15)	511,322,167.62	279,597,381	308,423,112	14,801,561	2.89	20.8
3123	BOILER PLANT EQUIPMENT - SCR CATALYST	10-S2.5 *	0	5,420,680.46	5,208,793	211,887	32,349	0.60	6.6
3140	TURBOGENERATOR UNITS	40-S0.5 *	(15)	107,331,031.50	63,268,270	60,162,417	3,023,603	2.82	19.9
3150	ACCESSORY ELECTRIC EQUIPMENT	60-R2.5 *	(15)	45,011,497.33	30,955,458	20,807,764	965,750	2.15	21.5
3160	MISCELLANEOUS POWER PLANT EQUIPMENT	50-S0 *	(15)	21,584,928.02	9,936,350	14,886,317	728,362	3.37	20.4
	TOTAL STEAM PRODUCTION PLANT			**816,290,379.48**	**432,298,137**	**505,622,697**	**24,109,898**	**2.95**	**21.0**
	OTHER PRODUCTION PLANT								
3401	RIGHTS OF WAY	40-SQ	0	1,428,665.32	319,058	1,109,608	45,790	3.21	24.2
3410	STRUCTURES AND IMPROVEMENTS	60-R4 *	(5)	36,470,339.76	25,304,437	12,989,420	980,952	2.69	13.2
3420	FUEL HOLDERS, PRODUCERS AND ACCESSORIES	50-S1.5 *	(5)	15,935,912.56	12,065,526	4,667,182	380,188	2.39	12.3
3440	GENERATORS	45-S0 *	(5)	216,899,473.15	122,838,550	104,905,897	8,541,054	3.94	12.3
3446	GENERATORS - SOLAR								
	CRITTENDEN	25-S2.5 *	(5)	4,168,275.61	192,246	4,184,443	202,343	4.85	20.7
	WALTON	25-S2.5 *	(5)	5,747,433.47	269,653	5,765,152	278,779	4.85	20.7
	TOTAL GENERATORS - SOLAR			9,915,709.08	461,899	9,949,595	481,122		
3450	ACCESSORY ELECTRIC EQUIPMENT	40-R2 *	(5)	21,507,774.51	11,620,785	10,962,378	899,216	4.18	12.2
3456	ACCESSORY ELECTRIC EQUIPMENT - SOLAR								
	CRITTENDEN	20-S2.5 *	(5)	425,603.19	18,087	428,796	23,915	5.62	17.9
	WALTON	20-S2.5 *	(5)	631,334.26	27,569	635,332	35,434	5.61	17.9
	TOTAL ACCESSORY ELECTRIC EQUIPMENT - SOLAR			1,056,937.45	45,656	1,064,128	59,349		
3460	MISCELLANEOUS POWER PLANT EQUIPMENT	40-R1.5 *	(5)	4,789,176.79	2,839,393	2,189,243	176,512	3.73	12.3
	TOTAL OTHER PRODUCTION PLANT			**308,003,988.62**	**175,495,303**	**147,837,451**	**11,566,183**	**3.76**	**12.8**
	TRANSMISSION PLANT								
3501	RIGHTS OF WAY	70-R4	0	1,030,238.49	674,060	356,178	10,188	0.99	35.0
3520	STRUCTURES AND IMPROVEMENTS	65-R2.5	(10)	1,480,413.30	268,720	1,359,735	29,566	2.00	46.0
3530	STATION EQUIPMENT	50-R2	(15)	17,649,959.51	4,796,777	15,500,677	391,536	2.22	39.6
3531	STATION EQUIPMENT - STEP UP	50-R2.5	0	9,446,665.08	4,151,992	5,294,673	193,615	2.05	27.3
3532	STATION EQUIPMENT - MAJOR	65-R2.5	(10)	5,826,369.89	1,983,751	4,425,256	87,299	1.50	50.7
3534	STATION EQUIPMENT - STEP UP EQUIPMENT	35-R2.5	0	7,057,290.24	1,154,915	5,902,375	233,724	3.31	25.3
3550	POLES AND FIXTURES	55-R1.5	(25)	8,666,988.90	4,037,448	6,796,288	152,968	1.76	44.4
3560	OVERHEAD CONDUCTORS AND DEVICES	55-R1	(15)	6,235,836.83	3,740,960	3,430,252	78,693	1.26	43.6
3561	OVERHEAD CONDUCTORS AND DEVICES - CLEARING AND RIGHT OF WAY	60-R3	0	581,036.96	17,299	563,738	9,847	1.69	57.2
	TOTAL TRANSMISSION PLANT			**57,974,799.20**	**20,825,922**	**43,629,172**	**1,187,436**	**2.05**	**36.7**

DUKE ENERGY KENTUCKY
TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVES, NET SALVAGE PERCENT, ORIGINAL COST, BOOK RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO ELECTRIC PLANT AS OF DECEMBER 31, 2018

	ACCOUNT	SURVIVOR CURVE	NET SALVAGE PERCENT	ORIGINAL COST	BOOK RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)=(7)/(4)	(9)=(6)/(7)
	DISTRIBUTION PLANT								
3601	RIGHTS OF WAY	70-R4	0	4,483,802.41	3,049,372	1,434,431	36,255	0.81	39.6
3610	STRUCTURES AND IMPROVEMENTS	65-R2.5	(10)	1,418,769.23	35,643	1,525,003	29,472	2.08	51.7
3620	STATION EQUIPMENT	40-R1.5	(10)	42,062,829.31	6,034,544	40,234,569	1,305,710	3.10	30.8
3622	STATION EQUIPMENT - MAJOR	65-R2.5	(10)	28,756,793.16	10,303,242	21,329,231	408,360	1.42	52.2
3640	POLES, TOWERS AND FIXTURES	54-R0.5	(40)	63,697,773.31	30,152,860	59,024,023	1,296,345	2.04	45.5
3650	OVERHEAD CONDUCTORS AND DEVICES	52-O1	(40)	124,541,081.62	38,491,818	135,865,696	3,012,947	2.42	45.1
3651	OVERHEAD CONDUCTORS AND DEVICES - CLEARING AND RIGHT OF WAY	60-R2.5	0	4,808,992.65	189,280	4,619,712	78,681	1.64	58.7
3660	UNDERGROUND CONDUIT	70-R3	(20)	22,947,111.43	6,938,950	20,597,584	368,204	1.60	55.9
3670	UNDERGROUND CONDUCTORS AND DEVICES	58-R2	(40)	62,856,152.93	17,068,091	70,930,523	1,602,328	2.55	44.3
3680	LINE TRANSFORMERS	46-R0.5	(15)	62,545,415.77	29,007,465	42,919,763	1,187,456	1.90	36.1
3682	LINE TRANSFORMERS - CUSTOMER	55-R1.5	(15)	273,660.52	279,586	35,124	1,347	0.49	26.1
3691	SERVICES - UNDERGROUND	65-R2.5	(25)	2,457,848.19	578,850	2,493,460	41,820	1.70	59.6
3692	SERVICES - OVERHEAD	55-R1	(30)	18,577,130.16	10,700,153	13,450,116	281,991	1.52	47.7
3700	METERS AND METERING EQUIPMENT	24-L1	0	3,993,342.83	1,492,348	2,500,995	138,103	3.46	18.1
3702	UoF METERS	15-S2.5	0	23,106,727.18	941,187	22,165,540	1,586,220	6.86	14.0
3712	COMPANY-OWNED OUTDOOR LIGHTING	10-R2	0	312,627.87	(108,791)	421,419	55,971	17.90	7.5
3720	LEASED PROPERTY ON CUSTOMERS' PREMISES	25-L3	0	9,647.36	9,647	0	0	-	-
3731	STREET LIGHTING - OVERHEAD	32-L0.5	(15)	2,503,754.86	2,145,933	733,385	28,988	1.16	25.3
3732	STREET LIGHTING - BOULEVARD	50-R1.5	(20)	3,366,958.08	2,549,472	1,490,878	40,700	1.21	36.6
3733	STREET LIGHTING - CUSTOMER POLES	30-L0	(25)	3,295,827.68	1,926,193	2,193,592	84,276	2.56	26.0
	TOTAL DISTRIBUTION PLANT			**476,016,246.55**	**161,785,842**	**443,965,044**	**11,585,174**	**2.43**	**38.3**
	GENERAL PLANT								
3900	STRUCTURES AND IMPROVEMENTS	35-S1	(5)	144,983.75	50,549	101,684	4,095	2.82	24.8
3910	OFFICE FURNITURE AND EQUIPMENT	20-SQ	0	25,501.26	7,454	18,048	1,274	5.00	14.2
3911	ELECTRONIC DATA PROCESSING	5-SQ	0	2,471,414.68	1,125,240	1,346,175	494,388	20.00	2.7
3920	TRANSPORTATION EQUIPMENT	12-S3	0	528,705.84	21,067	507,638	45,164	8.54	11.2
3921	TRANSPORTATION EQUIPMENT - TRAILERS	18-R2.5	5	254,439.74	143,843	97,875	9,082	3.57	10.8
3940	TOOLS, SHOP AND GARAGE EQUIPMENT	25-SQ	0	2,417,157.17	641,417	1,775,740	96,642	4.00	18.4
3960	POWER OPERATED EQUIPMENT	15-L2	0	11,770.00	6,757	5,013	706	6.00	7.1
3970	COMMUNICATION EQUIPMENT	15-SQ	0	4,013,449.03	1,587,512	2,425,937	267,501	6.67	9.1
	TOTAL GENERAL PLANT			**9,867,421.47**	**3,583,838**	**6,278,110**	**918,852**	**9.31**	**6.8**

DUKE ENERGY KENTUCKY
TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVES, NET SALVAGE PERCENT, ORIGINAL COST, BOOK RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO ELECTRIC PLANT AS OF DECEMBER 31, 2018

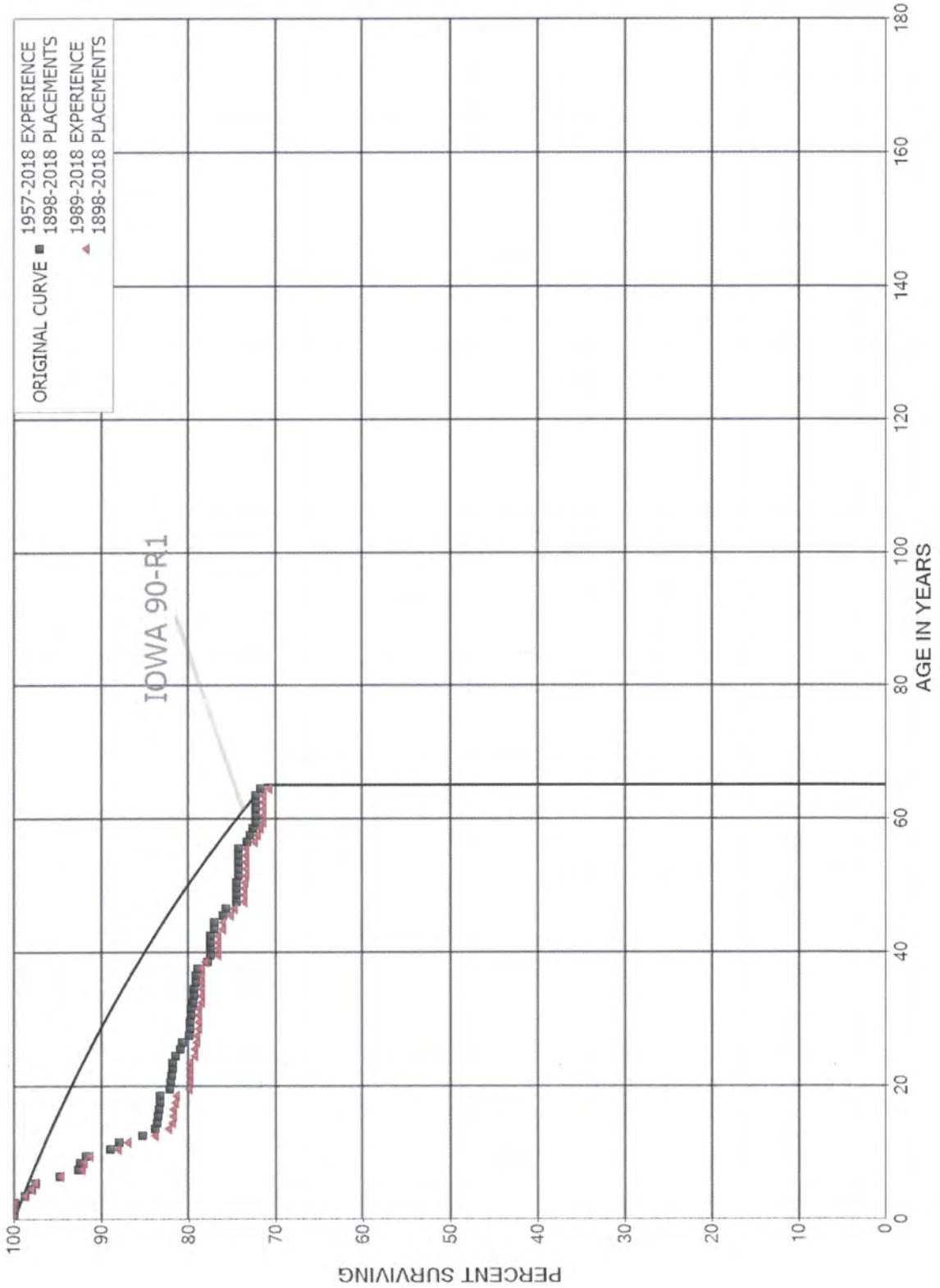
	ACCOUNT	SURVIVOR CURVE	NET SALVAGE PERCENT	ORIGINAL COST	BOOK RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)=(7)/(4)	(9)=(6)/(7)
	UNRECOVERED RESERVE FOR AMORTIZATION								
	COMMON PLANT								
1910	OFFICE FURNITURE AND EQUIPMENT				61,000		(12,200)		
1911	ELECTRONIC DATA PROCESSING				(31,041)		6,208		
1940	TOOLS, SHOP AND GARAGE EQUIPMENT				22,400		(4,480)		
1970	COMMUNICATION EQUIPMENT				3,497,100		(699,420)		
1980	MISCELLANEOUS EQUIPMENT				(3,750)		750		
	TOTAL COMMON PLANT				**3,545,709**		**(709,142)**		
	ELECTRIC PLANT								
3910	OFFICE FURNITURE AND EQUIPMENT				8,721		(1,744)		
3911	ELECTRONIC DATA PROCESSING				81,900		(16,380)		
3940	TOOLS, SHOP AND GARAGE EQUIPMENT				(40,000)		8,000		
3970	COMMUNICATION EQUIPMENT				29,711		(5,942)		
	TOTAL ELECTRIC PLANT				**80,332**		**(16,066)**		
	TOTAL UNRECOVERED RESERVE FOR AMORTIZATION				3,626,042		(725,208)		
	TOTAL DEPRECIABLE PLANT			**1,694,338,251.96**	**809,087,989**	**1,162,361,663**	**49,506,401**	**2.92**	
	NONDEPRECIABLE PLANT								
1890	LAND			1,035,882.45					
3100	LAND			7,047,300.74	60,798				
3170	ARO			62,110,190.23					
3400	LAND			2,258,588.39					
3500	LAND			308,628.15					
3600	LAND			9,504,879.20					
	TOTAL NONDEPRECIABLE PLANT			**82,265,469.16**	**60,798**				
	ACCOUNTS NOT STUDIED								
1030	MISCELLANEOUS INTANGIBLE PLANT			22,332,072.52	22,332,073				
3030	MISCELLANEOUS INTANGIBLE PLANT			21,018,786.02	11,154,000				
	TOTAL ACCOUNTS NOT STUDIED			**43,350,858.54**	**33,486,073**				
	TOTAL COMMON AND ELECTRIC PLANT			**1,819,954,579.66**	**842,634,860**	**1,162,361,663**	**49,506,401**		

* CURVE SHOWN IS INTERIM SURVIVOR CURVE. EACH FACILITY IN THE ACCOUNT IS ASSIGNED AN INDIVIDUAL PROBABLE RETIREMENT YEAR.

NOTE: ACCRUAL RATES FOR NEW ENERGY STORAGE ASSETS IN ACCOUNTS 348.0, 351.0 AND 363.0 WILL BE 6.78.

PART VII. SERVICE LIFE STATISTICS

DUKE ENERGY KENTUCKY
ACCOUNT 1900 STRUCTURES AND IMPROVEMENTS
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY

ACCOUNT 1900 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1898-2018 EXPERIENCE BAND 1957-2018

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	44,066,532	21,512	0.0005	0.9995	100.00
0.5	37,703,486		0.0000	1.0000	99.95
1.5	37,292,769	52,592	0.0014	0.9986	99.95
2.5	37,187,436	415,310	0.0112	0.9888	99.81
3.5	18,083,609	133,413	0.0074	0.9926	98.70
4.5	17,390,314	82,500	0.0047	0.9953	97.97
5.5	16,964,226	474,575	0.0280	0.9720	97.50
6.5	14,700,933	332,907	0.0226	0.9774	94.78
7.5	13,975,221	41,802	0.0030	0.9970	92.63
8.5	13,670,077	89,060	0.0065	0.9935	92.35
9.5	13,992,643	429,248	0.0307	0.9693	91.75
10.5	13,396,407	157,011	0.0117	0.9883	88.94
11.5	10,807,621	318,454	0.0295	0.9705	87.89
12.5	8,385,236	139,017	0.0166	0.9834	85.30
13.5	6,733,958	23,634	0.0035	0.9965	83.89
14.5	6,515,823	10,540	0.0016	0.9984	83.59
15.5	2,939,063	678	0.0002	0.9998	83.46
16.5	2,927,193	4,204	0.0014	0.9986	83.44
17.5	2,812,385	1,806	0.0006	0.9994	83.32
18.5	2,601,983	34,678	0.0133	0.9867	83.27
19.5	2,461,471	3,571	0.0015	0.9985	82.16
20.5	2,421,993	3,253	0.0013	0.9987	82.04
21.5	2,411,270	1,237	0.0005	0.9995	81.93
22.5	2,404,903		0.0000	1.0000	81.89
23.5	2,360,495	10,857	0.0046	0.9954	81.89
24.5	2,118,728	14,079	0.0066	0.9934	81.51
25.5	2,028,680	6,810	0.0034	0.9966	80.97
26.5	1,961,644	16,881	0.0086	0.9914	80.70
27.5	1,906,738	3,518	0.0018	0.9982	80.00
28.5	1,899,880		0.0000	1.0000	79.85
29.5	1,864,578	2,254	0.0012	0.9988	79.85
30.5	1,861,730	607	0.0003	0.9997	79.76
31.5	1,848,671	6,025	0.0033	0.9967	79.73
32.5	1,842,203	2,552	0.0014	0.9986	79.47
33.5	803,178		0.0000	1.0000	79.36
34.5	760,824	1,358	0.0018	0.9982	79.36
35.5	745,431		0.0000	1.0000	79.22
36.5	732,914	2,604	0.0036	0.9964	79.22
37.5	697,116	9,526	0.0137	0.9863	78.94
38.5	676,030	2,609	0.0039	0.9961	77.86

DUKE ENERGY KENTUCKY

ACCOUNT 1900 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1898-2018 EXPERIENCE BAND 1957-2018

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	633,482	154	0.0002	0.9998	77.56
40.5	609,702		0.0000	1.0000	77.54
41.5	608,727		0.0000	1.0000	77.54
42.5	608,389	3,870	0.0064	0.9936	77.54
43.5	598,200		0.0000	1.0000	77.05
44.5	591,562	7,453	0.0126	0.9874	77.05
45.5	575,524	2,847	0.0049	0.9951	76.08
46.5	568,042	8,622	0.0152	0.9848	75.70
47.5	559,421		0.0000	1.0000	74.55
48.5	557,495		0.0000	1.0000	74.55
49.5	553,158	596	0.0011	0.9989	74.55
50.5	552,562	1,586	0.0029	0.9971	74.47
51.5	542,787		0.0000	1.0000	74.26
52.5	542,309		0.0000	1.0000	74.26
53.5	539,899		0.0000	1.0000	74.26
54.5	538,239		0.0000	1.0000	74.26
55.5	538,239	6,779	0.0126	0.9874	74.26
56.5	531,460	2,420	0.0046	0.9954	73.32
57.5	525,279	2,327	0.0044	0.9956	72.99
58.5	543,231	2,650	0.0049	0.9951	72.66
59.5	538,676		0.0000	1.0000	72.31
60.5	538,585		0.0000	1.0000	72.31
61.5	537,104		0.0000	1.0000	72.31
62.5	536,791		0.0000	1.0000	72.31
63.5	536,669	4,629	0.0086	0.9914	72.31
64.5	532,040		0.0000	1.0000	71.69
65.5	527,050	108,533	0.2059	0.7941	71.69
66.5	418,518		0.0000	1.0000	56.92
67.5	417,907	7,703	0.0184	0.9816	56.92
68.5	407,370		0.0000	1.0000	55.87
69.5	399,496		0.0000	1.0000	55.87
70.5	399,496	860	0.0022	0.9978	55.87
71.5	20,494		0.0000	1.0000	55.75
72.5	20,494		0.0000	1.0000	55.75
73.5	20,494		0.0000	1.0000	55.75
74.5	20,494		0.0000	1.0000	55.75
75.5	20,494	185	0.0090	0.9910	55.75
76.5	20,309		0.0000	1.0000	55.25
77.5	20,309		0.0000	1.0000	55.25
78.5	20,309		0.0000	1.0000	55.25

DUKE ENERGY KENTUCKY

ACCOUNT 1900 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1898-2018 EXPERIENCE BAND 1957-2018

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	20,280		0.0000	1.0000	55.25
80.5	20,280		0.0000	1.0000	55.25
81.5	20,280		0.0000	1.0000	55.25
82.5	20,280		0.0000	1.0000	55.25
83.5	20,280		0.0000	1.0000	55.25
84.5	20,280		0.0000	1.0000	55.25
85.5	20,280		0.0000	1.0000	55.25
86.5	20,280		0.0000	1.0000	55.25
87.5	20,280		0.0000	1.0000	55.25
88.5	20,280		0.0000	1.0000	55.25
89.5	20,280		0.0000	1.0000	55.25
90.5	20,280		0.0000	1.0000	55.25
91.5	20,280		0.0000	1.0000	55.25
92.5	20,280		0.0000	1.0000	55.25
93.5	20,280		0.0000	1.0000	55.25
94.5	20,280		0.0000	1.0000	55.25
95.5	20,280		0.0000	1.0000	55.25
96.5	20,280		0.0000	1.0000	55.25
97.5	20,280		0.0000	1.0000	55.25
98.5	20,280		0.0000	1.0000	55.25
99.5	20,280		0.0000	1.0000	55.25
100.5	20,280		0.0000	1.0000	55.25
101.5	20,280		0.0000	1.0000	55.25
102.5	20,280		0.0000	1.0000	55.25
103.5	20,280		0.0000	1.0000	55.25
104.5	20,280		0.0000	1.0000	55.25
105.5	20,280		0.0000	1.0000	55.25
106.5					55.25

DUKE ENERGY KENTUCKY

ACCOUNT 1900 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1898-2018 EXPERIENCE BAND 1989-2018

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	42,553,502	21,512	0.0005	0.9995	100.00
0.5	36,199,305		0.0000	1.0000	99.95
1.5	35,808,494	52,592	0.0015	0.9985	99.95
2.5	35,704,283	414,798	0.0116	0.9884	99.80
3.5	16,632,656	129,263	0.0078	0.9922	98.64
4.5	16,020,298	79,965	0.0050	0.9950	97.88
5.5	15,617,431	469,742	0.0301	0.9699	97.39
6.5	13,368,375	331,020	0.0248	0.9752	94.46
7.5	12,707,773	41,802	0.0033	0.9967	92.12
8.5	12,414,030	88,900	0.0072	0.9928	91.82
9.5	12,247,154	428,603	0.0350	0.9650	91.16
10.5	11,676,091	156,574	0.0134	0.9866	87.97
11.5	9,088,716	316,118	0.0348	0.9652	86.79
12.5	6,669,004	128,615	0.0193	0.9807	83.77
13.5	5,036,337	23,634	0.0047	0.9953	82.16
14.5	4,830,066	9,127	0.0019	0.9981	81.77
15.5	1,263,304	678	0.0005	0.9995	81.62
16.5	1,262,310	3,507	0.0028	0.9972	81.57
17.5	2,168,017	1,376	0.0006	0.9994	81.34
18.5	1,959,971	34,215	0.0175	0.9825	81.29
19.5	1,825,518	2,286	0.0013	0.9987	79.87
20.5	1,787,325	1,500	0.0008	0.9992	79.77
21.5	1,789,927		0.0000	1.0000	79.71
22.5	1,785,274		0.0000	1.0000	79.71
23.5	1,743,277	10,857	0.0062	0.9938	79.71
24.5	1,503,170		0.0000	1.0000	79.21
25.5	1,427,201	5,766	0.0040	0.9960	79.21
26.5	1,361,210		0.0000	1.0000	78.89
27.5	1,326,945	1,888	0.0014	0.9986	78.89
28.5	1,321,717		0.0000	1.0000	78.78
29.5	1,288,321		0.0000	1.0000	78.78
30.5	1,287,818		0.0000	1.0000	78.78
31.5	1,276,847	5,595	0.0044	0.9956	78.78
32.5	1,271,122		0.0000	1.0000	78.43
33.5	234,771		0.0000	1.0000	78.43
34.5	192,417		0.0000	1.0000	78.43
35.5	187,836		0.0000	1.0000	78.43
36.5	175,320		0.0000	1.0000	78.43
37.5	142,736	773	0.0054	0.9946	78.43
38.5	133,514	2,609	0.0195	0.9805	78.01

DUKE ENERGY KENTUCKY

ACCOUNT 1900 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1898-2018 EXPERIENCE BAND 1989-2018

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	98,841		0.0000	1.0000	76.48
40.5	75,214		0.0000	1.0000	76.48
41.5	607,488		0.0000	1.0000	76.48
42.5	607,150	3,870	0.0064	0.9936	76.48
43.5	596,961		0.0000	1.0000	76.00
44.5	590,323	7,453	0.0126	0.9874	76.00
45.5	574,285	2,847	0.0050	0.9950	75.04
46.5	566,803	8,622	0.0152	0.9848	74.66
47.5	558,182		0.0000	1.0000	73.53
48.5	556,256		0.0000	1.0000	73.53
49.5	553,158	596	0.0011	0.9989	73.53
50.5	552,562	1,586	0.0029	0.9971	73.45
51.5	542,787		0.0000	1.0000	73.24
52.5	542,309		0.0000	1.0000	73.24
53.5	539,899		0.0000	1.0000	73.24
54.5	538,239		0.0000	1.0000	73.24
55.5	538,239	6,779	0.0126	0.9874	73.24
56.5	531,460	2,420	0.0046	0.9954	72.32
57.5	525,279	2,327	0.0044	0.9956	71.99
58.5	522,951	2,650	0.0051	0.9949	71.67
59.5	518,396		0.0000	1.0000	71.31
60.5	518,305		0.0000	1.0000	71.31
61.5	516,825		0.0000	1.0000	71.31
62.5	516,512		0.0000	1.0000	71.31
63.5	516,390	4,629	0.0090	0.9910	71.31
64.5	511,760		0.0000	1.0000	70.67
65.5	506,771	108,533	0.2142	0.7858	70.67
66.5	398,238		0.0000	1.0000	55.53
67.5	397,627	7,703	0.0194	0.9806	55.53
68.5	387,091		0.0000	1.0000	54.46
69.5	379,217		0.0000	1.0000	54.46
70.5	379,217	860	0.0023	0.9977	54.46
71.5	214		0.0000	1.0000	54.33
72.5	214		0.0000	1.0000	54.33
73.5	214		0.0000	1.0000	54.33
74.5	214		0.0000	1.0000	54.33
75.5	214	185	0.8626	0.1374	54.33
76.5	29		0.0000	1.0000	7.47
77.5	29		0.0000	1.0000	7.47
78.5	29		0.0000	1.0000	7.47

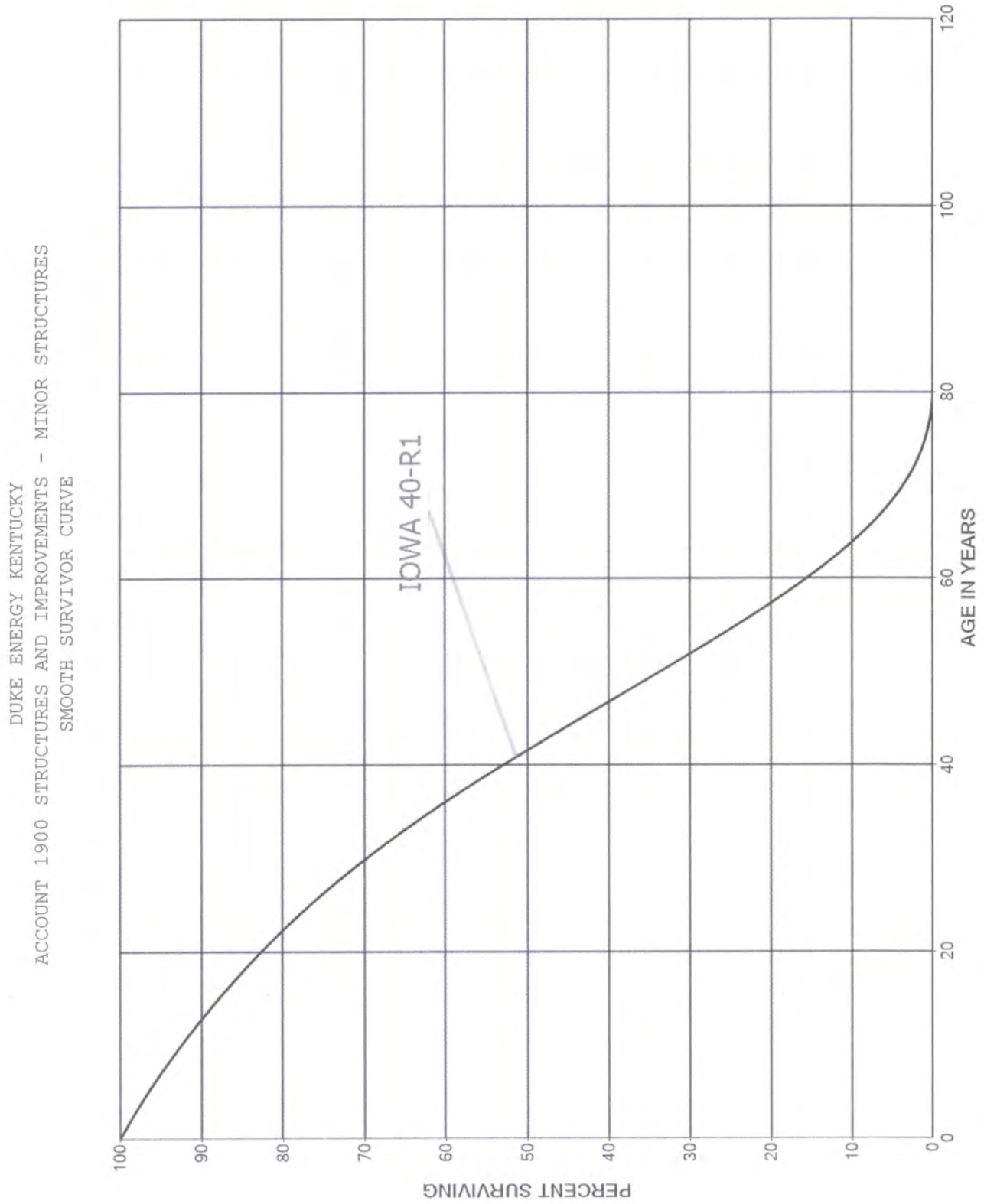
DUKE ENERGY KENTUCKY

ACCOUNT 1900 STRUCTURES AND IMPROVEMENTS

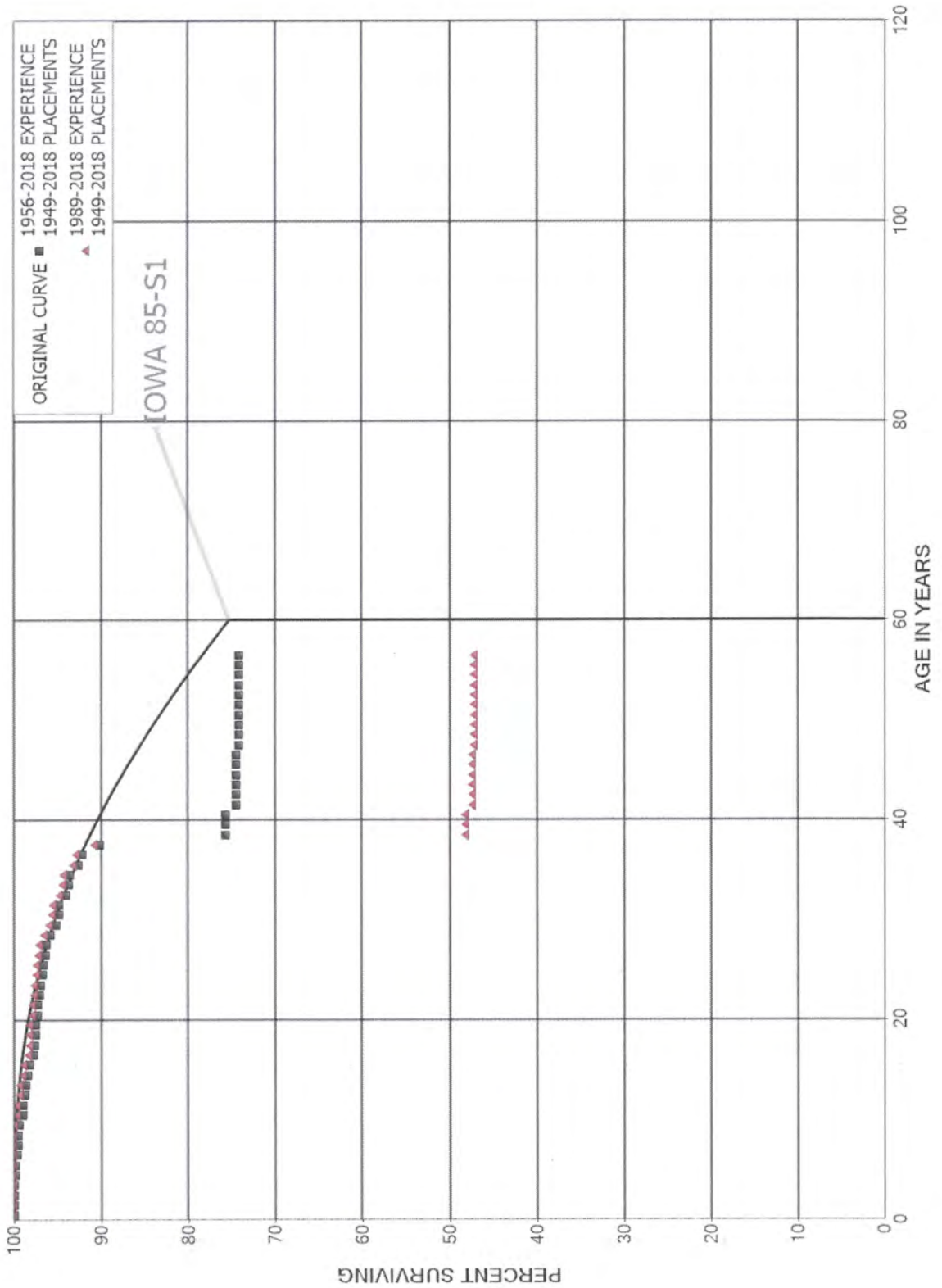
ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1898-2018 EXPERIENCE BAND 1989-2018

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					7.47
80.5					
81.5					
82.5					
83.5					
84.5					
85.5					
86.5					
87.5					
88.5					
89.5					
90.5	20,280		0.0000		
91.5	20,280		0.0000		
92.5	20,280		0.0000		
93.5	20,280		0.0000		
94.5	20,280		0.0000		
95.5	20,280		0.0000		
96.5	20,280		0.0000		
97.5	20,280		0.0000		
98.5	20,280		0.0000		
99.5	20,280		0.0000		
100.5	20,280		0.0000		
101.5	20,280		0.0000		
102.5	20,280		0.0000		
103.5	20,280		0.0000		
104.5	20,280		0.0000		
105.5	20,280		0.0000		
106.5					


DUKE ENERGY KENTUCKY
ACCOUNT 1900 STRUCTURES AND IMPROVEMENTS - MINOR STRUCTURES
SMOOTH SURVIVOR CURVE
IOWA 40-R1
PERCENT SURVIVING
100
90
80
70
60
50
40
30
20
10
0
AGE IN YEARS
0
20
40
60
80
100
120

DUKE ENERGY KENTUCKY
ACCOUNT 3110 STRUCTURES AND IMPROVEMENTS
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY

ACCOUNT 3110 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1949-2018 EXPERIENCE BAND 1956-2018

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	131,983,540		0.0000	1.0000	100.00
0.5	118,841,078		0.0000	1.0000	100.00
1.5	76,636,098	40,813	0.0005	0.9995	100.00
2.5	65,496,623	1,953	0.0000	1.0000	99.95
3.5	45,933,282	44,255	0.0010	0.9990	99.94
4.5	45,541,178	7,770	0.0002	0.9998	99.85
5.5	45,295,845	117,932	0.0026	0.9974	99.83
6.5	44,489,141	15,572	0.0004	0.9996	99.57
7.5	44,091,712	9,553	0.0002	0.9998	99.54
8.5	43,308,411	50,979	0.0012	0.9988	99.51
9.5	42,572,334	176,574	0.0041	0.9959	99.40
10.5	41,481,149	3,914	0.0001	0.9999	98.98
11.5	41,007,756	113,550	0.0028	0.9972	98.98
12.5	37,996,782	33,929	0.0009	0.9991	98.70
13.5	37,918,413	83,648	0.0022	0.9978	98.61
14.5	37,682,294	79,505	0.0021	0.9979	98.40
15.5	37,506,507	195,535	0.0052	0.9948	98.19
16.5	36,659,180	19,855	0.0005	0.9995	97.68
17.5	36,396,395	31,027	0.0009	0.9991	97.62
18.5	36,313,656	5,711	0.0002	0.9998	97.54
19.5	36,240,295	96,561	0.0027	0.9973	97.52
20.5	36,167,866		0.0000	1.0000	97.26
21.5	36,538,300	88,923	0.0024	0.9976	97.26
22.5	36,449,376	41,973	0.0012	0.9988	97.03
23.5	36,168,536	76,666	0.0021	0.9979	96.92
24.5	36,091,748	32,589	0.0009	0.9991	96.71
25.5	35,732,996	65,393	0.0018	0.9982	96.62
26.5	35,387,468	56,871	0.0016	0.9984	96.45
27.5	34,275,332	168,463	0.0049	0.9951	96.29
28.5	33,858,121	216,104	0.0064	0.9936	95.82
29.5	33,615,296	116,584	0.0035	0.9965	95.21
30.5	33,491,032	16,988	0.0005	0.9995	94.88
31.5	33,448,345	273,842	0.0082	0.9918	94.83
32.5	33,096,166	98,944	0.0030	0.9970	94.05
33.5	32,626,788	59,784	0.0018	0.9982	93.77
34.5	32,724,949	350,943	0.0107	0.9893	93.60
35.5	32,306,544	134,301	0.0042	0.9958	92.60
36.5	31,959,191	707,481	0.0221	0.9779	92.21
37.5	1,323,332	211,617	0.1599	0.8401	90.17
38.5	1,101,808		0.0000	1.0000	75.75

DUKE ENERGY KENTUCKY

ACCOUNT 3110 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1949-2018 EXPERIENCE BAND 1956-2018

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	1,100,849		0.0000	1.0000	75.75
40.5	1,100,849	17,308	0.0157	0.9843	75.75
41.5	1,085,932		0.0000	1.0000	74.56
42.5	1,084,006		0.0000	1.0000	74.56
43.5	1,071,133		0.0000	1.0000	74.56
44.5	1,024,884		0.0000	1.0000	74.56
45.5	1,024,884		0.0000	1.0000	74.56
46.5	3,891,211	18,254	0.0047	0.9953	74.56
47.5	3,872,956		0.0000	1.0000	74.21
48.5	3,872,956		0.0000	1.0000	74.21
49.5	3,731,896		0.0000	1.0000	74.21
50.5	3,722,507		0.0000	1.0000	74.21
51.5	2,856,501		0.0000	1.0000	74.21
52.5	2,856,501		0.0000	1.0000	74.21
53.5	2,856,501		0.0000	1.0000	74.21
54.5	2,856,501		0.0000	1.0000	74.21
55.5	2,856,501		0.0000	1.0000	74.21
56.5					74.21

DUKE ENERGY KENTUCKY

ACCOUNT 3110 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1949-2018 EXPERIENCE BAND 1989-2018

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	96,234,382		0.0000	1.0000	100.00
0.5	83,091,920		0.0000	1.0000	100.00
1.5	40,893,338		0.0000	1.0000	100.00
2.5	29,936,295		0.0000	1.0000	100.00
3.5	10,374,907		0.0000	1.0000	100.00
4.5	10,630,375	2,822	0.0003	0.9997	100.00
5.5	10,380,600		0.0000	1.0000	99.97
6.5	8,887,604		0.0000	1.0000	99.97
7.5	40,736,336		0.0000	1.0000	99.97
8.5	40,221,896	33,928	0.0008	0.9992	99.97
9.5	39,510,799	170,545	0.0043	0.9957	99.89
10.5	38,425,643		0.0000	1.0000	99.46
11.5	38,338,092	92,657	0.0024	0.9976	99.46
12.5	35,348,011	33,929	0.0010	0.9990	99.22
13.5	35,488,846	83,648	0.0024	0.9976	99.12
14.5	35,277,843	73,121	0.0021	0.9979	98.89
15.5	36,168,625	189,813	0.0052	0.9948	98.68
16.5	35,327,020	19,855	0.0006	0.9994	98.17
17.5	35,090,956	31,027	0.0009	0.9991	98.11
18.5	35,008,217		0.0000	1.0000	98.02
19.5	34,940,567	94,561	0.0027	0.9973	98.02
20.5	34,891,529		0.0000	1.0000	97.76
21.5	35,261,963	76,044	0.0022	0.9978	97.76
22.5	35,185,919	29,768	0.0008	0.9992	97.55
23.5	34,917,521	76,666	0.0022	0.9978	97.47
24.5	34,844,922	4,329	0.0001	0.9999	97.25
25.5	34,517,324	57,318	0.0017	0.9983	97.24
26.5	34,254,830	56,871	0.0017	0.9983	97.08
27.5	33,145,977	163,663	0.0049	0.9951	96.92
28.5	32,774,580	216,104	0.0066	0.9934	96.44
29.5	32,531,755	116,584	0.0036	0.9964	95.80
30.5	32,409,417	16,988	0.0005	0.9995	95.46
31.5	32,379,603	273,842	0.0085	0.9915	95.41
32.5	32,073,673	98,944	0.0031	0.9969	94.60
33.5	31,604,295	59,784	0.0019	0.9981	94.31
34.5	31,710,885	350,943	0.0111	0.9889	94.13
35.5	31,292,480	134,301	0.0043	0.9957	93.09
36.5	30,945,127	707,481	0.0229	0.9771	92.69
37.5	450,328	211,617	0.4699	0.5301	90.57
38.5	238,193		0.0000	1.0000	48.01

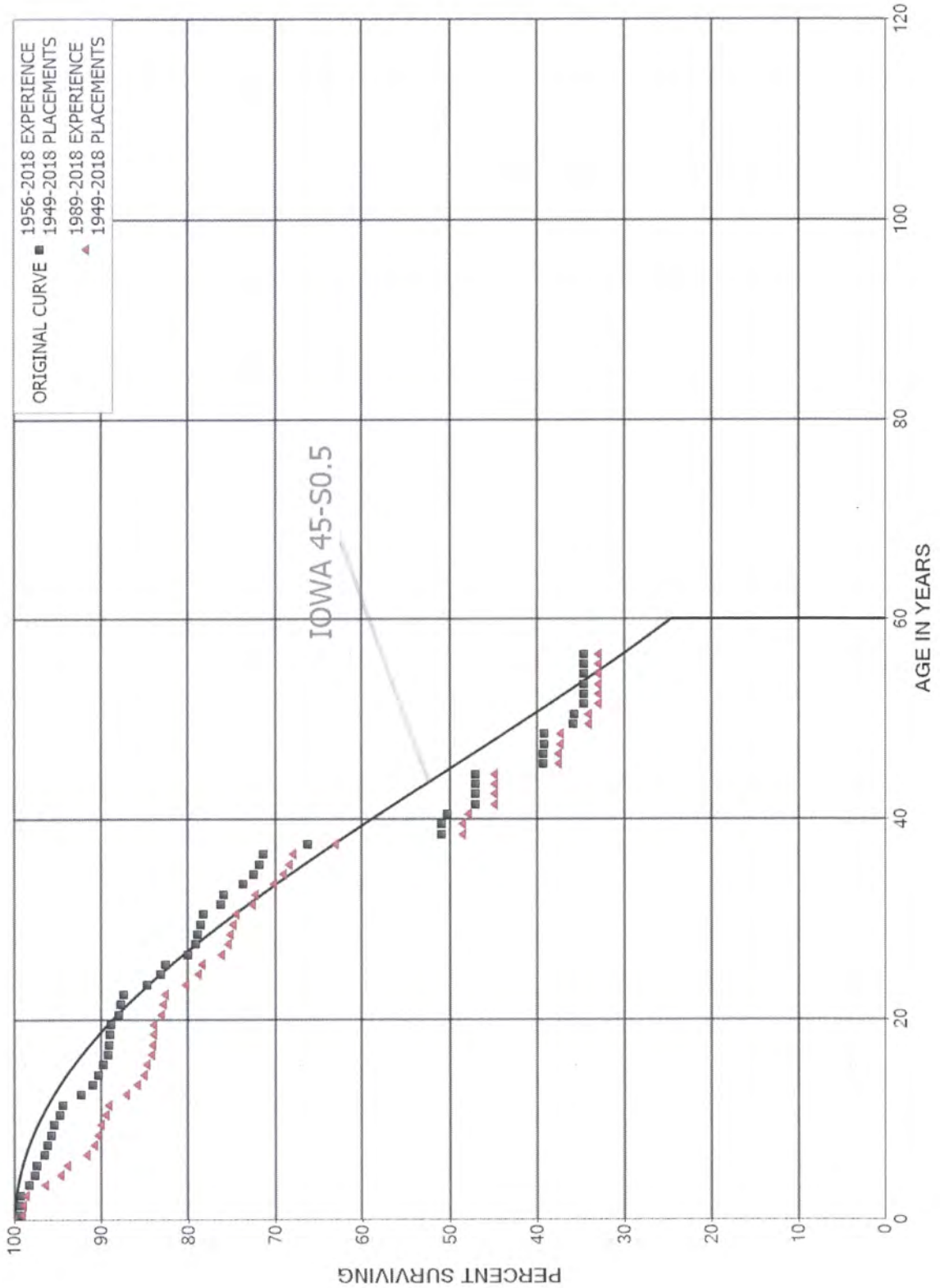
DUKE ENERGY KENTUCKY

ACCOUNT 3110 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1949-2018			EXPERIENCE BAND 1989-2018		
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	1,100,849		0.0000	1.0000	48.01
40.5	1,100,849	17,308	0.0157	0.9843	48.01
41.5	1,085,932		0.0000	1.0000	47.26
42.5	1,084,006		0.0000	1.0000	47.26
43.5	1,071,133		0.0000	1.0000	47.26
44.5	1,024,884		0.0000	1.0000	47.26
45.5	1,024,884		0.0000	1.0000	47.26
46.5	3,891,211	18,254	0.0047	0.9953	47.26
47.5	3,872,956		0.0000	1.0000	47.03
48.5	3,872,956		0.0000	1.0000	47.03
49.5	3,731,896		0.0000	1.0000	47.03
50.5	3,722,507		0.0000	1.0000	47.03
51.5	2,856,501		0.0000	1.0000	47.03
52.5	2,856,501		0.0000	1.0000	47.03
53.5	2,856,501		0.0000	1.0000	47.03
54.5	2,856,501		0.0000	1.0000	47.03
55.5	2,856,501		0.0000	1.0000	47.03
56.5					47.03

DUKE ENERGY KENTUCKY
ACCOUNT 3120 BOILER PLANT EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY

ACCOUNT 3120 BOILER PLANT EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1949-2018 EXPERIENCE BAND 1956-2018

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	725,662,787	3,962,738	0.0055	0.9945	100.00
0.5	629,665,250	434,143	0.0007	0.9993	99.45
1.5	621,461,215	785,352	0.0013	0.9987	99.39
2.5	611,339,379	6,341,383	0.0104	0.9896	99.26
3.5	475,292,549	2,870,294	0.0060	0.9940	98.23
4.5	494,767,375	1,405,605	0.0028	0.9972	97.64
5.5	494,666,661	4,507,769	0.0091	0.9909	97.36
6.5	480,700,049	1,421,730	0.0030	0.9970	96.47
7.5	468,476,298	2,100,704	0.0045	0.9955	96.19
8.5	462,192,743	1,933,862	0.0042	0.9958	95.76
9.5	456,046,345	2,892,867	0.0063	0.9937	95.36
10.5	446,979,215	1,688,948	0.0038	0.9962	94.75
11.5	443,325,590	9,840,728	0.0222	0.9778	94.39
12.5	436,749,903	6,221,990	0.0142	0.9858	92.30
13.5	431,802,528	3,565,120	0.0083	0.9917	90.98
14.5	428,875,299	2,226,090	0.0052	0.9948	90.23
15.5	425,350,148	2,998,864	0.0071	0.9929	89.76
16.5	378,305,773	371,114	0.0010	0.9990	89.13
17.5	375,958,395	640,157	0.0017	0.9983	89.04
18.5	373,651,709	344,513	0.0009	0.9991	88.89
19.5	369,042,742	3,512,744	0.0095	0.9905	88.81
20.5	361,776,201	1,008,410	0.0028	0.9972	87.96
21.5	224,183,095	843,373	0.0038	0.9962	87.72
22.5	223,687,072	6,876,539	0.0307	0.9693	87.39
23.5	201,889,916	3,637,189	0.0180	0.9820	84.70
24.5	193,226,844	1,376,257	0.0071	0.9929	83.18
25.5	185,123,467	5,594,819	0.0302	0.9698	82.58
26.5	179,239,102	1,920,224	0.0107	0.9893	80.09
27.5	176,072,850	525,249	0.0030	0.9970	79.23
28.5	174,655,025	835,634	0.0048	0.9952	78.99
29.5	173,381,545	757,358	0.0044	0.9956	78.62
30.5	171,880,464	4,351,211	0.0253	0.9747	78.27
31.5	166,683,957	803,180	0.0048	0.9952	76.29
32.5	165,483,209	4,745,079	0.0287	0.9713	75.92
33.5	158,923,954	2,585,995	0.0163	0.9837	73.75
34.5	155,323,204	1,525,840	0.0098	0.9902	72.55
35.5	152,910,525	946,119	0.0062	0.9938	71.83
36.5	151,796,381	10,878,659	0.0717	0.9283	71.39
37.5	2,534,313	586,181	0.2313	0.7687	66.27
38.5	1,079,566		0.0000	1.0000	50.94

DUKE ENERGY KENTUCKY

ACCOUNT 3120 BOILER PLANT EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1949-2018 EXPERIENCE BAND 1956-2018

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	1,082,273	14,345	0.0133	0.9867	50.94
40.5	797,444	50,275	0.0630	0.9370	50.27
41.5	781,694		0.0000	1.0000	47.10
42.5	718,842		0.0000	1.0000	47.10
43.5	717,326		0.0000	1.0000	47.10
44.5	736,028	121,386	0.1649	0.8351	47.10
45.5	622,964		0.0000	1.0000	39.33
46.5	7,768,311	28,271	0.0036	0.9964	39.33
47.5	7,740,040		0.0000	1.0000	39.19
48.5	7,740,040	668,919	0.0864	0.9136	39.19
49.5	7,064,222	9,310	0.0013	0.9987	35.80
50.5	6,983,932	223,986	0.0321	0.9679	35.75
51.5	6,718,498		0.0000	1.0000	34.61
52.5	6,690,518		0.0000	1.0000	34.61
53.5	6,665,564	6,702	0.0010	0.9990	34.61
54.5	6,630,890		0.0000	1.0000	34.57
55.5	6,622,569		0.0000	1.0000	34.57
56.5	6,734		0.0000	1.0000	34.57
57.5	192,340		0.0000	1.0000	34.57
58.5	192,340		0.0000	1.0000	34.57
59.5	192,340		0.0000	1.0000	34.57
60.5	192,340		0.0000	1.0000	34.57
61.5	192,340		0.0000	1.0000	34.57
62.5	185,606		0.0000	1.0000	34.57
63.5	185,606		0.0000	1.0000	34.57
64.5	185,606		0.0000	1.0000	34.57
65.5	185,606		0.0000	1.0000	34.57
66.5	185,606		0.0000	1.0000	34.57
67.5					34.57

DUKE ENERGY KENTUCKY

ACCOUNT 3120 BOILER PLANT EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1949-2018 EXPERIENCE BAND 1989-2018

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	376,489,943	3,962,738	0.0105	0.9895	100.00
0.5	280,871,601	429,079	0.0015	0.9985	98.95
1.5	273,996,297	713,919	0.0026	0.9974	98.80
2.5	264,238,672	6,061,299	0.0229	0.9771	98.54
3.5	128,919,073	2,375,992	0.0184	0.9816	96.28
4.5	149,904,686	1,257,672	0.0084	0.9916	94.50
5.5	150,041,460	3,591,262	0.0239	0.9761	93.71
6.5	138,243,286	1,324,643	0.0096	0.9904	91.47
7.5	439,005,254	1,951,149	0.0044	0.9956	90.59
8.5	446,710,197	1,703,465	0.0038	0.9962	90.19
9.5	440,929,658	2,826,863	0.0064	0.9936	89.85
10.5	432,899,165	1,625,031	0.0038	0.9962	89.27
11.5	429,309,457	9,731,557	0.0227	0.9773	88.93
12.5	423,773,587	6,079,042	0.0143	0.9857	86.92
13.5	424,800,142	3,414,029	0.0080	0.9920	85.67
14.5	422,289,390	2,058,147	0.0049	0.9951	84.98
15.5	418,970,044	2,752,310	0.0066	0.9934	84.57
16.5	372,260,781	362,676	0.0010	0.9990	84.01
17.5	369,961,049	341,201	0.0009	0.9991	83.93
18.5	367,962,882	287,642	0.0008	0.9992	83.85
19.5	363,411,243	3,475,889	0.0096	0.9904	83.79
20.5	356,183,237	958,610	0.0027	0.9973	82.99
21.5	218,976,967	541,411	0.0025	0.9975	82.76
22.5	218,798,485	6,377,155	0.0291	0.9709	82.56
23.5	197,500,714	3,540,609	0.0179	0.9821	80.15
24.5	188,938,313	1,121,657	0.0059	0.9941	78.72
25.5	181,089,930	5,002,935	0.0276	0.9724	78.25
26.5	177,034,041	1,815,544	0.0103	0.9897	76.09
27.5	173,973,690	504,648	0.0029	0.9971	75.31
28.5	174,647,790	835,634	0.0048	0.9952	75.09
29.5	173,374,310	757,358	0.0044	0.9956	74.73
30.5	171,873,229	4,351,211	0.0253	0.9747	74.40
31.5	166,676,722	803,180	0.0048	0.9952	72.52
32.5	165,475,974	4,745,079	0.0287	0.9713	72.17
33.5	158,916,719	2,585,995	0.0163	0.9837	70.10
34.5	155,315,969	1,525,840	0.0098	0.9902	68.96
35.5	152,903,290	946,119	0.0062	0.9938	68.28
36.5	151,789,146	10,878,659	0.0717	0.9283	67.86
37.5	2,527,078	586,181	0.2320	0.7680	63.00
38.5	1,072,643		0.0000	1.0000	48.38

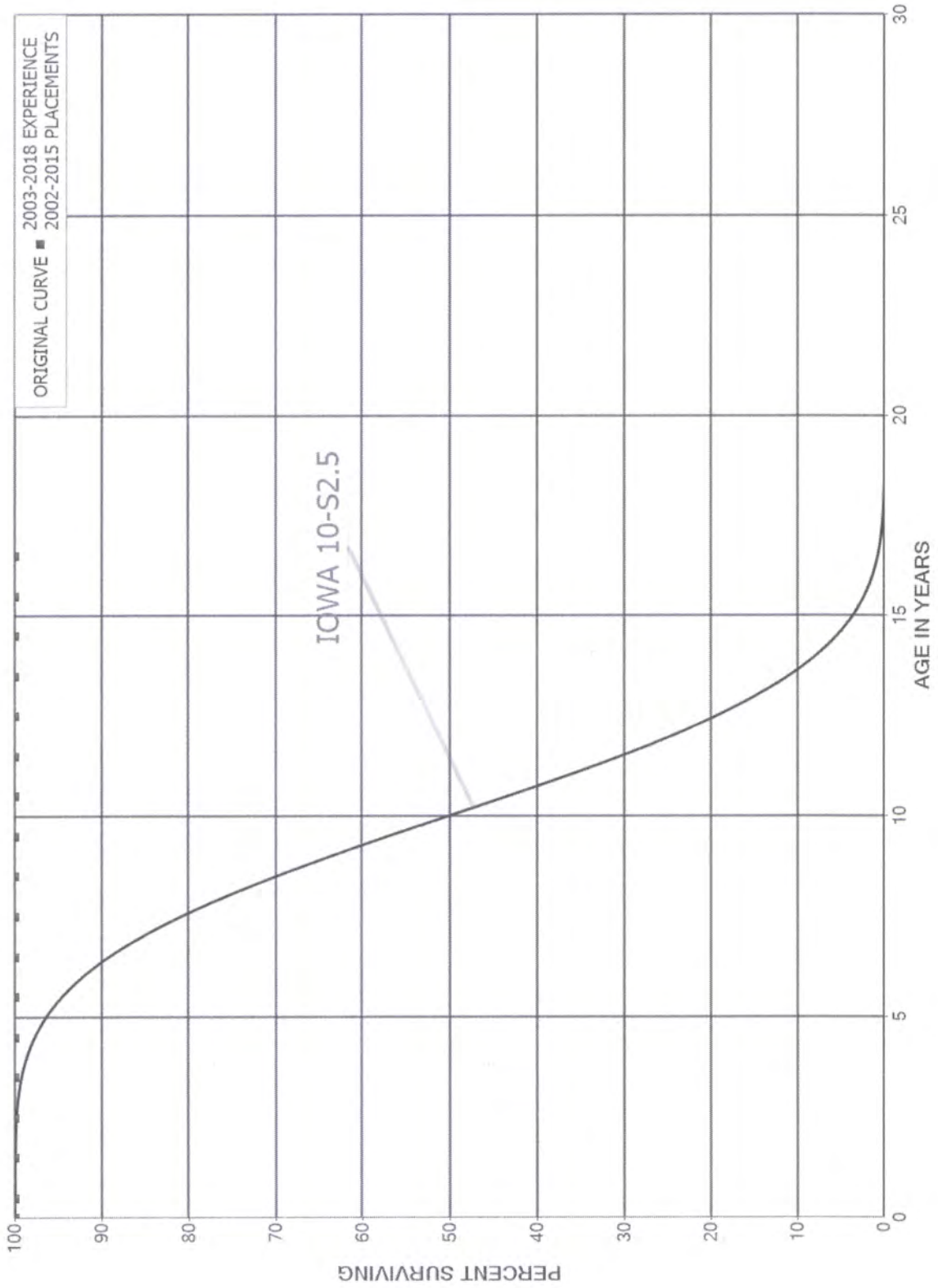
DUKE ENERGY KENTUCKY

ACCOUNT 3120 BOILER PLANT EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1949-2018			EXPERIENCE BAND 1989-2018		
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	1,082,273	14,345	0.0133	0.9867	48.38
40.5	797,444	50,275	0.0630	0.9370	47.74
41.5	781,694		0.0000	1.0000	44.73
42.5	718,842		0.0000	1.0000	44.73
43.5	717,326		0.0000	1.0000	44.73
44.5	736,028	121,386	0.1649	0.8351	44.73
45.5	622,964		0.0000	1.0000	37.35
46.5	7,768,311	28,271	0.0036	0.9964	37.35
47.5	7,740,040		0.0000	1.0000	37.22
48.5	7,740,040	668,919	0.0864	0.9136	37.22
49.5	7,064,222	9,310	0.0013	0.9987	34.00
50.5	6,983,932	223,986	0.0321	0.9679	33.96
51.5	6,718,498		0.0000	1.0000	32.87
52.5	6,690,518		0.0000	1.0000	32.87
53.5	6,665,564	6,702	0.0010	0.9990	32.87
54.5	6,630,890		0.0000	1.0000	32.84
55.5	6,622,569		0.0000	1.0000	32.84
56.5	6,734		0.0000	1.0000	32.84
57.5	192,340		0.0000	1.0000	32.84
58.5	192,340		0.0000	1.0000	32.84
59.5	192,340		0.0000	1.0000	32.84
60.5	192,340		0.0000	1.0000	32.84
61.5	192,340		0.0000	1.0000	32.84
62.5	185,606		0.0000	1.0000	32.84
63.5	185,606		0.0000	1.0000	32.84
64.5	185,606		0.0000	1.0000	32.84
65.5	185,606		0.0000	1.0000	32.84
66.5	185,606		0.0000	1.0000	32.84
67.5					32.84

DUKE ENERGY KENTUCKY
ACCOUNT 3123 BOILER PLANT EQUIPMENT - SCR CATALYST
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY

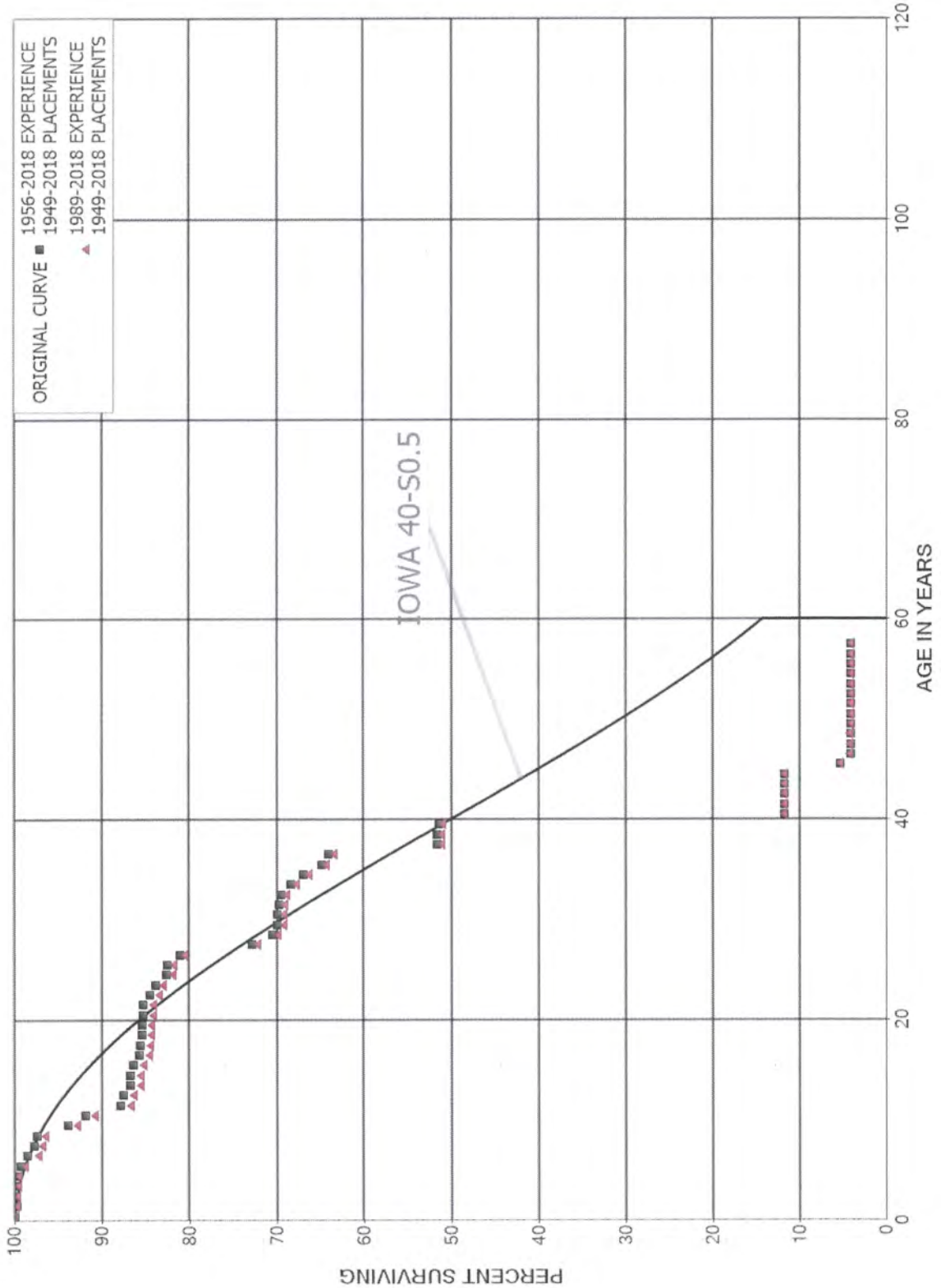
ACCOUNT 3123 BOILER PLANT EQUIPMENT - SCR CATALYST

ORIGINAL LIFE TABLE

PLACEMENT BAND 2002-2015 EXPERIENCE BAND 2003-2018

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	3,190,194		0.0000	1.0000	100.00
0.5	5,420,687		0.0000	1.0000	100.00
1.5	5,420,680		0.0000	1.0000	100.00
2.5	5,420,680		0.0000	1.0000	100.00
3.5	2,766,750		0.0000	1.0000	100.00
4.5	2,766,750		0.0000	1.0000	100.00
5.5	2,230,486		0.0000	1.0000	100.00
6.5	2,230,486		0.0000	1.0000	100.00
7.5	2,230,486		0.0000	1.0000	100.00
8.5	2,230,486		0.0000	1.0000	100.00
9.5	2,230,486		0.0000	1.0000	100.00
10.5	2,230,486		0.0000	1.0000	100.00
11.5	2,230,486		0.0000	1.0000	100.00
12.5	2,230,486		0.0000	1.0000	100.00
13.5	2,230,486		0.0000	1.0000	100.00
14.5	2,230,486		0.0000	1.0000	100.00
15.5	2,230,486		0.0000	1.0000	100.00
16.5					100.00

DUKE ENERGY KENTUCKY
ACCOUNT 3140 TURBOGENERATOR UNITS
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY

ACCOUNT 3140 TURBOGENERATOR UNITS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1949-2018 EXPERIENCE BAND 1956-2018

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	107,442,833		0.0000	1.0000	100.00
0.5	95,202,369	218,970	0.0023	0.9977	100.00
1.5	95,593,921	95,283	0.0010	0.9990	99.77
2.5	94,594,589	60,220	0.0006	0.9994	99.67
3.5	64,286,079	701	0.0000	1.0000	99.61
4.5	62,218,643	205,690	0.0033	0.9967	99.61
5.5	61,507,901	451,618	0.0073	0.9927	99.28
6.5	60,453,993	505,766	0.0084	0.9916	98.55
7.5	61,555,119	175,792	0.0029	0.9971	97.72
8.5	60,199,195	2,209,484	0.0367	0.9633	97.44
9.5	56,767,466	1,220,675	0.0215	0.9785	93.87
10.5	55,112,588	2,417,725	0.0439	0.9561	91.85
11.5	48,263,931	146,801	0.0030	0.9970	87.82
12.5	47,774,906	423,682	0.0089	0.9911	87.55
13.5	39,984,434	12,408	0.0003	0.9997	86.78
14.5	40,930,091	155,218	0.0038	0.9962	86.75
15.5	40,505,747	331,187	0.0082	0.9918	86.42
16.5	40,332,654	53,663	0.0013	0.9987	85.71
17.5	38,238,117	67,638	0.0018	0.9982	85.60
18.5	37,829,173	3,500	0.0001	0.9999	85.45
19.5	38,183,482	60,185	0.0016	0.9984	85.44
20.5	39,346,550	15,419	0.0004	0.9996	85.31
21.5	59,779,423	519,882	0.0087	0.9913	85.27
22.5	59,085,047	516,998	0.0088	0.9912	84.53
23.5	56,807,867	786,467	0.0138	0.9862	83.79
24.5	55,800,545	52,928	0.0009	0.9991	82.63
25.5	55,659,933	969,163	0.0174	0.9826	82.55
26.5	54,049,874	5,524,472	0.1022	0.8978	81.12
27.5	48,317,254	1,562,503	0.0323	0.9677	72.82
28.5	46,621,680	380,242	0.0082	0.9918	70.47
29.5	46,186,712		0.0000	1.0000	69.89
30.5	45,901,819	84,460	0.0018	0.9982	69.89
31.5	45,132,858	151,481	0.0034	0.9966	69.77
32.5	44,536,198	741,411	0.0166	0.9834	69.53
33.5	23,309,018	493,479	0.0212	0.9788	68.37
34.5	22,761,605	705,387	0.0310	0.9690	66.93
35.5	22,044,775	281,170	0.0128	0.9872	64.85
36.5	21,705,545	4,217,208	0.1943	0.8057	64.03
37.5	523,396		0.0000	1.0000	51.59
38.5	498,373	1,820	0.0037	0.9963	51.59

DUKE ENERGY KENTUCKY

ACCOUNT 3140 TURBOGENERATOR UNITS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1949-2018 EXPERIENCE BAND 1956-2018

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	496,554	383,504	0.7723	0.2277	51.40
40.5	107,802		0.0000	1.0000	11.70
41.5	97,580		0.0000	1.0000	11.70
42.5	95,647		0.0000	1.0000	11.70
43.5	93,070		0.0000	1.0000	11.70
44.5	94,614	52,089	0.5505	0.4495	11.70
45.5	40,605	9,199	0.2265	0.7735	5.26
46.5	5,960,098		0.0000	1.0000	4.07
47.5	5,980,790	4,031	0.0007	0.9993	4.07
48.5	5,976,759	25,889	0.0043	0.9957	4.07
49.5	5,950,869		0.0000	1.0000	4.05
50.5	5,950,869		0.0000	1.0000	4.05
51.5	5,950,869		0.0000	1.0000	4.05
52.5	5,929,295		0.0000	1.0000	4.05
53.5	5,921,007		0.0000	1.0000	4.05
54.5	5,919,463		0.0000	1.0000	4.05
55.5	5,919,463		0.0000	1.0000	4.05
56.5	20,692		0.0000	1.0000	4.05
57.5					4.05

DUKE ENERGY KENTUCKY

ACCOUNT 3140 TURBOGENERATOR UNITS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1949-2018 EXPERIENCE BAND 1989-2018

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	71,252,916		0.0000	1.0000	100.00
0.5	59,012,452	218,970	0.0037	0.9963	100.00
1.5	59,553,427	95,283	0.0016	0.9984	99.63
2.5	58,852,945	60,220	0.0010	0.9990	99.47
3.5	28,544,435		0.0000	1.0000	99.37
4.5	26,477,700	204,786	0.0077	0.9923	99.37
5.5	25,804,865	411,009	0.0159	0.9841	98.60
6.5	24,791,566	105,190	0.0042	0.9958	97.03
7.5	59,234,646	175,792	0.0030	0.9970	96.62
8.5	57,885,490	2,199,846	0.0380	0.9620	96.33
9.5	54,463,398	1,220,675	0.0224	0.9776	92.67
10.5	52,904,921	2,417,725	0.0457	0.9543	90.59
11.5	46,056,264	143,491	0.0031	0.9969	86.45
12.5	45,570,549	423,682	0.0093	0.9907	86.18
13.5	37,780,077	7,120	0.0002	0.9998	85.38
14.5	38,735,804	125,944	0.0033	0.9967	85.37
15.5	38,340,735	322,285	0.0084	0.9916	85.09
16.5	38,176,543	50,172	0.0013	0.9987	84.37
17.5	36,085,497	53,449	0.0015	0.9985	84.26
18.5	35,690,742		0.0000	1.0000	84.14
19.5	36,054,650	60,185	0.0017	0.9983	84.14
20.5	37,217,718	2,120	0.0001	0.9999	84.00
21.5	57,663,890	519,882	0.0090	0.9910	83.99
22.5	57,066,086	261,849	0.0046	0.9954	83.23
23.5	55,050,047	776,958	0.0141	0.9859	82.85
24.5	54,054,398	52,710	0.0010	0.9990	81.68
25.5	53,914,005	778,917	0.0144	0.9856	81.60
26.5	53,071,859	5,524,472	0.1041	0.8959	80.42
27.5	47,339,240	1,562,503	0.0330	0.9670	72.05
28.5	46,602,259	380,242	0.0082	0.9918	69.67
29.5	46,186,712		0.0000	1.0000	69.11
30.5	45,901,819	84,460	0.0018	0.9982	69.11
31.5	45,132,858	151,481	0.0034	0.9966	68.98
32.5	44,536,198	741,411	0.0166	0.9834	68.75
33.5	23,309,018	493,479	0.0212	0.9788	67.60
34.5	22,761,605	705,387	0.0310	0.9690	66.17
35.5	22,044,775	281,170	0.0128	0.9872	64.12
36.5	21,705,545	4,217,208	0.1943	0.8057	63.30
37.5	523,396		0.0000	1.0000	51.00
38.5	498,373	1,820	0.0037	0.9963	51.00

DUKE ENERGY KENTUCKY

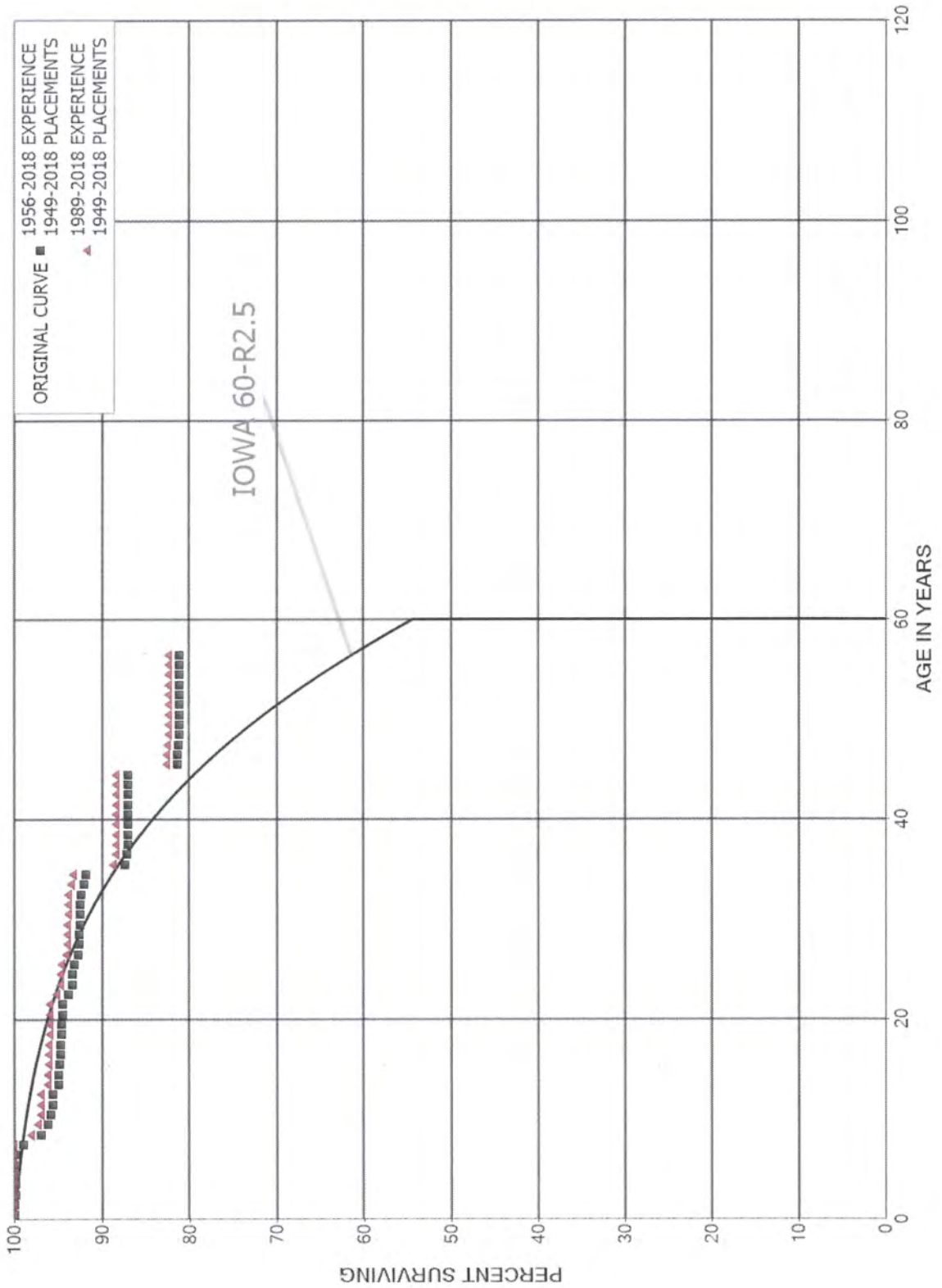
ACCOUNT 3140 TURBOGENERATOR UNITS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1949-2018 EXPERIENCE BAND 1989-2018

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	496,554	383,504	0.7723	0.2277	50.82
40.5	107,802		0.0000	1.0000	11.57
41.5	97,580		0.0000	1.0000	11.57
42.5	95,647		0.0000	1.0000	11.57
43.5	93,070		0.0000	1.0000	11.57
44.5	94,614	52,089	0.5505	0.4495	11.57
45.5	40,605	9,199	0.2265	0.7735	5.20
46.5	5,960,098		0.0000	1.0000	4.02
47.5	5,980,790	4,031	0.0007	0.9993	4.02
48.5	5,976,759	25,889	0.0043	0.9957	4.02
49.5	5,950,869		0.0000	1.0000	4.00
50.5	5,950,869		0.0000	1.0000	4.00
51.5	5,950,869		0.0000	1.0000	4.00
52.5	5,929,295		0.0000	1.0000	4.00
53.5	5,921,007		0.0000	1.0000	4.00
54.5	5,919,463		0.0000	1.0000	4.00
55.5	5,919,463		0.0000	1.0000	4.00
56.5	20,692		0.0000	1.0000	4.00
57.5					4.00

DUKE ENERGY KENTUCKY
ACCOUNT 3150 ACCESSORY ELECTRIC EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY

ACCOUNT 3150 ACCESSORY ELECTRIC EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1949-2018 EXPERIENCE BAND 1956-2018

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	48,013,705		0.0000	1.0000	100.00
0.5	47,734,147		0.0000	1.0000	100.00
1.5	47,798,254	72,673	0.0015	0.9985	100.00
2.5	46,881,912	873	0.0000	1.0000	99.85
3.5	34,869,451	11,039	0.0003	0.9997	99.85
4.5	34,854,555	2,705	0.0001	0.9999	99.81
5.5	34,716,452		0.0000	1.0000	99.81
6.5	30,289,238	277,312	0.0092	0.9908	99.81
7.5	29,816,278	584,342	0.0196	0.9804	98.89
8.5	28,865,714	245,238	0.0085	0.9915	96.95
9.5	28,487,106	85,953	0.0030	0.9970	96.13
10.5	28,295,898	59,048	0.0021	0.9979	95.84
11.5	28,238,141	5,988	0.0002	0.9998	95.64
12.5	27,810,296	195,206	0.0070	0.9930	95.62
13.5	27,191,437		0.0000	1.0000	94.95
14.5	27,912,310	38,447	0.0014	0.9986	94.95
15.5	27,873,863	13,543	0.0005	0.9995	94.82
16.5	27,766,739	8,637	0.0003	0.9997	94.77
17.5	25,900,989	46,152	0.0018	0.9982	94.74
18.5	25,810,239		0.0000	1.0000	94.57
19.5	25,843,150	21,209	0.0008	0.9992	94.57
20.5	25,836,633	665	0.0000	1.0000	94.50
21.5	25,930,503	183,946	0.0071	0.9929	94.49
22.5	25,639,704	126,423	0.0049	0.9951	93.82
23.5	25,616,636		0.0000	1.0000	93.36
24.5	25,373,658	40,813	0.0016	0.9984	93.36
25.5	24,620,563	141,443	0.0057	0.9943	93.21
26.5	24,874,978	20,346	0.0008	0.9992	92.68
27.5	24,816,521	4,796	0.0002	0.9998	92.60
28.5	24,656,691	22,125	0.0009	0.9991	92.58
29.5	24,575,350	11,117	0.0005	0.9995	92.50
30.5	24,564,232	139	0.0000	1.0000	92.46
31.5	24,538,573	7,102	0.0003	0.9997	92.46
32.5	24,694,383	98,570	0.0040	0.9960	92.43
33.5	24,544,979	51,968	0.0021	0.9979	92.06
34.5	24,257,487	1,186,967	0.0489	0.9511	91.87
35.5	23,112,216	65,456	0.0028	0.9972	87.37
36.5	22,803,476	4,304	0.0002	0.9998	87.12
37.5	1,544,813		0.0000	1.0000	87.11
38.5	958,079		0.0000	1.0000	87.11

DUKE ENERGY KENTUCKY

ACCOUNT 3150 ACCESSORY ELECTRIC EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1949-2018 EXPERIENCE BAND 1956-2018

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	779,011		0.0000	1.0000	87.11
40.5	982,329		0.0000	1.0000	87.11
41.5	957,192		0.0000	1.0000	87.11
42.5	810,283		0.0000	1.0000	87.11
43.5	832,561		0.0000	1.0000	87.11
44.5	719,226	46,986	0.0653	0.9347	87.11
45.5	532,365		0.0000	1.0000	81.42
46.5	1,878,730	2,920	0.0016	0.9984	81.42
47.5	1,739,039	3,085	0.0018	0.9982	81.29
48.5	1,721,799	349	0.0002	0.9998	81.15
49.5	1,718,539		0.0000	1.0000	81.13
50.5	1,515,221		0.0000	1.0000	81.13
51.5	1,509,812		0.0000	1.0000	81.13
52.5	1,468,050		0.0000	1.0000	81.13
53.5	1,416,843		0.0000	1.0000	81.13
54.5	1,374,188		0.0000	1.0000	81.13
55.5	1,370,346		0.0000	1.0000	81.13
56.5					81.13

DUKE ENERGY KENTUCKY

ACCOUNT 3150 ACCESSORY ELECTRIC EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1949-2018 EXPERIENCE BAND 1989-2018

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	22,443,720		0.0000	1.0000	100.00
0.5	22,164,163		0.0000	1.0000	100.00
1.5	22,227,177		0.0000	1.0000	100.00
2.5	21,383,508		0.0000	1.0000	100.00
3.5	9,371,920		0.0000	1.0000	100.00
4.5	9,368,064		0.0000	1.0000	100.00
5.5	9,274,832		0.0000	1.0000	100.00
6.5	5,161,346		0.0000	1.0000	100.00
7.5	27,774,964	558,146	0.0201	0.9799	100.00
8.5	27,074,344	235,778	0.0087	0.9913	97.99
9.5	26,715,529	69,363	0.0026	0.9974	97.14
10.5	26,923,999	23,327	0.0009	0.9991	96.88
11.5	27,103,804		0.0000	1.0000	96.80
12.5	26,681,948	195,206	0.0073	0.9927	96.80
13.5	26,848,184		0.0000	1.0000	96.09
14.5	27,616,894	38,447	0.0014	0.9986	96.09
15.5	27,579,636	10,333	0.0004	0.9996	95.96
16.5	27,487,547		0.0000	1.0000	95.92
17.5	25,630,434	25,669	0.0010	0.9990	95.92
18.5	25,575,918		0.0000	1.0000	95.83
19.5	25,634,887	10,086	0.0004	0.9996	95.83
20.5	25,639,493		0.0000	1.0000	95.79
21.5	25,738,825	183,946	0.0071	0.9929	95.79
22.5	25,448,025	126,423	0.0050	0.9950	95.10
23.5	25,428,550		0.0000	1.0000	94.63
24.5	25,191,757	32,185	0.0013	0.9987	94.63
25.5	24,447,793	141,443	0.0058	0.9942	94.51
26.5	24,722,825	20,346	0.0008	0.9992	93.96
27.5	24,671,110	4,796	0.0002	0.9998	93.89
28.5	24,655,599	22,125	0.0009	0.9991	93.87
29.5	24,574,258	11,117	0.0005	0.9995	93.78
30.5	24,563,140	139	0.0000	1.0000	93.74
31.5	24,537,481	7,102	0.0003	0.9997	93.74
32.5	24,693,291	98,570	0.0040	0.9960	93.71
33.5	24,543,887	51,968	0.0021	0.9979	93.34
34.5	24,257,487	1,186,967	0.0489	0.9511	93.14
35.5	23,112,216	65,456	0.0028	0.9972	88.59
36.5	22,803,476	4,304	0.0002	0.9998	88.33
37.5	1,544,813		0.0000	1.0000	88.32
38.5	958,079		0.0000	1.0000	88.32

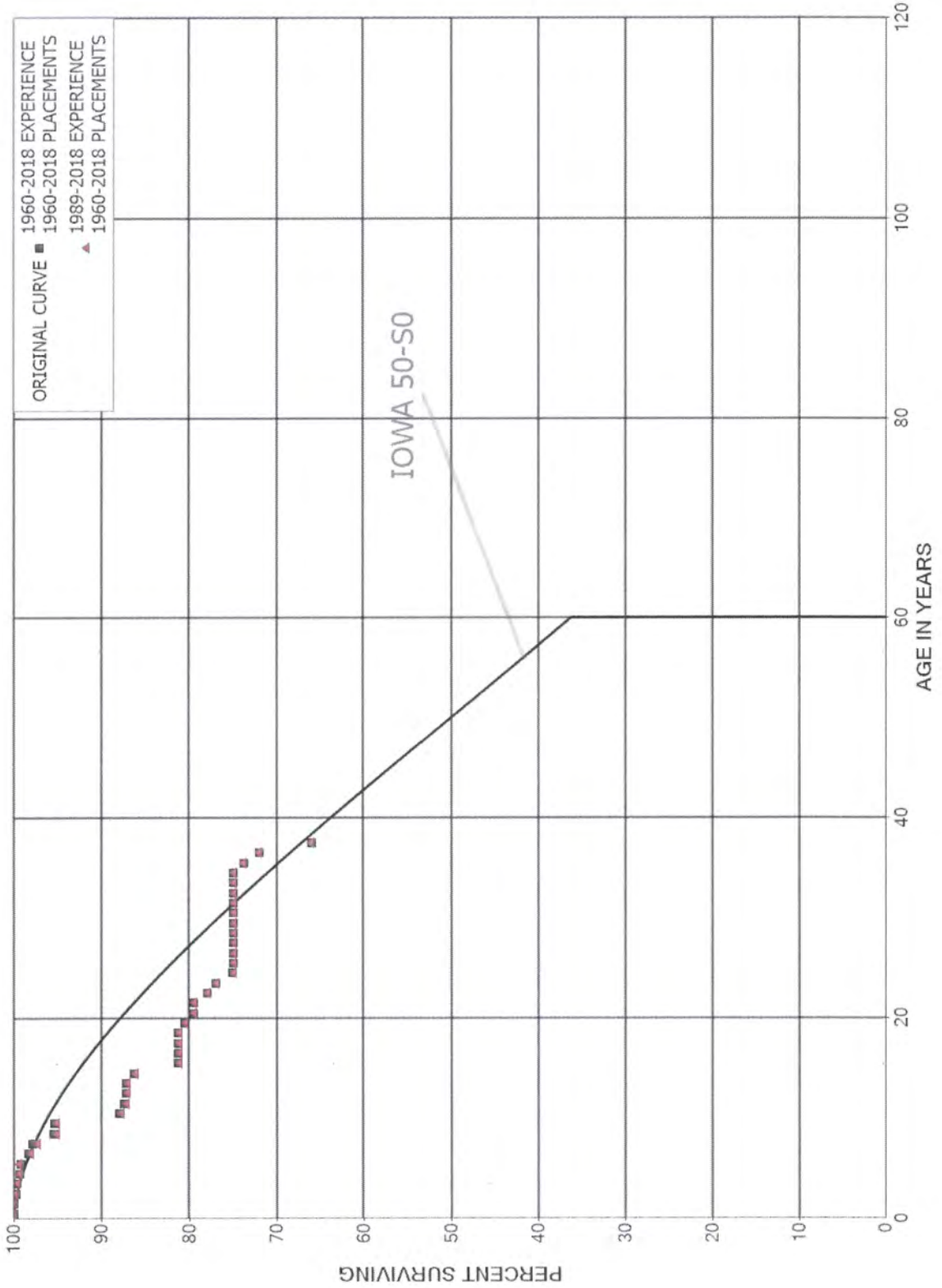
DUKE ENERGY KENTUCKY

ACCOUNT 3150 ACCESSORY ELECTRIC EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1949-2018			EXPERIENCE BAND 1989-2018		
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	779,011		0.0000	1.0000	88.32
40.5	982,329		0.0000	1.0000	88.32
41.5	957,192		0.0000	1.0000	88.32
42.5	810,283		0.0000	1.0000	88.32
43.5	832,561		0.0000	1.0000	88.32
44.5	719,226	46,986	0.0653	0.9347	88.32
45.5	532,365		0.0000	1.0000	82.55
46.5	1,878,730	2,920	0.0016	0.9984	82.55
47.5	1,739,039	3,085	0.0018	0.9982	82.42
48.5	1,721,799	349	0.0002	0.9998	82.27
49.5	1,718,539		0.0000	1.0000	82.26
50.5	1,515,221		0.0000	1.0000	82.26
51.5	1,509,812		0.0000	1.0000	82.26
52.5	1,468,050		0.0000	1.0000	82.26
53.5	1,416,843		0.0000	1.0000	82.26
54.5	1,374,188		0.0000	1.0000	82.26
55.5	1,370,346		0.0000	1.0000	82.26
56.5					82.26

DUKE ENERGY KENTUCKY
ACCOUNT 3160 MISCELLANEOUS POWER PLANT EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY

ACCOUNT 3160 MISCELLANEOUS POWER PLANT EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1960-2018 EXPERIENCE BAND 1960-2018

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	19,641,272		0.0000	1.0000	100.00
0.5	19,021,348	1,598	0.0001	0.9999	100.00
1.5	17,485,002	37,703	0.0022	0.9978	99.99
2.5	15,424,100	31,985	0.0021	0.9979	99.78
3.5	10,538,240	24,717	0.0023	0.9977	99.57
4.5	10,365,620	12,267	0.0012	0.9988	99.34
5.5	10,246,800	97,415	0.0095	0.9905	99.22
6.5	9,472,022	44,631	0.0047	0.9953	98.27
7.5	9,166,548	230,145	0.0251	0.9749	97.81
8.5	8,679,006	10,612	0.0012	0.9988	95.36
9.5	7,992,983	613,513	0.0768	0.9232	95.24
10.5	6,786,743	38,952	0.0057	0.9943	87.93
11.5	6,705,740	15,961	0.0024	0.9976	87.42
12.5	6,846,011	1,929	0.0003	0.9997	87.22
13.5	6,340,745	64,346	0.0101	0.9899	87.19
14.5	6,135,014	354,343	0.0578	0.9422	86.31
15.5	6,159,312	71	0.0000	1.0000	81.32
16.5	6,107,748	6,159	0.0010	0.9990	81.32
17.5	5,529,988		0.0000	1.0000	81.24
18.5	5,520,779	46,577	0.0084	0.9916	81.24
19.5	4,955,359	61,460	0.0124	0.9876	80.55
20.5	5,006,963		0.0000	1.0000	79.55
21.5	4,999,466	102,016	0.0204	0.9796	79.55
22.5	5,048,393	61,119	0.0121	0.9879	77.93
23.5	5,080,363	130,411	0.0257	0.9743	76.99
24.5	4,968,328	7,911	0.0016	0.9984	75.01
25.5	4,911,061		0.0000	1.0000	74.89
26.5	4,769,951		0.0000	1.0000	74.89
27.5	4,349,842		0.0000	1.0000	74.89
28.5	4,241,363		0.0000	1.0000	74.89
29.5	4,081,051		0.0000	1.0000	74.89
30.5	3,999,354		0.0000	1.0000	74.89
31.5	3,877,702		0.0000	1.0000	74.89
32.5	3,764,639		0.0000	1.0000	74.89
33.5	3,663,573		0.0000	1.0000	74.89
34.5	3,506,019	54,585	0.0156	0.9844	74.89
35.5	3,337,672	81,430	0.0244	0.9756	73.73
36.5	3,020,863	251,486	0.0832	0.9168	71.93
37.5	12,705		0.0000	1.0000	65.94
38.5	12,705		0.0000	1.0000	65.94

DUKE ENERGY KENTUCKY

ACCOUNT 3160 MISCELLANEOUS POWER PLANT EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1960-2018			EXPERIENCE BAND 1960-2018		
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	12,705		0.0000	1.0000	65.94
40.5	12,705		0.0000	1.0000	65.94
41.5	12,705		0.0000	1.0000	65.94
42.5	12,705		0.0000	1.0000	65.94
43.5	12,705		0.0000	1.0000	65.94
44.5	12,705		0.0000	1.0000	65.94
45.5	12,705		0.0000	1.0000	65.94
46.5	27,336		0.0000	1.0000	65.94
47.5	27,336		0.0000	1.0000	65.94
48.5	27,336		0.0000	1.0000	65.94
49.5	27,336		0.0000	1.0000	65.94
50.5	27,336		0.0000	1.0000	65.94
51.5	27,336		0.0000	1.0000	65.94
52.5	27,336		0.0000	1.0000	65.94
53.5	27,336		0.0000	1.0000	65.94
54.5	27,336		0.0000	1.0000	65.94
55.5	27,336		0.0000	1.0000	65.94
56.5					65.94

DUKE ENERGY KENTUCKY

ACCOUNT 3160 MISCELLANEOUS POWER PLANT EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1960-2018 EXPERIENCE BAND 1989-2018

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	16,060,916		0.0000	1.0000	100.00
0.5	15,440,992		0.0000	1.0000	100.00
1.5	13,906,245	33,325	0.0024	0.9976	100.00
2.5	11,849,722	29,490	0.0025	0.9975	99.76
3.5	6,968,134	12,440	0.0018	0.9982	99.51
4.5	6,819,664	5,572	0.0008	0.9992	99.33
5.5	6,719,574	90,281	0.0134	0.9866	99.25
6.5	6,010,323	44,153	0.0073	0.9927	97.92
7.5	8,789,144	200,716	0.0228	0.9772	97.20
8.5	8,582,124		0.0000	1.0000	94.98
9.5	7,906,713	613,142	0.0775	0.9225	94.98
10.5	6,700,845	38,069	0.0057	0.9943	87.62
11.5	6,620,724	10,556	0.0016	0.9984	87.12
12.5	6,766,400		0.0000	1.0000	86.98
13.5	6,263,063	62,842	0.0100	0.9900	86.98
14.5	6,058,836	351,588	0.0580	0.9420	86.11
15.5	6,085,889		0.0000	1.0000	81.11
16.5	6,034,396		0.0000	1.0000	81.11
17.5	5,509,372		0.0000	1.0000	81.11
18.5	5,500,163	46,577	0.0085	0.9915	81.11
19.5	4,934,743	61,460	0.0125	0.9875	80.42
20.5	4,986,347		0.0000	1.0000	79.42
21.5	4,978,850	102,016	0.0205	0.9795	79.42
22.5	5,027,777	61,119	0.0122	0.9878	77.79
23.5	5,059,747	130,411	0.0258	0.9742	76.85
24.5	4,947,712		0.0000	1.0000	74.87
25.5	4,898,356		0.0000	1.0000	74.87
26.5	4,757,246		0.0000	1.0000	74.87
27.5	4,337,137		0.0000	1.0000	74.87
28.5	4,241,363		0.0000	1.0000	74.87
29.5	4,081,051		0.0000	1.0000	74.87
30.5	3,999,354		0.0000	1.0000	74.87
31.5	3,877,702		0.0000	1.0000	74.87
32.5	3,764,639		0.0000	1.0000	74.87
33.5	3,663,573		0.0000	1.0000	74.87
34.5	3,506,019	54,585	0.0156	0.9844	74.87
35.5	3,337,672	81,430	0.0244	0.9756	73.70
36.5	3,020,863	251,486	0.0832	0.9168	71.90
37.5	12,705		0.0000	1.0000	65.92
38.5	12,705		0.0000	1.0000	65.92

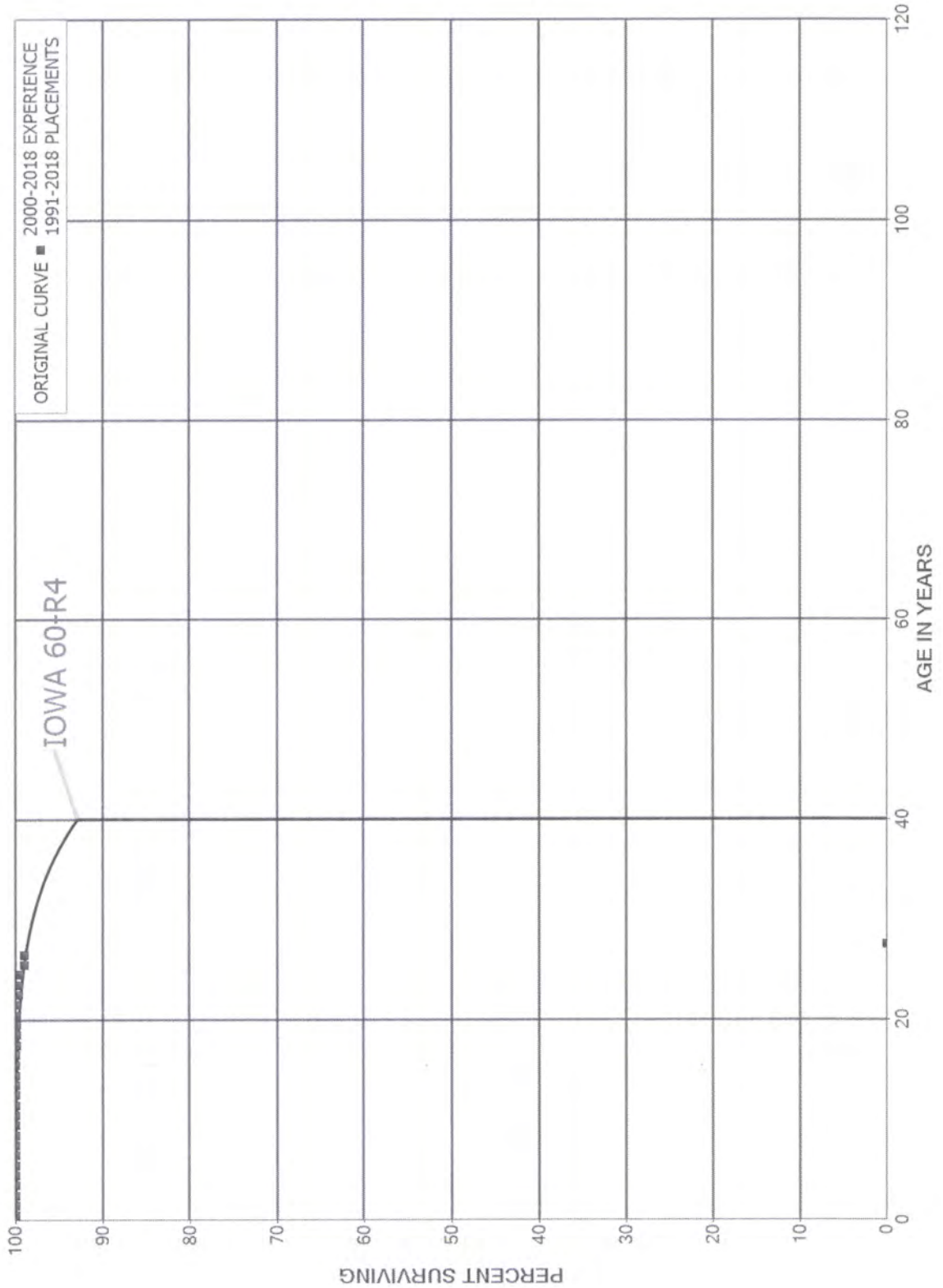
DUKE ENERGY KENTUCKY

ACCOUNT 3160 MISCELLANEOUS POWER PLANT EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1960-2018			EXPERIENCE BAND 1989-2018		
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	12,705		0.0000	1.0000	65.92
40.5	12,705		0.0000	1.0000	65.92
41.5	12,705		0.0000	1.0000	65.92
42.5	12,705		0.0000	1.0000	65.92
43.5	12,705		0.0000	1.0000	65.92
44.5	12,705		0.0000	1.0000	65.92
45.5	12,705		0.0000	1.0000	65.92
46.5	27,336		0.0000	1.0000	65.92
47.5	27,336		0.0000	1.0000	65.92
48.5	27,336		0.0000	1.0000	65.92
49.5	27,336		0.0000	1.0000	65.92
50.5	27,336		0.0000	1.0000	65.92
51.5	27,336		0.0000	1.0000	65.92
52.5	27,336		0.0000	1.0000	65.92
53.5	27,336		0.0000	1.0000	65.92
54.5	27,336		0.0000	1.0000	65.92
55.5	27,336		0.0000	1.0000	65.92
56.5					65.92

DUKE ENERGY KENTUCKY
ACCOUNT 3410 STRUCTURES AND IMPROVEMENTS
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY

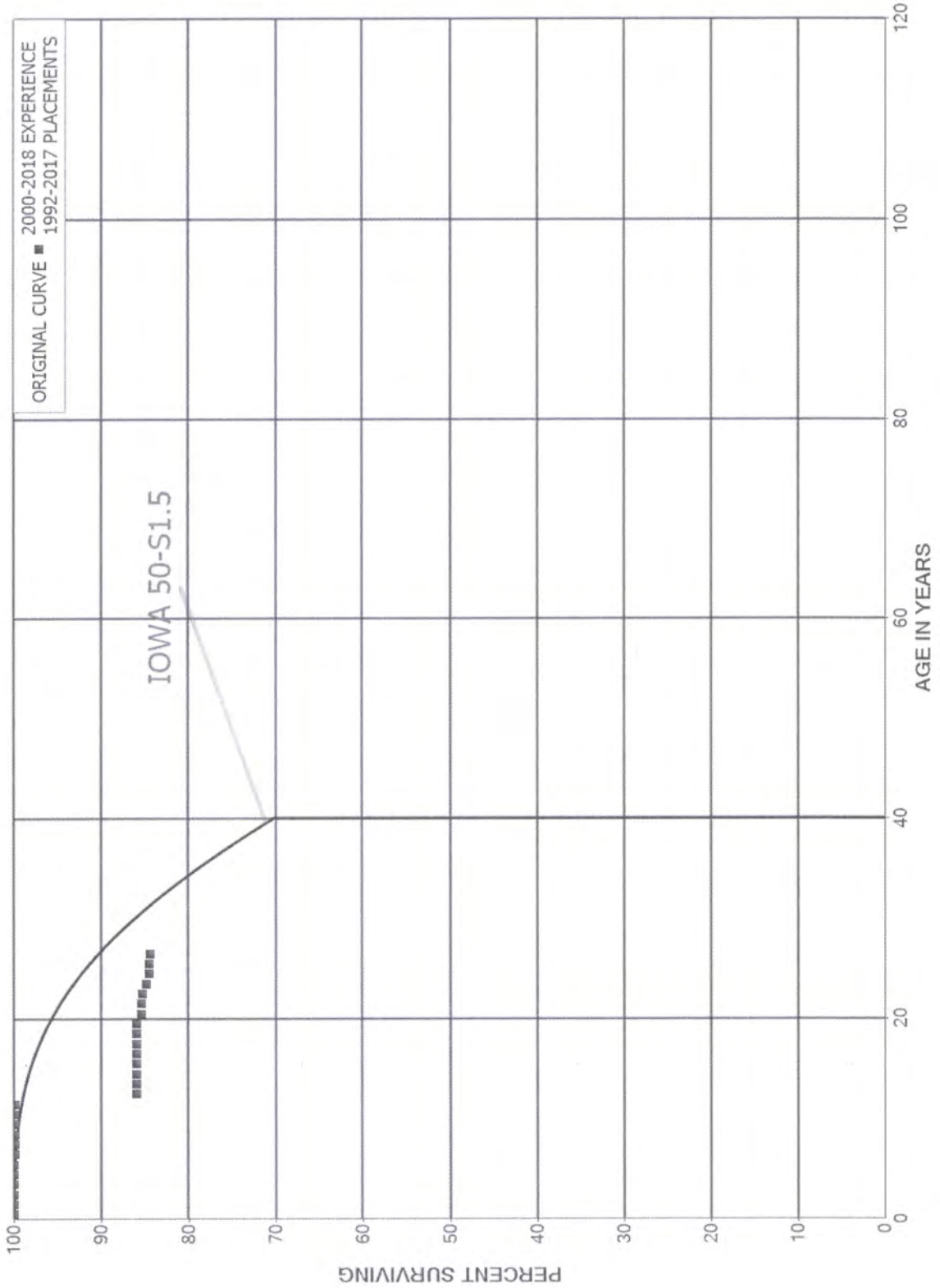
ACCOUNT 3410 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1991-2018 EXPERIENCE BAND 2000-2018

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	3,104,047		0.0000	1.0000	100.00
0.5	3,205,318		0.0000	1.0000	100.00
1.5	2,811,043		0.0000	1.0000	100.00
2.5	2,657,257		0.0000	1.0000	100.00
3.5	2,578,955		0.0000	1.0000	100.00
4.5	1,552,262		0.0000	1.0000	100.00
5.5	1,336,145		0.0000	1.0000	100.00
6.5	1,134,212		0.0000	1.0000	100.00
7.5	33,771,629		0.0000	1.0000	100.00
8.5	33,778,315		0.0000	1.0000	100.00
9.5	33,778,315		0.0000	1.0000	100.00
10.5	33,749,413		0.0000	1.0000	100.00
11.5	33,707,266		0.0000	1.0000	100.00
12.5	33,725,782		0.0000	1.0000	100.00
13.5	33,725,782		0.0000	1.0000	100.00
14.5	33,725,782	10,618	0.0003	0.9997	100.00
15.5	33,715,164	22,463	0.0007	0.9993	99.97
16.5	33,692,702	6,963	0.0002	0.9998	99.90
17.5	33,685,738	15,621	0.0005	0.9995	99.88
18.5	33,670,118		0.0000	1.0000	99.83
19.5	33,670,118		0.0000	1.0000	99.83
20.5	33,670,118		0.0000	1.0000	99.83
21.5	33,670,118	75,984	0.0023	0.9977	99.83
22.5	33,594,134		0.0000	1.0000	99.61
23.5	33,565,509	46,566	0.0014	0.9986	99.61
24.5	33,486,671	172,057	0.0051	0.9949	99.47
25.5	33,314,615		0.0000	1.0000	98.96
26.5	6,687	6,687	1.0000		98.96
27.5					

DUKE ENERGY KENTUCKY
ACCOUNT 3420 FUEL HOLDERS, PRODUCERS AND ACCESSORIES
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY

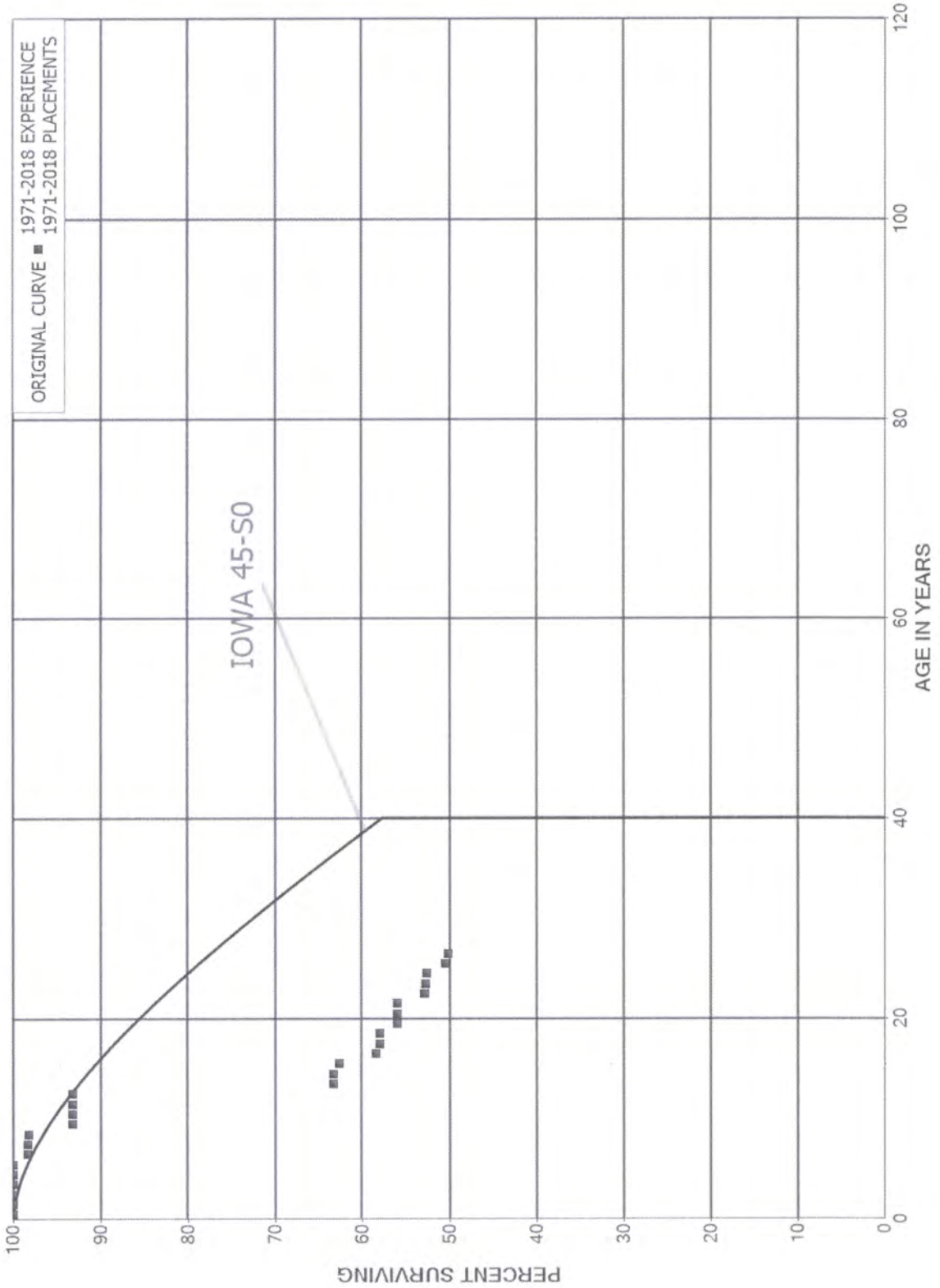
ACCOUNT 3420 FUEL HOLDERS, PRODUCERS AND ACCESSORIES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1992-2017 EXPERIENCE BAND 2000-2018

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	786,339		0.0000	1.0000	100.00
0.5	730,204	178	0.0002	0.9998	100.00
1.5	556,398		0.0000	1.0000	99.98
2.5	552,535		0.0000	1.0000	99.98
3.5	552,535	154	0.0003	0.9997	99.98
4.5	407,682		0.0000	1.0000	99.95
5.5	463,270	434	0.0009	0.9991	99.95
6.5	55,587		0.0000	1.0000	99.85
7.5	447,444		0.0000	1.0000	99.85
8.5	447,444		0.0000	1.0000	99.85
9.5	156,456		0.0000	1.0000	99.85
10.5	240,153		0.0000	1.0000	99.85
11.5	305,459	42,403	0.1388	0.8612	99.85
12.5	263,056		0.0000	1.0000	85.99
13.5	263,056		0.0000	1.0000	85.99
14.5	15,507,516		0.0000	1.0000	85.99
15.5	15,507,516		0.0000	1.0000	85.99
16.5	15,507,516	59	0.0000	1.0000	85.99
17.5	15,451,929		0.0000	1.0000	85.99
18.5	15,451,929	62	0.0000	1.0000	85.99
19.5	15,393,462	98,945	0.0064	0.9936	85.99
20.5	15,294,518		0.0000	1.0000	85.44
21.5	15,294,518	21,585	0.0014	0.9986	85.44
22.5	15,189,325	83,738	0.0055	0.9945	85.32
23.5	15,040,351	70,159	0.0047	0.9953	84.85
24.5	14,970,191		0.0000	1.0000	84.45
25.5	14,970,191	15,945	0.0011	0.9989	84.45
26.5					84.36

DUKE ENERGY KENTUCKY
ACCOUNT 3440 GENERATORS
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY

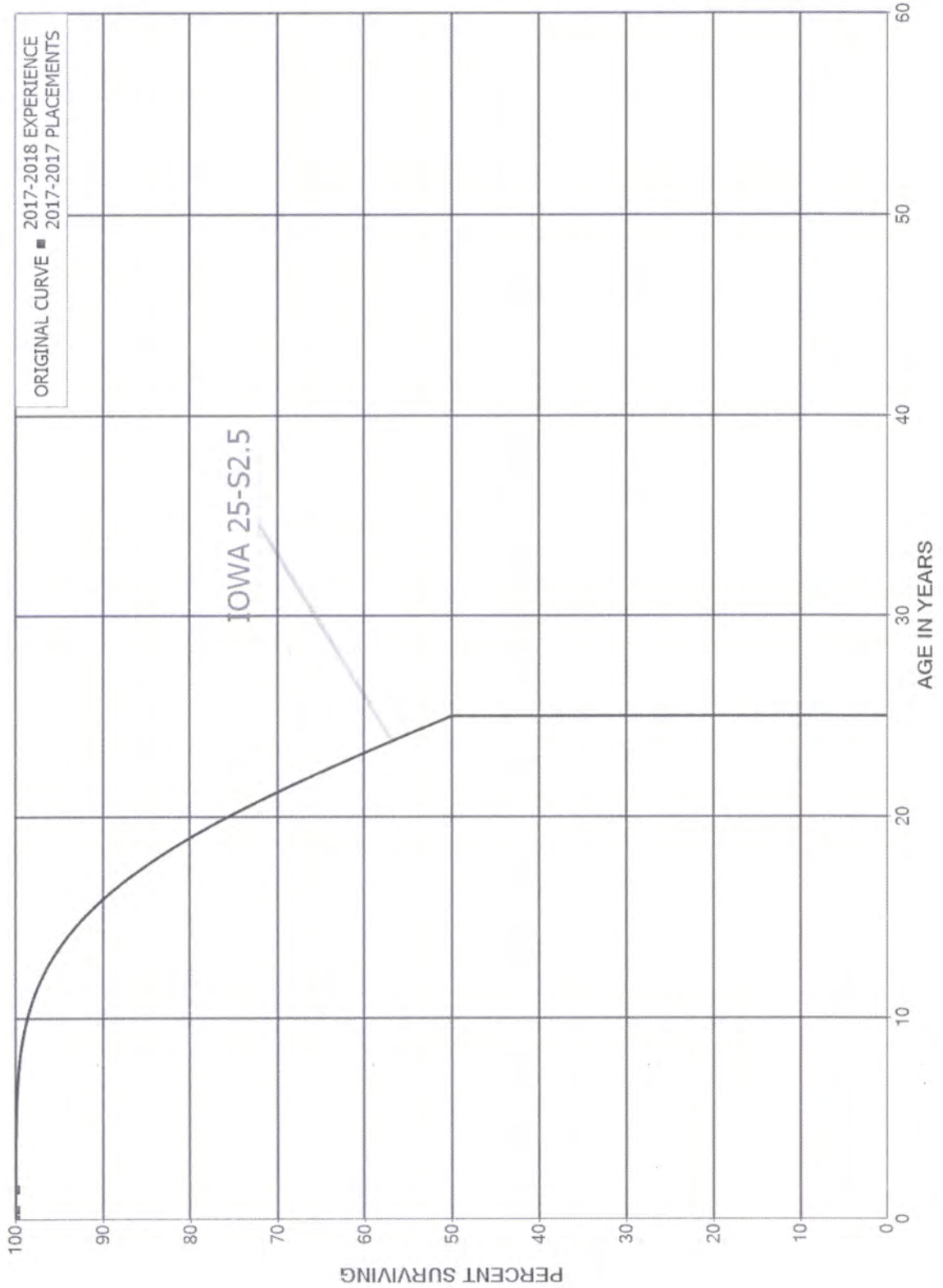
ACCOUNT 3440 GENERATORS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1971-2018 EXPERIENCE BAND 1971-2018

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	117,893,717		0.0000	1.0000	100.00
0.5	118,344,136		0.0000	1.0000	100.00
1.5	108,660,332		0.0000	1.0000	100.00
2.5	108,695,251		0.0000	1.0000	100.00
3.5	108,881,200	5,187	0.0000	1.0000	100.00
4.5	108,700,062	77,342	0.0007	0.9993	100.00
5.5	124,454,790	2,043,080	0.0164	0.9836	99.92
6.5	116,149,311		0.0000	1.0000	98.28
7.5	106,636,902	79,800	0.0007	0.9993	98.28
8.5	79,805,687	4,110,640	0.0515	0.9485	98.21
9.5	84,228,174		0.0000	1.0000	93.15
10.5	49,760,337		0.0000	1.0000	93.15
11.5	49,634,207		0.0000	1.0000	93.15
12.5	38,800,556	12,455,990	0.3210	0.6790	93.15
13.5	15,883,470		0.0000	1.0000	63.25
14.5	170,475,057	1,665,378	0.0098	0.9902	63.25
15.5	168,388,173	11,486,736	0.0682	0.9318	62.63
16.5	156,901,437	1,046,175	0.0067	0.9933	58.36
17.5	143,303,551	22,233	0.0002	0.9998	57.97
18.5	141,059,911	4,838,958	0.0343	0.9657	57.96
19.5	135,931,376		0.0000	1.0000	55.97
20.5	135,931,376		0.0000	1.0000	55.97
21.5	135,931,376	7,587,726	0.0558	0.9442	55.97
22.5	128,268,583	249,396	0.0019	0.9981	52.85
23.5	127,975,116	262,865	0.0021	0.9979	52.74
24.5	127,712,251	5,154,293	0.0404	0.9596	52.64
25.5	122,557,958	689,312	0.0056	0.9944	50.51
26.5	266,482		0.0000	1.0000	50.23
27.5	266,482		0.0000	1.0000	50.23
28.5	266,482	266,482	1.0000		50.23
29.5					

DUKE ENERGY KENTUCKY
ACCOUNT 3446 GENERATORS - SOLAR
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY

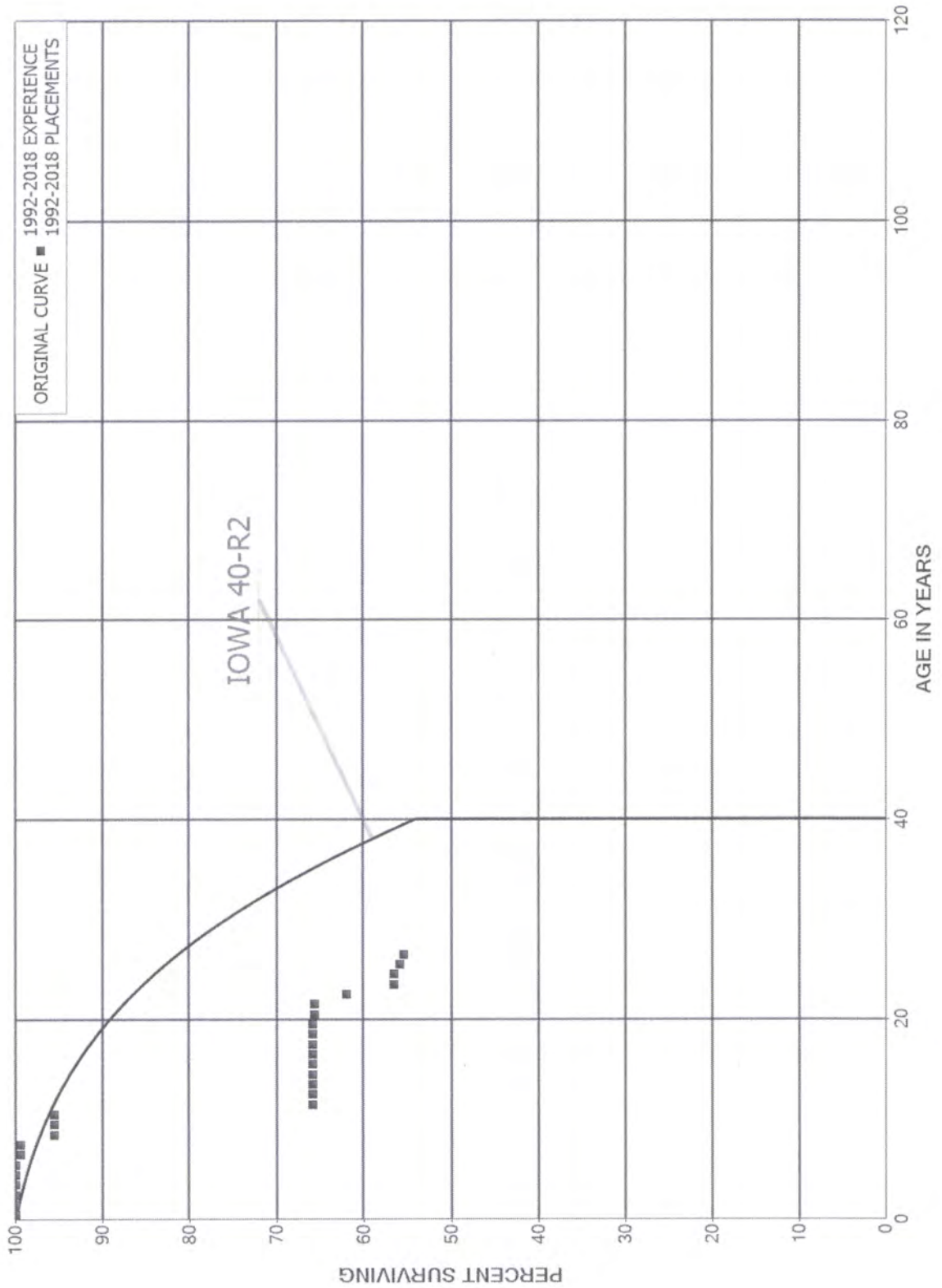
ACCOUNT 3446 GENERATORS - SOLAR

ORIGINAL LIFE TABLE

PLACEMENT BAND 2017-2017 EXPERIENCE BAND 2017-2018

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	9,915,709		0.0000	1.0000	100.00
0.5	9,915,709		0.0000	1.0000	100.00
1.5					100.00

DUKE ENERGY KENTUCKY
ACCOUNT 3450 ACCESSORY ELECTRIC EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY

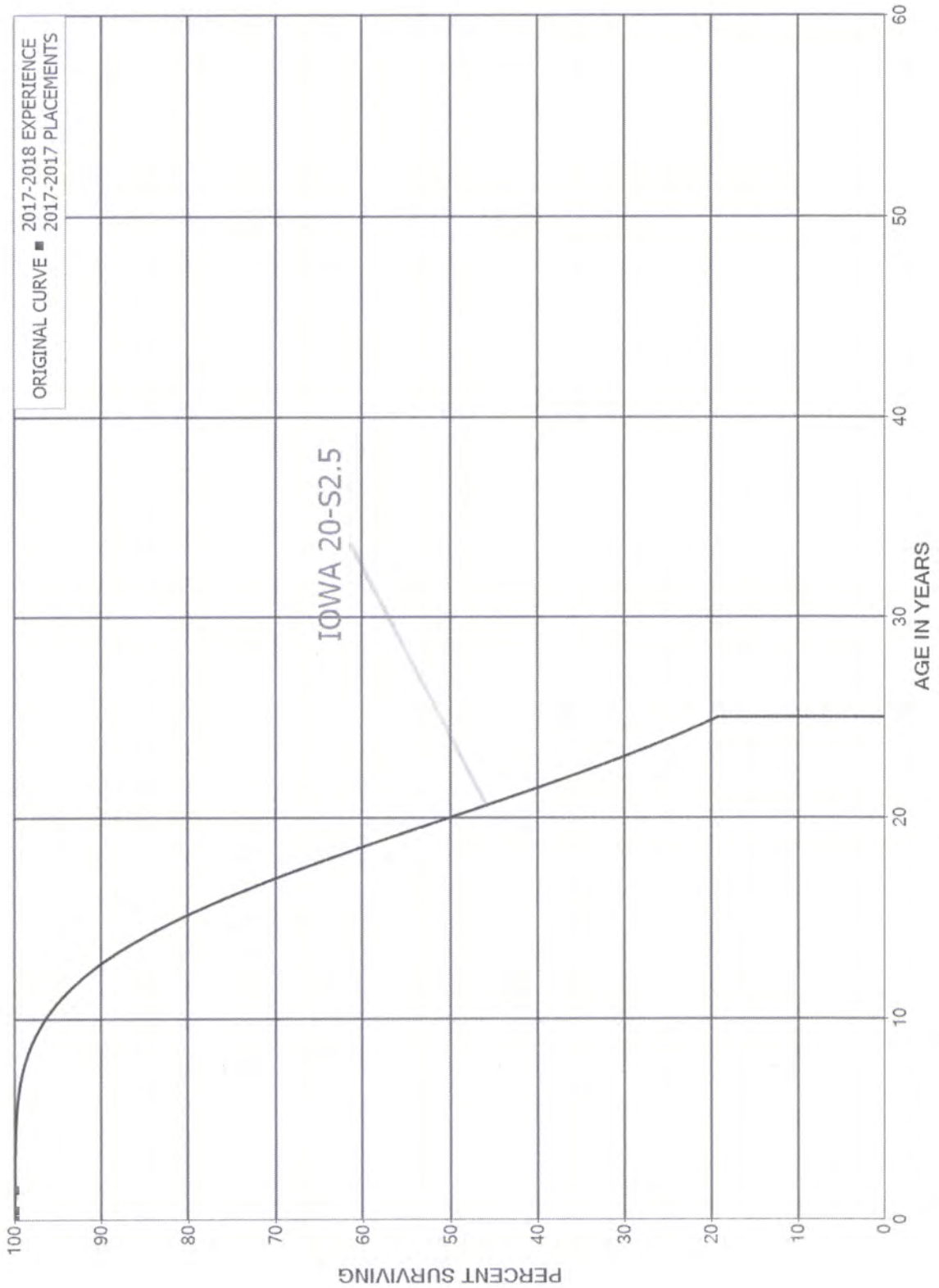
ACCOUNT 3450 ACCESSORY ELECTRIC EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1992-2018 EXPERIENCE BAND 1992-2018

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	7,887,075		0.0000	1.0000	100.00
0.5	7,659,960		0.0000	1.0000	100.00
1.5	7,398,612		0.0000	1.0000	100.00
2.5	6,499,315		0.0000	1.0000	100.00
3.5	6,117,717		0.0000	1.0000	100.00
4.5	5,886,982		0.0000	1.0000	100.00
5.5	5,864,874	37,864	0.0065	0.9935	100.00
6.5	3,655,108		0.0000	1.0000	99.35
7.5	637,168	24,565	0.0386	0.9614	99.35
8.5	156,470		0.0000	1.0000	95.52
9.5	149,206		0.0000	1.0000	95.52
10.5	168,859	52,428	0.3105	0.6895	95.52
11.5	108,384		0.0000	1.0000	65.87
12.5	99,767		0.0000	1.0000	65.87
13.5	99,767		0.0000	1.0000	65.87
14.5	16,860,742	6,651	0.0004	0.9996	65.87
15.5	16,854,091		0.0000	1.0000	65.84
16.5	16,811,382		0.0000	1.0000	65.84
17.5	16,805,095		0.0000	1.0000	65.84
18.5	16,781,978		0.0000	1.0000	65.84
19.5	16,779,759	50,661	0.0030	0.9970	65.84
20.5	16,729,098	11,907	0.0007	0.9993	65.64
21.5	16,717,191	937,109	0.0561	0.9439	65.59
22.5	15,766,554	1,368,190	0.0868	0.9132	61.92
23.5	14,398,363		0.0000	1.0000	56.54
24.5	14,398,363	189,527	0.0132	0.9868	56.54
25.5	14,208,836	90,795	0.0064	0.9936	55.80
26.5					55.44

DUKE ENERGY KENTUCKY
ACCOUNT 3456 ACCESSORY ELECTRIC EQUIPMENT - SOLAR
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY

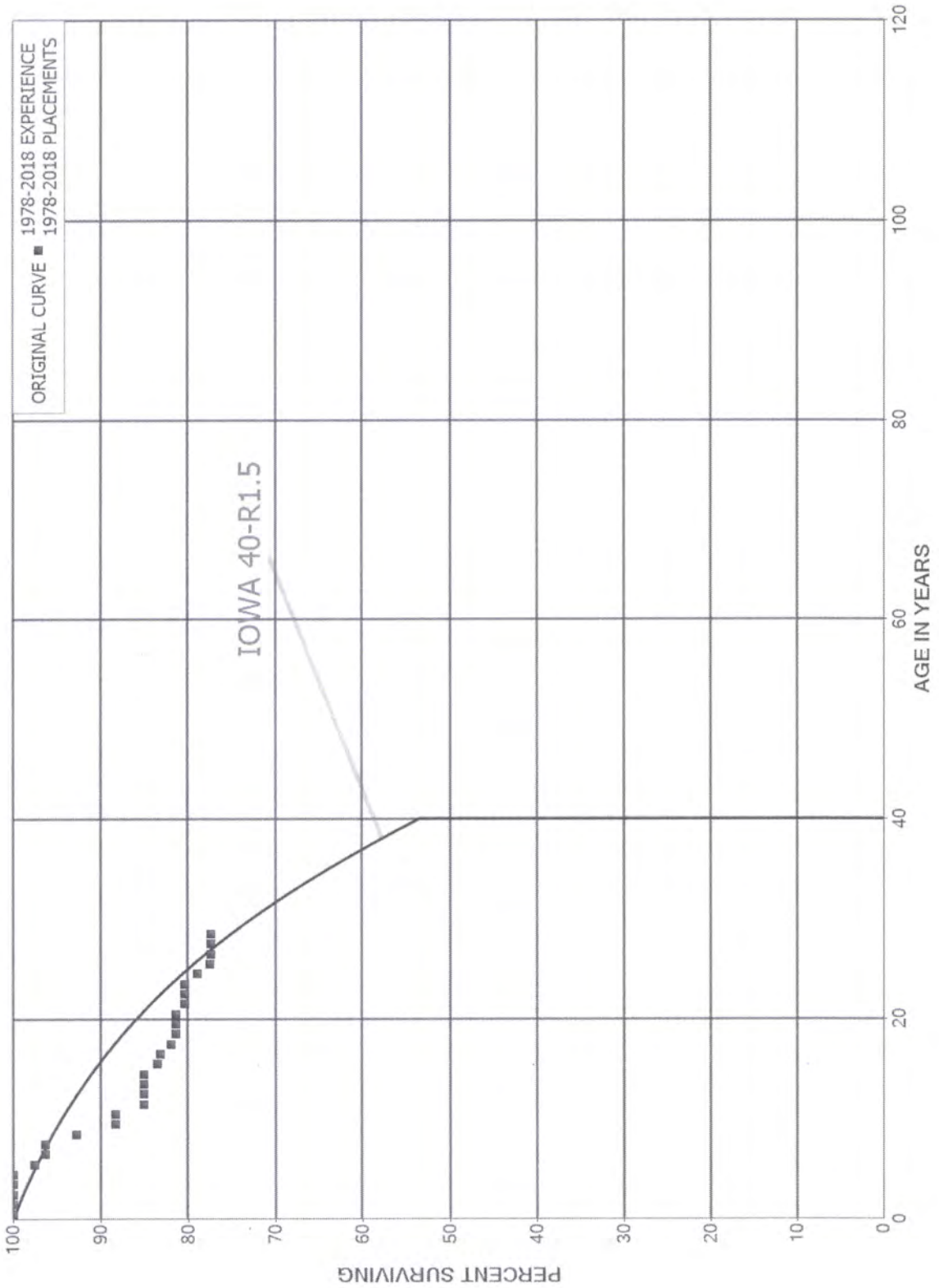
ACCOUNT 3456 ACCESSORY ELECTRIC EQUIPMENT - SOLAR

ORIGINAL LIFE TABLE

PLACEMENT BAND 2017-2017 EXPERIENCE BAND 2017-2018

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	1,056,937		0.0000	1.0000	100.00
0.5	1,056,937		0.0000	1.0000	100.00
1.5					100.00

DUKE ENERGY KENTUCKY
ACCOUNT 3460 MISCELLANEOUS POWER PLANT EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY

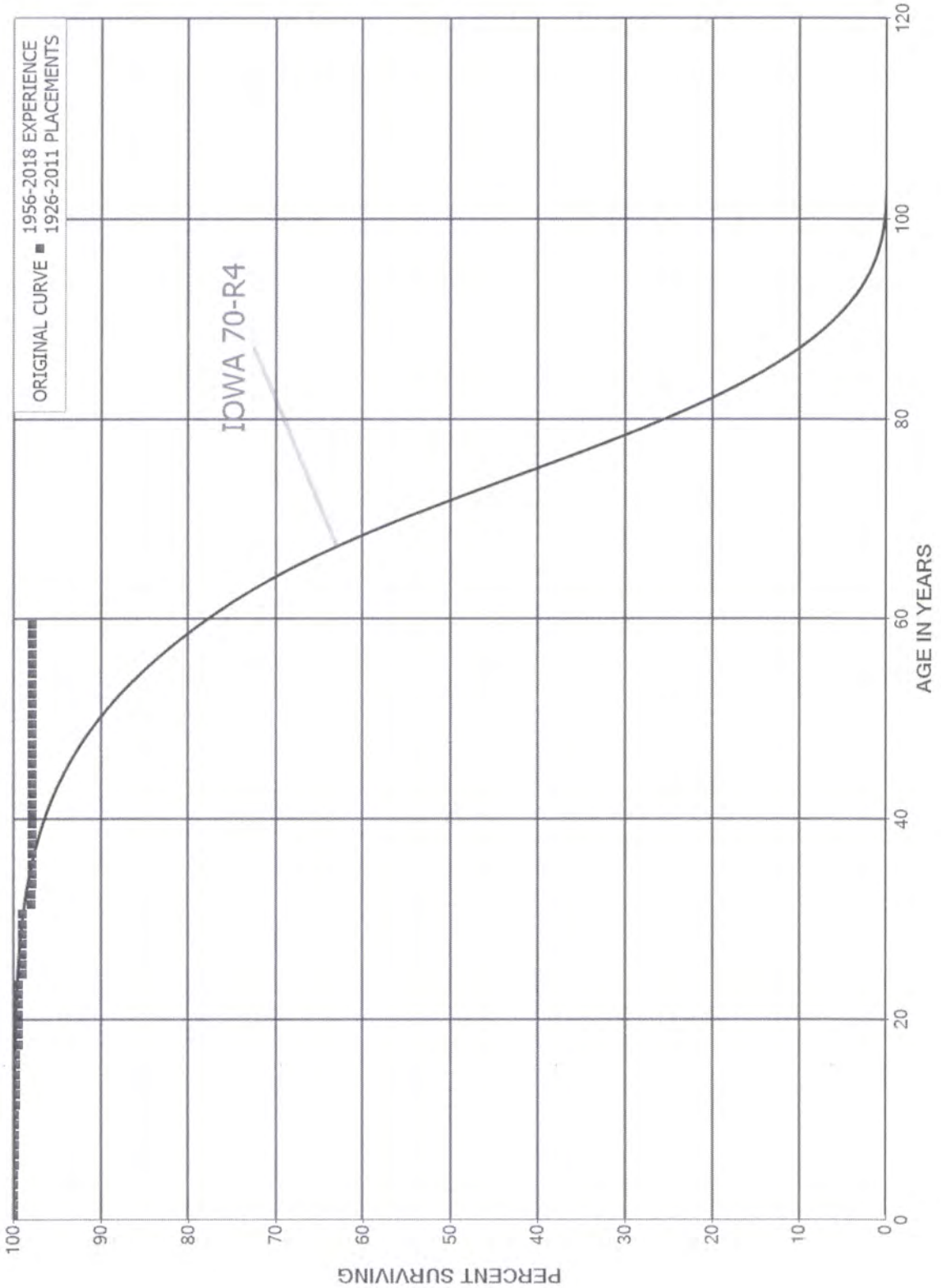
ACCOUNT 3460 MISCELLANEOUS POWER PLANT EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1978-2018 EXPERIENCE BAND 1978-2018

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	2,098,979	37	0.0000	1.0000	100.00
0.5	2,047,144	12	0.0000	1.0000	100.00
1.5	1,568,005	200	0.0001	0.9999	100.00
2.5	1,288,366	80	0.0001	0.9999	99.98
3.5	1,202,804	162	0.0001	0.9999	99.98
4.5	983,040	23,751	0.0242	0.9758	99.97
5.5	1,251,431	16,311	0.0130	0.9870	97.55
6.5	1,382,760	218	0.0002	0.9998	96.28
7.5	1,521,107	56,302	0.0370	0.9630	96.26
8.5	1,399,323	67,368	0.0481	0.9519	92.70
9.5	1,289,418	70	0.0001	0.9999	88.24
10.5	1,194,298	42,546	0.0356	0.9644	88.23
11.5	1,032,286	40	0.0000	1.0000	85.09
12.5	1,076,987		0.0000	1.0000	85.09
13.5	1,111,380		0.0000	1.0000	85.09
14.5	3,588,637	65,934	0.0184	0.9816	85.09
15.5	3,521,579	15,960	0.0045	0.9955	83.52
16.5	3,502,135	48,385	0.0138	0.9862	83.14
17.5	3,114,000	20,998	0.0067	0.9933	82.00
18.5	2,988,262	317	0.0001	0.9999	81.44
19.5	2,545,382	8	0.0000	1.0000	81.43
20.5	2,534,390	32,922	0.0130	0.9870	81.43
21.5	2,499,239	2	0.0000	1.0000	80.38
22.5	2,496,804	3	0.0000	1.0000	80.38
23.5	2,492,342	45,998	0.0185	0.9815	80.38
24.5	2,346,007	41,675	0.0178	0.9822	78.89
25.5	2,269,964	1,618	0.0007	0.9993	77.49
26.5	11,062	5	0.0005	0.9995	77.44
27.5	3,543	2	0.0006	0.9994	77.40
28.5	750		0.0000	1.0000	77.35
29.5	750		0.0000	1.0000	77.35
30.5	750		0.0000	1.0000	77.35
31.5	750		0.0000	1.0000	77.35
32.5	750	0	0.0000	1.0000	77.35
33.5	703		0.0000	1.0000	77.35
34.5	703	0	0.0003	0.9997	77.35
35.5	408		0.0000	1.0000	77.32
36.5	408		0.0000	1.0000	77.32
37.5	408	0	0.0001	0.9999	77.32
38.5	329		0.0000	1.0000	77.31
39.5	329	0	0.0007	0.9993	77.31
40.5					77.26

DUKE ENERGY KENTUCKY
ACCOUNT 3501 RIGHTS OF WAY
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY

ACCOUNT 3501 RIGHTS OF WAY

ORIGINAL LIFE TABLE

PLACEMENT BAND 1926-2011 EXPERIENCE BAND 1956-2018

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	1,861,163		0.0000	1.0000	100.00
0.5	1,859,751	33	0.0000	1.0000	100.00
1.5	1,758,300		0.0000	1.0000	100.00
2.5	1,753,504		0.0000	1.0000	100.00
3.5	1,637,618		0.0000	1.0000	100.00
4.5	1,644,147	3,357	0.0020	0.9980	100.00
5.5	1,640,837		0.0000	1.0000	99.79
6.5	1,635,420		0.0000	1.0000	99.79
7.5	1,635,420		0.0000	1.0000	99.79
8.5	1,635,420		0.0000	1.0000	99.79
9.5	1,427,369		0.0000	1.0000	99.79
10.5	1,427,369	793	0.0006	0.9994	99.79
11.5	1,332,416	175	0.0001	0.9999	99.74
12.5	1,209,288		0.0000	1.0000	99.73
13.5	1,209,288		0.0000	1.0000	99.73
14.5	1,111,303		0.0000	1.0000	99.73
15.5	1,107,934		0.0000	1.0000	99.73
16.5	1,107,934	3,189	0.0029	0.9971	99.73
17.5	1,124,840		0.0000	1.0000	99.44
18.5	1,124,546		0.0000	1.0000	99.44
19.5	1,124,546		0.0000	1.0000	99.44
20.5	978,865	123	0.0001	0.9999	99.44
21.5	978,742	112	0.0001	0.9999	99.43
22.5	978,631	327	0.0003	0.9997	99.41
23.5	978,303	3,700	0.0038	0.9962	99.38
24.5	974,603		0.0000	1.0000	99.01
25.5	974,603		0.0000	1.0000	99.01
26.5	964,083		0.0000	1.0000	99.01
27.5	964,083		0.0000	1.0000	99.01
28.5	964,246		0.0000	1.0000	99.01
29.5	957,587		0.0000	1.0000	99.01
30.5	939,289	10,509	0.0112	0.9888	99.01
31.5	928,781		0.0000	1.0000	97.90
32.5	928,781	940	0.0010	0.9990	97.90
33.5	927,841		0.0000	1.0000	97.80
34.5	926,484		0.0000	1.0000	97.80
35.5	579,733		0.0000	1.0000	97.80
36.5	579,733		0.0000	1.0000	97.80
37.5	494,068		0.0000	1.0000	97.80
38.5	494,068		0.0000	1.0000	97.80

DUKE ENERGY KENTUCKY

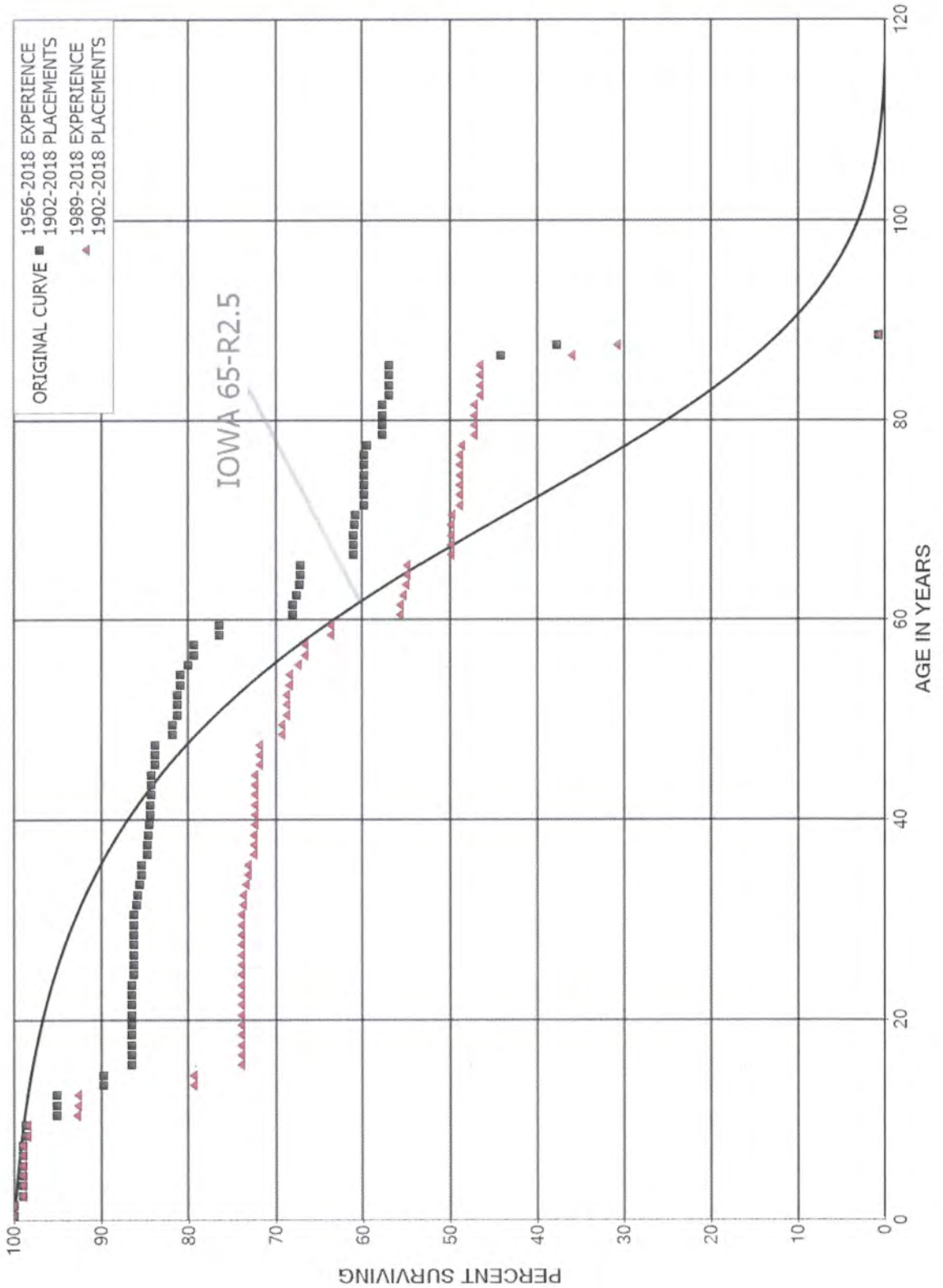
ACCOUNT 3501 RIGHTS OF WAY

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1926-2011 EXPERIENCE BAND 1956-2018

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	444,769		0.0000	1.0000	97.80
40.5	444,769		0.0000	1.0000	97.80
41.5	444,494		0.0000	1.0000	97.80
42.5	429,896		0.0000	1.0000	97.80
43.5	428,318		0.0000	1.0000	97.80
44.5	401,996		0.0000	1.0000	97.80
45.5	367,219		0.0000	1.0000	97.80
46.5	342,046		0.0000	1.0000	97.80
47.5	333,151		0.0000	1.0000	97.80
48.5	333,105		0.0000	1.0000	97.80
49.5	332,013		0.0000	1.0000	97.80
50.5	327,095		0.0000	1.0000	97.80
51.5	240,382		0.0000	1.0000	97.80
52.5	236,536		0.0000	1.0000	97.80
53.5	161,261		0.0000	1.0000	97.80
54.5	161,261		0.0000	1.0000	97.80
55.5	139,172		0.0000	1.0000	97.80
56.5	138,937		0.0000	1.0000	97.80
57.5	88,889		0.0000	1.0000	97.80
58.5	86,533		0.0000	1.0000	97.80
59.5	84,571		0.0000	1.0000	97.80
60.5	4,762		0.0000	1.0000	97.80
61.5	4,399		0.0000	1.0000	97.80
62.5	1,695		0.0000	1.0000	97.80
63.5	1,695		0.0000	1.0000	97.80
64.5	1,695		0.0000	1.0000	97.80
65.5	1,695		0.0000	1.0000	97.80
66.5	1,695		0.0000	1.0000	97.80
67.5	1,695		0.0000	1.0000	97.80
68.5					97.80

DUKE ENERGY KENTUCKY
ACCOUNTS 3520 AND 3610 STRUCTURES AND IMPROVEMENTS
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY

ACCOUNTS 3520 AND 3610 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1902-2018 EXPERIENCE BAND 1956-2018

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	2,980,937	6	0.0000	1.0000	100.00
0.5	3,055,048		0.0000	1.0000	100.00
1.5	3,055,972	30,890	0.0101	0.9899	100.00
2.5	3,021,139	379	0.0001	0.9999	98.99
3.5	2,646,525	698	0.0003	0.9997	98.98
4.5	1,957,046	51	0.0000	1.0000	98.95
5.5	1,684,122		0.0000	1.0000	98.95
6.5	1,332,247	6	0.0000	1.0000	98.95
7.5	1,326,214	4,568	0.0034	0.9966	98.95
8.5	1,304,372		0.0000	1.0000	98.61
9.5	1,304,862	47,444	0.0364	0.9636	98.61
10.5	1,118,335	10	0.0000	1.0000	95.02
11.5	688,591		0.0000	1.0000	95.02
12.5	566,450	31,741	0.0560	0.9440	95.02
13.5	536,282		0.0000	1.0000	89.70
14.5	536,282	19,258	0.0359	0.9641	89.70
15.5	517,499		0.0000	1.0000	86.48
16.5	558,767		0.0000	1.0000	86.48
17.5	558,767		0.0000	1.0000	86.48
18.5	558,767		0.0000	1.0000	86.48
19.5	558,767		0.0000	1.0000	86.48
20.5	558,767		0.0000	1.0000	86.48
21.5	558,767		0.0000	1.0000	86.48
22.5	558,767		0.0000	1.0000	86.48
23.5	558,767	1,112	0.0020	0.9980	86.48
24.5	557,655		0.0000	1.0000	86.30
25.5	535,659		0.0000	1.0000	86.30
26.5	584,929		0.0000	1.0000	86.30
27.5	590,412		0.0000	1.0000	86.30
28.5	602,465		0.0000	1.0000	86.30
29.5	602,465	354	0.0006	0.9994	86.30
30.5	613,884	2,513	0.0041	0.9959	86.25
31.5	611,371	84	0.0001	0.9999	85.90
32.5	611,287	1,728	0.0028	0.9972	85.89
33.5	609,559	1,721	0.0028	0.9972	85.64
34.5	607,837		0.0000	1.0000	85.40
35.5	607,837	4,517	0.0074	0.9926	85.40
36.5	603,320		0.0000	1.0000	84.77
37.5	603,320	734	0.0012	0.9988	84.77
38.5	602,586	808	0.0013	0.9987	84.66

DUKE ENERGY KENTUCKY

ACCOUNTS 3520 AND 3610 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1902-2018 EXPERIENCE BAND 1956-2018

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	601,778	1,389	0.0023	0.9977	84.55
40.5	600,389		0.0000	1.0000	84.36
41.5	600,389	308	0.0005	0.9995	84.36
42.5	453,774	0	0.0000	1.0000	84.31
43.5	453,682	361	0.0008	0.9992	84.31
44.5	363,332	1,717	0.0047	0.9953	84.25
45.5	361,615		0.0000	1.0000	83.85
46.5	361,615		0.0000	1.0000	83.85
47.5	359,586	8,595	0.0239	0.9761	83.85
48.5	350,991	3	0.0000	1.0000	81.84
49.5	348,451	2,388	0.0069	0.9931	81.84
50.5	344,151	139	0.0004	0.9996	81.28
51.5	341,401	24	0.0001	0.9999	81.25
52.5	341,377	1,231	0.0036	0.9964	81.24
53.5	339,826	2	0.0000	1.0000	80.95
54.5	337,386	3,728	0.0110	0.9890	80.95
55.5	333,659	2,969	0.0089	0.9911	80.06
56.5	330,690		0.0000	1.0000	79.34
57.5	330,690	11,652	0.0352	0.9648	79.34
58.5	247,057		0.0000	1.0000	76.55
59.5	247,057	27,426	0.1110	0.8890	76.55
60.5	170,128	25	0.0001	0.9999	68.05
61.5	170,103	1,049	0.0062	0.9938	68.04
62.5	169,054	787	0.0047	0.9953	67.62
63.5	118,681	272	0.0023	0.9977	67.31
64.5	118,409	0	0.0000	1.0000	67.15
65.5	118,322	10,713	0.0905	0.9095	67.15
66.5	107,609		0.0000	1.0000	61.07
67.5	107,609		0.0000	1.0000	61.07
68.5	107,609	129	0.0012	0.9988	61.07
69.5	107,480	197	0.0018	0.9982	61.00
70.5	107,283	1,876	0.0175	0.9825	60.89
71.5	105,407	1	0.0000	1.0000	59.82
72.5	104,917		0.0000	1.0000	59.82
73.5	104,917		0.0000	1.0000	59.82
74.5	104,917		0.0000	1.0000	59.82
75.5	104,917	1	0.0000	1.0000	59.82
76.5	103,473	475	0.0046	0.9954	59.82
77.5	102,998	3,068	0.0298	0.9702	59.55
78.5	99,930	29	0.0003	0.9997	57.77

DUKE ENERGY KENTUCKY

ACCOUNTS 3520 AND 3610 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1902-2018 EXPERIENCE BAND 1956-2018

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	71,739		0.0000	1.0000	57.76
80.5	71,739		0.0000	1.0000	57.76
81.5	71,739	967	0.0135	0.9865	57.76
82.5	70,771		0.0000	1.0000	56.98
83.5	70,771		0.0000	1.0000	56.98
84.5	70,771		0.0000	1.0000	56.98
85.5	70,771	15,864	0.2242	0.7758	56.98
86.5	54,907	8,081	0.1472	0.8528	44.20
87.5	46,826	45,915	0.9806	0.0194	37.70
88.5	911		0.0000	1.0000	0.73
89.5	911		0.0000	1.0000	0.73
90.5	911		0.0000	1.0000	0.73
91.5	911		0.0000	1.0000	0.73
92.5	911		0.0000	1.0000	0.73
93.5	911		0.0000	1.0000	0.73
94.5	911		0.0000	1.0000	0.73
95.5	911		0.0000	1.0000	0.73
96.5	911		0.0000	1.0000	0.73
97.5	911		0.0000	1.0000	0.73
98.5	911		0.0000	1.0000	0.73
99.5	911		0.0000	1.0000	0.73
100.5	911		0.0000	1.0000	0.73
101.5	911		0.0000	1.0000	0.73
102.5	911		0.0000	1.0000	0.73
103.5	911		0.0000	1.0000	0.73
104.5	911		0.0000	1.0000	0.73
105.5	911		0.0000	1.0000	0.73
106.5	911		0.0000	1.0000	0.73
107.5	911		0.0000	1.0000	0.73
108.5	911	911	1.0000		0.73
109.5					

DUKE ENERGY KENTUCKY

ACCOUNTS 3520 AND 3610 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1902-2018 EXPERIENCE BAND 1989-2018

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	2,581,877	6	0.0000	1.0000	100.00
0.5	2,576,164		0.0000	1.0000	100.00
1.5	2,576,164	28,958	0.0112	0.9888	100.00
2.5	2,531,449	379	0.0001	0.9999	98.88
3.5	2,156,534	698	0.0003	0.9997	98.86
4.5	1,467,055	51	0.0000	1.0000	98.83
5.5	1,193,860		0.0000	1.0000	98.83
6.5	841,984	6	0.0000	1.0000	98.83
7.5	835,951	4,542	0.0054	0.9946	98.82
8.5	814,135		0.0000	1.0000	98.29
9.5	814,135	47,444	0.0583	0.9417	98.29
10.5	627,608	10	0.0000	1.0000	92.56
11.5	197,864		0.0000	1.0000	92.56
12.5	220,477	31,741	0.1440	0.8560	92.56
13.5	188,829		0.0000	1.0000	79.23
14.5	283,058	19,258	0.0680	0.9320	79.23
15.5	263,800		0.0000	1.0000	73.84
16.5	263,800		0.0000	1.0000	73.84
17.5	265,828		0.0000	1.0000	73.84
18.5	265,828		0.0000	1.0000	73.84
19.5	272,667		0.0000	1.0000	73.84
20.5	274,579		0.0000	1.0000	73.84
21.5	279,428		0.0000	1.0000	73.84
22.5	279,428		0.0000	1.0000	73.84
23.5	284,108		0.0000	1.0000	73.84
24.5	286,547		0.0000	1.0000	73.84
25.5	264,551		0.0000	1.0000	73.84
26.5	268,279		0.0000	1.0000	73.84
27.5	268,279		0.0000	1.0000	73.84
28.5	340,260		0.0000	1.0000	73.84
29.5	340,260		0.0000	1.0000	73.84
30.5	399,060	1,175	0.0029	0.9971	73.84
31.5	397,884		0.0000	1.0000	73.63
32.5	397,884	1,728	0.0043	0.9957	73.63
33.5	474,048	1,721	0.0036	0.9964	73.31
34.5	473,251		0.0000	1.0000	73.04
35.5	485,039	4,462	0.0092	0.9908	73.04
36.5	480,878		0.0000	1.0000	72.37
37.5	480,878		0.0000	1.0000	72.37
38.5	481,150	729	0.0015	0.9985	72.37

DUKE ENERGY KENTUCKY

ACCOUNTS 3520 AND 3610 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1902-2018 EXPERIENCE BAND 1989-2018

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	480,421		0.0000	1.0000	72.26
40.5	480,421		0.0000	1.0000	72.26
41.5	480,421		0.0000	1.0000	72.26
42.5	334,604	0	0.0000	1.0000	72.26
43.5	334,512	91	0.0003	0.9997	72.26
44.5	244,432	1,717	0.0070	0.9930	72.24
45.5	245,443		0.0000	1.0000	71.73
46.5	247,016		0.0000	1.0000	71.73
47.5	244,987	8,595	0.0351	0.9649	71.73
48.5	236,867	3	0.0000	1.0000	69.21
49.5	274,160	2,388	0.0087	0.9913	69.21
50.5	269,861	139	0.0005	0.9995	68.61
51.5	267,111	24	0.0001	0.9999	68.58
52.5	267,087	1,231	0.0046	0.9954	68.57
53.5	264,625	2	0.0000	1.0000	68.25
54.5	262,185	3,728	0.0142	0.9858	68.25
55.5	258,458	2,969	0.0115	0.9885	67.28
56.5	255,489		0.0000	1.0000	66.51
57.5	255,489	11,652	0.0456	0.9544	66.51
58.5	171,856		0.0000	1.0000	63.48
59.5	218,738	27,426	0.1254	0.8746	63.48
60.5	147,205	25	0.0002	0.9998	55.52
61.5	158,330	1,049	0.0066	0.9934	55.51
62.5	157,280	787	0.0050	0.9950	55.14
63.5	117,770	272	0.0023	0.9977	54.86
64.5	117,498	0	0.0000	1.0000	54.74
65.5	117,411	10,713	0.0912	0.9088	54.74
66.5	106,698		0.0000	1.0000	49.74
67.5	106,698		0.0000	1.0000	49.74
68.5	106,698	129	0.0012	0.9988	49.74
69.5	106,569	197	0.0018	0.9982	49.68
70.5	106,372	1,876	0.0176	0.9824	49.59
71.5	104,496	1	0.0000	1.0000	48.72
72.5	104,006		0.0000	1.0000	48.72
73.5	104,006		0.0000	1.0000	48.72
74.5	104,006		0.0000	1.0000	48.72
75.5	104,006	1	0.0000	1.0000	48.72
76.5	102,563	475	0.0046	0.9954	48.72
77.5	102,088	3,068	0.0301	0.9699	48.49
78.5	99,020	29	0.0003	0.9997	47.03

DUKE ENERGY KENTUCKY

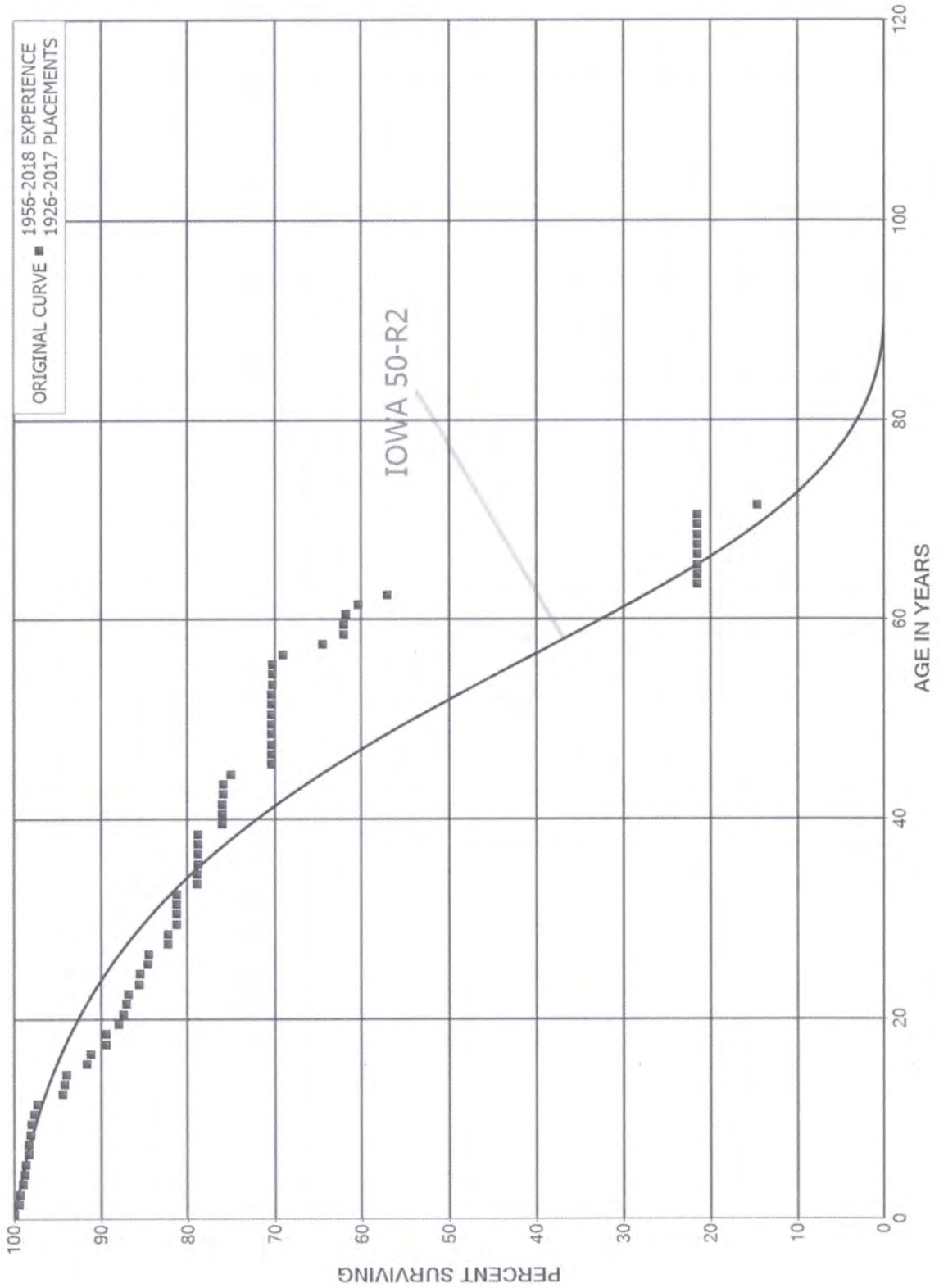
ACCOUNTS 3520 AND 3610 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1902-2018 EXPERIENCE BAND 1989-2018

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	70,828		0.0000	1.0000	47.02
80.5	70,828		0.0000	1.0000	47.02
81.5	70,828	967	0.0137	0.9863	47.02
82.5	69,861		0.0000	1.0000	46.38
83.5	69,861		0.0000	1.0000	46.38
84.5	69,861		0.0000	1.0000	46.38
85.5	69,861	15,864	0.2271	0.7729	46.38
86.5	54,907	8,081	0.1472	0.8528	35.85
87.5	46,826	45,915	0.9806	0.0194	30.57
88.5	911		0.0000	1.0000	0.59
89.5	911		0.0000	1.0000	0.59
90.5	911		0.0000	1.0000	0.59
91.5	911		0.0000	1.0000	0.59
92.5	911		0.0000	1.0000	0.59
93.5	911		0.0000	1.0000	0.59
94.5	911		0.0000	1.0000	0.59
95.5	911		0.0000	1.0000	0.59
96.5	911		0.0000	1.0000	0.59
97.5	911		0.0000	1.0000	0.59
98.5	911		0.0000	1.0000	0.59
99.5	911		0.0000	1.0000	0.59
100.5	911		0.0000	1.0000	0.59
101.5	911		0.0000	1.0000	0.59
102.5	911		0.0000	1.0000	0.59
103.5	911		0.0000	1.0000	0.59
104.5	911		0.0000	1.0000	0.59
105.5	911		0.0000	1.0000	0.59
106.5	911		0.0000	1.0000	0.59
107.5	911		0.0000	1.0000	0.59
108.5	911	911	1.0000		0.59
109.5					

DUKE ENERGY KENTUCKY
ACCOUNT 3530 STATION EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY

ACCOUNT 3530 STATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1926-2017 EXPERIENCE BAND 1956-2018

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	22,050,666		0.0000	1.0000	100.00
0.5	21,952,366	122,677	0.0056	0.9944	100.00
1.5	20,006,543	37,410	0.0019	0.9981	99.44
2.5	19,880,348	57,116	0.0029	0.9971	99.26
3.5	14,997,107	29,201	0.0019	0.9981	98.97
4.5	13,264,766	27,347	0.0021	0.9979	98.78
5.5	12,745,345	38,479	0.0030	0.9970	98.57
6.5	11,762,113	1,398	0.0001	0.9999	98.28
7.5	11,618,636	18,768	0.0016	0.9984	98.26
8.5	11,605,541	21,500	0.0019	0.9981	98.11
9.5	11,572,362	39,494	0.0034	0.9966	97.92
10.5	11,532,867	35,697	0.0031	0.9969	97.59
11.5	8,194,959	245,565	0.0300	0.9700	97.29
12.5	7,552,628	19,935	0.0026	0.9974	94.37
13.5	7,105,955	17,590	0.0025	0.9975	94.12
14.5	7,098,497	169,828	0.0239	0.9761	93.89
15.5	5,317,482	28,404	0.0053	0.9947	91.64
16.5	4,534,090	86,786	0.0191	0.9809	91.15
17.5	4,403,940	3,008	0.0007	0.9993	89.41
18.5	3,671,177	59,572	0.0162	0.9838	89.35
19.5	3,364,061	20,309	0.0060	0.9940	87.90
20.5	3,240,619	10,960	0.0034	0.9966	87.37
21.5	3,229,798	8,434	0.0026	0.9974	87.07
22.5	3,212,779	45,512	0.0142	0.9858	86.85
23.5	2,660,233	4,924	0.0019	0.9981	85.62
24.5	2,655,309	26,048	0.0098	0.9902	85.46
25.5	2,597,539	3,507	0.0014	0.9986	84.62
26.5	1,734,505	46,020	0.0265	0.9735	84.50
27.5	1,544,572		0.0000	1.0000	82.26
28.5	1,544,572	17,428	0.0113	0.9887	82.26
29.5	1,570,242	1,050	0.0007	0.9993	81.33
30.5	1,569,192		0.0000	1.0000	81.28
31.5	1,569,192	68	0.0000	1.0000	81.28
32.5	1,552,554	45,260	0.0292	0.9708	81.28
33.5	1,438,950		0.0000	1.0000	78.91
34.5	1,438,950	1,228	0.0009	0.9991	78.91
35.5	1,139,818	173	0.0002	0.9998	78.84
36.5	1,097,755		0.0000	1.0000	78.83
37.5	1,097,755		0.0000	1.0000	78.83
38.5	1,097,755	38,077	0.0347	0.9653	78.83

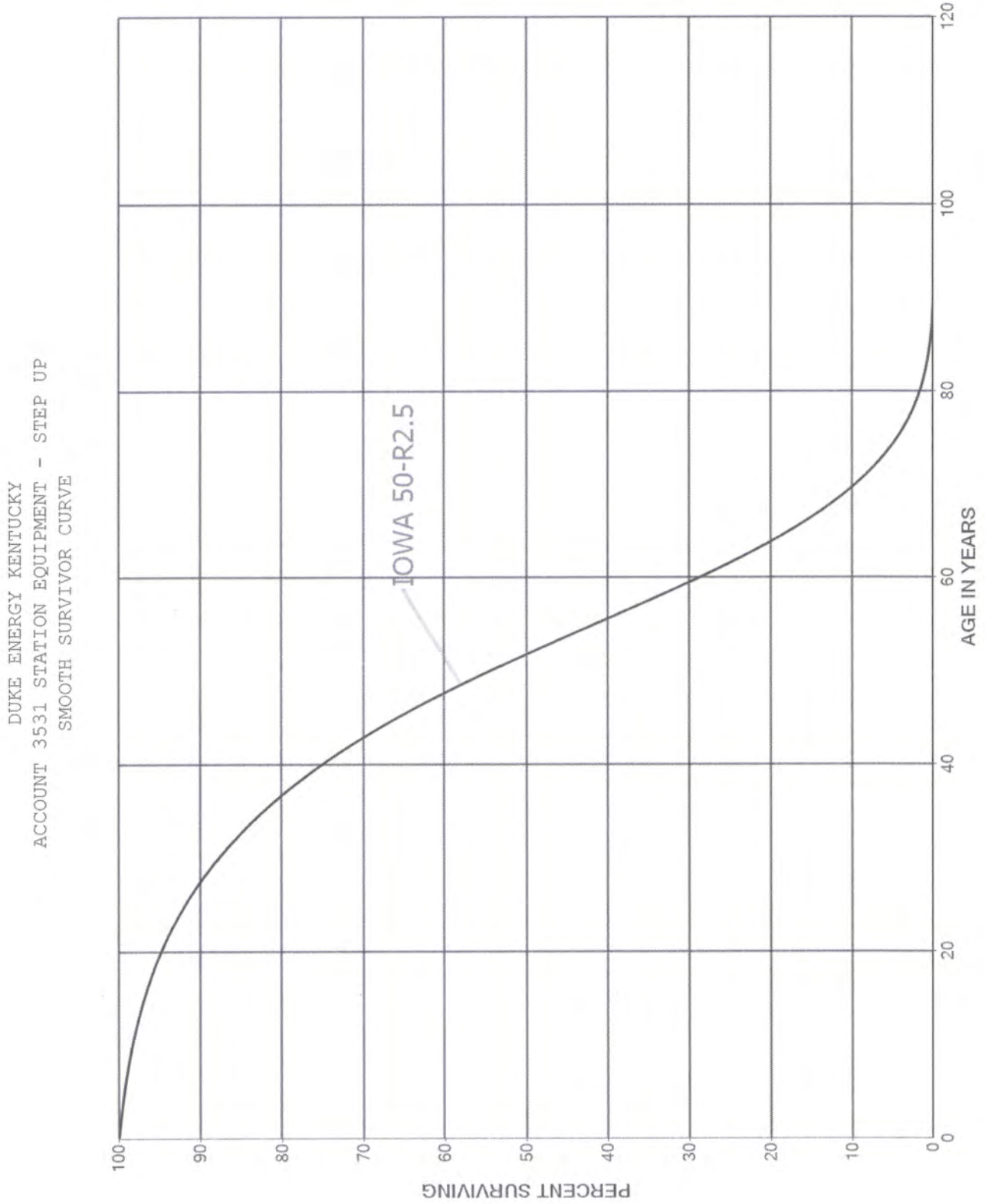
DUKE ENERGY KENTUCKY

ACCOUNT 3530 STATION EQUIPMENT

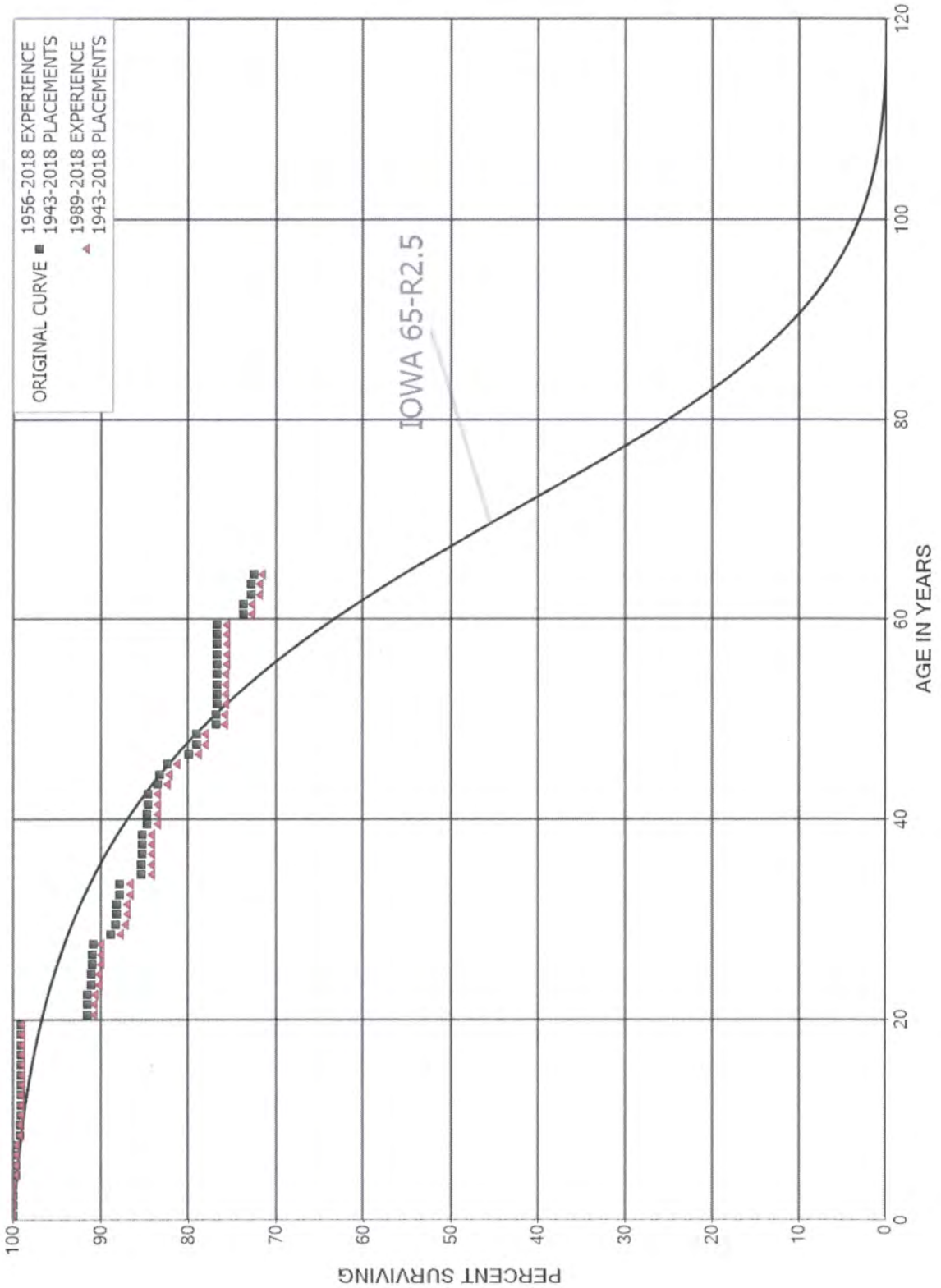
ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1926-2017 EXPERIENCE BAND 1956-2018

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	1,155,850	7	0.0000	1.0000	76.09
40.5	1,154,040		0.0000	1.0000	76.09
41.5	1,154,040	1,389	0.0012	0.9988	76.09
42.5	815,628	11	0.0000	1.0000	76.00
43.5	812,974	10,134	0.0125	0.9875	76.00
44.5	802,434	49,370	0.0615	0.9385	75.05
45.5	709,553		0.0000	1.0000	70.43
46.5	709,553	197	0.0003	0.9997	70.43
47.5	661,520		0.0000	1.0000	70.42
48.5	661,520		0.0000	1.0000	70.42
49.5	661,520	16	0.0000	1.0000	70.42
50.5	657,536	1	0.0000	1.0000	70.41
51.5	657,206	12	0.0000	1.0000	70.41
52.5	654,231	808	0.0012	0.9988	70.41
53.5	457,336		0.0000	1.0000	70.33
54.5	457,336		0.0000	1.0000	70.33
55.5	457,336	8,238	0.0180	0.9820	70.33
56.5	449,098	29,703	0.0661	0.9339	69.06
57.5	416,925	15,431	0.0370	0.9630	64.49
58.5	365,039		0.0000	1.0000	62.10
59.5	365,039	1,537	0.0042	0.9958	62.10
60.5	67,918	1,556	0.0229	0.9771	61.84
61.5	66,362	3,636	0.0548	0.9452	60.43
62.5	60,875	37,954	0.6235	0.3765	57.12
63.5	20,732		0.0000	1.0000	21.51
64.5	20,732		0.0000	1.0000	21.51
65.5	20,732		0.0000	1.0000	21.51
66.5	20,732	41	0.0020	0.9980	21.51
67.5	10,864		0.0000	1.0000	21.46
68.5	10,864		0.0000	1.0000	21.46
69.5	10,864		0.0000	1.0000	21.46
70.5	10,864	3,481	0.3204	0.6796	21.46
71.5	7,383		0.0000	1.0000	14.59
72.5	7,383		0.0000	1.0000	14.59
73.5	7,383		0.0000	1.0000	14.59
74.5	7,383	4,090	0.5539	0.4461	14.59
75.5					6.51


DUKE ENERGY KENTUCKY
ACCOUNT 3531 STATION EQUIPMENT - STEP UP
SMOOTH SURVIVOR CURVE
IOWA 50-R2.5
PERCENT SURVIVING
100
90
80
70
60
50
40
30
20
10
0
AGE IN YEARS
0
20
40
60
80
100
120

DUKE ENERGY KENTUCKY
ACCOUNTS 3532 AND 3622 STATION EQUIPMENT - MAJOR
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY

ACCOUNTS 3532 AND 3622 STATION EQUIPMENT - MAJOR

ORIGINAL LIFE TABLE

PLACEMENT BAND 1943-2018 EXPERIENCE BAND 1956-2018

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	34,316,871		0.0000	1.0000	100.00
0.5	30,812,664		0.0000	1.0000	100.00
1.5	30,841,258		0.0000	1.0000	100.00
2.5	31,244,107		0.0000	1.0000	100.00
3.5	30,001,598	127,686	0.0043	0.9957	100.00
4.5	29,070,135		0.0000	1.0000	99.57
5.5	29,098,250		0.0000	1.0000	99.57
6.5	29,098,250		0.0000	1.0000	99.57
7.5	29,015,993	101,291	0.0035	0.9965	99.57
8.5	26,878,408		0.0000	1.0000	99.23
9.5	26,565,226	40,579	0.0015	0.9985	99.23
10.5	24,139,411		0.0000	1.0000	99.08
11.5	20,991,269		0.0000	1.0000	99.08
12.5	19,410,015	7,466	0.0004	0.9996	99.08
13.5	18,021,641		0.0000	1.0000	99.04
14.5	17,072,941		0.0000	1.0000	99.04
15.5	15,417,121		0.0000	1.0000	99.04
16.5	14,126,545		0.0000	1.0000	99.04
17.5	10,537,635		0.0000	1.0000	99.04
18.5	9,044,761		0.0000	1.0000	99.04
19.5	9,044,761	683,187	0.0755	0.9245	99.04
20.5	8,361,574		0.0000	1.0000	91.56
21.5	8,361,574	4,710	0.0006	0.9994	91.56
22.5	8,356,863	35,635	0.0043	0.9957	91.50
23.5	8,118,550		0.0000	1.0000	91.11
24.5	8,118,550	18,286	0.0023	0.9977	91.11
25.5	7,160,628	1,292	0.0002	0.9998	90.91
26.5	6,738,222	5,925	0.0009	0.9991	90.89
27.5	5,632,152	124,760	0.0222	0.9778	90.81
28.5	5,473,023	30,269	0.0055	0.9945	88.80
29.5	5,242,295	9,017	0.0017	0.9983	88.31
30.5	5,149,477		0.0000	1.0000	88.16
31.5	5,110,911	19,543	0.0038	0.9962	88.16
32.5	5,049,398		0.0000	1.0000	87.82
33.5	4,926,718	138,454	0.0281	0.9719	87.82
34.5	4,387,135		0.0000	1.0000	85.35
35.5	3,593,121	1,471	0.0004	0.9996	85.35
36.5	3,308,912		0.0000	1.0000	85.32
37.5	3,158,536	949	0.0003	0.9997	85.32
38.5	2,783,130	19,241	0.0069	0.9931	85.29

DUKE ENERGY KENTUCKY

ACCOUNTS 3532 AND 3622 STATION EQUIPMENT - MAJOR

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1943-2018			EXPERIENCE BAND 1956-2018		
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	2,743,481		0.0000	1.0000	84.70
40.5	2,717,234	1,614	0.0006	0.9994	84.70
41.5	2,319,382		0.0000	1.0000	84.65
42.5	1,672,903	22,285	0.0133	0.9867	84.65
43.5	1,650,618	3,773	0.0023	0.9977	83.53
44.5	1,510,275	16,442	0.0109	0.9891	83.33
45.5	1,444,597	44,352	0.0307	0.9693	82.43
46.5	1,363,558	13,357	0.0098	0.9902	79.90
47.5	1,149,073		0.0000	1.0000	79.11
48.5	1,139,707	32,418	0.0284	0.9716	79.11
49.5	1,008,804		0.0000	1.0000	76.86
50.5	1,008,804	1,514	0.0015	0.9985	76.86
51.5	1,214,340		0.0000	1.0000	76.75
52.5	943,992		0.0000	1.0000	76.75
53.5	878,951		0.0000	1.0000	76.75
54.5	757,661	366	0.0005	0.9995	76.75
55.5	746,864		0.0000	1.0000	76.71
56.5	691,223		0.0000	1.0000	76.71
57.5	691,223		0.0000	1.0000	76.71
58.5	650,904		0.0000	1.0000	76.71
59.5	650,904	25,012	0.0384	0.9616	76.71
60.5	350,177		0.0000	1.0000	73.76
61.5	350,177	4,301	0.0123	0.9877	73.76
62.5	345,876		0.0000	1.0000	72.86
63.5	245,712	1,151	0.0047	0.9953	72.86
64.5	21,699		0.0000	1.0000	72.52
65.5	21,699		0.0000	1.0000	72.52
66.5	21,699		0.0000	1.0000	72.52
67.5	21,699		0.0000	1.0000	72.52
68.5	10,864		0.0000	1.0000	72.52
69.5	10,864		0.0000	1.0000	72.52
70.5	10,864		0.0000	1.0000	72.52
71.5	10,864	10,864	1.0000		72.52
72.5					

DUKE ENERGY KENTUCKY

ACCOUNTS 3532 AND 3622 STATION EQUIPMENT - MAJOR

ORIGINAL LIFE TABLE

PLACEMENT BAND 1943-2018 EXPERIENCE BAND 1989-2018

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	28,221,022		0.0000	1.0000	100.00
0.5	24,673,925		0.0000	1.0000	100.00
1.5	24,856,635		0.0000	1.0000	100.00
2.5	25,301,455		0.0000	1.0000	100.00
3.5	24,181,625	127,686	0.0053	0.9947	100.00
4.5	23,657,468		0.0000	1.0000	99.47
5.5	25,162,021		0.0000	1.0000	99.47
6.5	25,545,350		0.0000	1.0000	99.47
7.5	25,712,794	101,291	0.0039	0.9961	99.47
8.5	23,967,952		0.0000	1.0000	99.08
9.5	23,853,947	40,579	0.0017	0.9983	99.08
10.5	21,454,379		0.0000	1.0000	98.91
11.5	18,712,501		0.0000	1.0000	98.91
12.5	17,781,780	7,466	0.0004	0.9996	98.91
13.5	16,393,407		0.0000	1.0000	98.87
14.5	15,720,048		0.0000	1.0000	98.87
15.5	14,133,007		0.0000	1.0000	98.87
16.5	12,901,403		0.0000	1.0000	98.87
17.5	9,542,677		0.0000	1.0000	98.87
18.5	8,059,169		0.0000	1.0000	98.87
19.5	8,158,025	683,187	0.0837	0.9163	98.87
20.5	7,474,838		0.0000	1.0000	90.59
21.5	7,490,650	4,710	0.0006	0.9994	90.59
22.5	7,580,192	35,635	0.0047	0.9953	90.53
23.5	7,423,487		0.0000	1.0000	90.11
24.5	7,475,668	18,286	0.0024	0.9976	90.11
25.5	6,544,619	1,292	0.0002	0.9998	89.89
26.5	6,177,855	5,925	0.0010	0.9990	89.87
27.5	5,071,784	124,760	0.0246	0.9754	89.78
28.5	4,952,974	30,269	0.0061	0.9939	87.57
29.5	4,722,612	9,017	0.0019	0.9981	87.04
30.5	4,982,893		0.0000	1.0000	86.87
31.5	4,944,327	19,543	0.0040	0.9960	86.87
32.5	4,895,558		0.0000	1.0000	86.53
33.5	4,899,568	138,454	0.0283	0.9717	86.53
34.5	4,359,985		0.0000	1.0000	84.08
35.5	3,565,971	1,471	0.0004	0.9996	84.08
36.5	3,281,762		0.0000	1.0000	84.05
37.5	3,135,687	949	0.0003	0.9997	84.05
38.5	2,772,266	19,241	0.0069	0.9931	84.02

DUKE ENERGY KENTUCKY

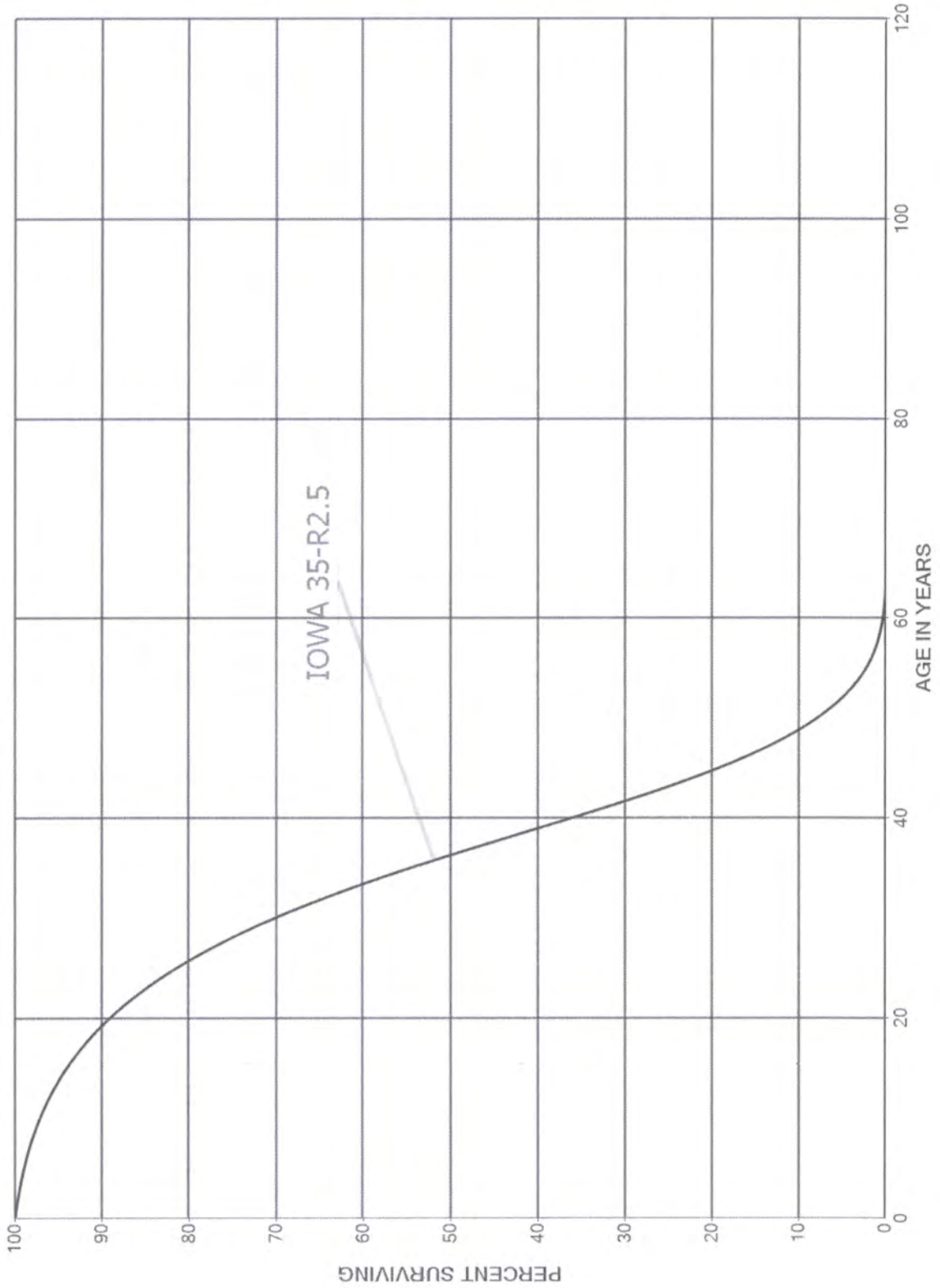
ACCOUNTS 3532 AND 3622 STATION EQUIPMENT - MAJOR

ORIGINAL LIFE TABLE, CONT.

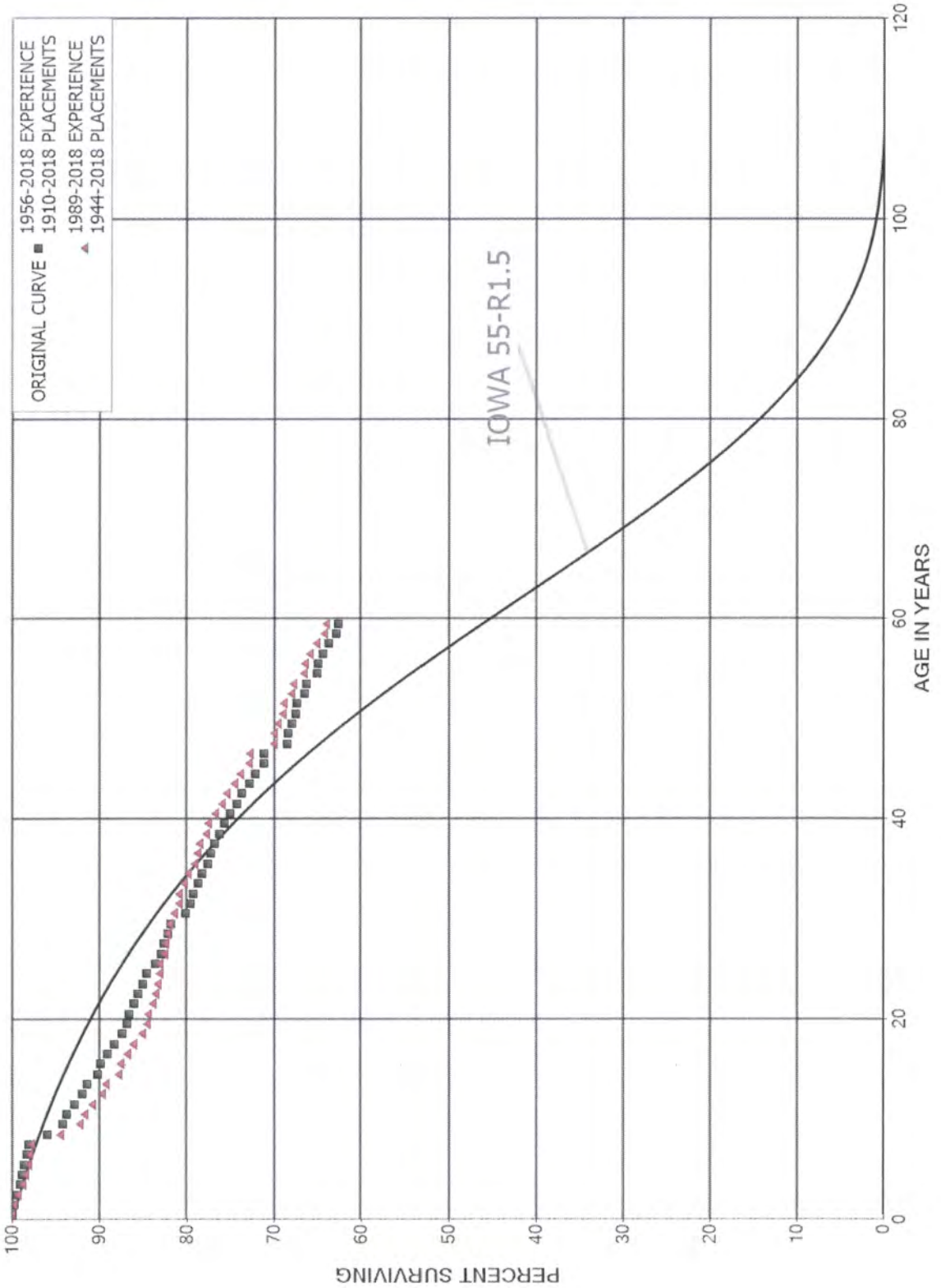
PLACEMENT BAND 1943-2018 EXPERIENCE BAND 1989-2018

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	2,732,617		0.0000	1.0000	83.44
40.5	2,706,369	1,614	0.0006	0.9994	83.44
41.5	2,308,517		0.0000	1.0000	83.39
42.5	1,662,039	22,285	0.0134	0.9866	83.39
43.5	1,639,754	3,773	0.0023	0.9977	82.27
44.5	1,499,410	16,442	0.0110	0.9890	82.08
45.5	1,444,597	44,352	0.0307	0.9693	81.18
46.5	1,363,558	13,357	0.0098	0.9902	78.69
47.5	1,149,073		0.0000	1.0000	77.92
48.5	1,139,707	32,418	0.0284	0.9716	77.92
49.5	1,008,804		0.0000	1.0000	75.70
50.5	1,008,804	1,514	0.0015	0.9985	75.70
51.5	1,214,340		0.0000	1.0000	75.59
52.5	943,992		0.0000	1.0000	75.59
53.5	878,951		0.0000	1.0000	75.59
54.5	757,661	366	0.0005	0.9995	75.59
55.5	746,864		0.0000	1.0000	75.55
56.5	691,223		0.0000	1.0000	75.55
57.5	691,223		0.0000	1.0000	75.55
58.5	650,904		0.0000	1.0000	75.55
59.5	650,904	25,012	0.0384	0.9616	75.55
60.5	350,177		0.0000	1.0000	72.65
61.5	350,177	4,301	0.0123	0.9877	72.65
62.5	345,876		0.0000	1.0000	71.76
63.5	245,712	1,151	0.0047	0.9953	71.76
64.5	21,699		0.0000	1.0000	71.42
65.5	21,699		0.0000	1.0000	71.42
66.5	21,699		0.0000	1.0000	71.42
67.5	21,699		0.0000	1.0000	71.42
68.5	10,864		0.0000	1.0000	71.42
69.5	10,864		0.0000	1.0000	71.42
70.5	10,864		0.0000	1.0000	71.42
71.5	10,864	10,864	1.0000		71.42
72.5					

DUKE ENERGY KENTUCKY
ACCOUNT 3534 STATION EQUIPMENT - STEP UP EQUIPMENT
SMOOTH SURVIVOR CURVE



DUKE ENERGY KENTUCKY
ACCOUNT 3550 POLES AND FIXTURES
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY

ACCOUNT 3550 POLES AND FIXTURES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1910-2018 EXPERIENCE BAND 1956-2018

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	13,438,871	9,078	0.0007	0.9993	100.00
0.5	12,871,134	29,258	0.0023	0.9977	99.93
1.5	11,977,586	31,552	0.0026	0.9974	99.71
2.5	11,670,151	39,722	0.0034	0.9966	99.44
3.5	10,855,006	28,951	0.0027	0.9973	99.10
4.5	10,527,809	27,658	0.0026	0.9974	98.84
5.5	10,022,979	31,155	0.0031	0.9969	98.58
6.5	9,683,713	24,723	0.0026	0.9974	98.27
7.5	9,543,016	206,866	0.0217	0.9783	98.02
8.5	7,871,313	140,341	0.0178	0.9822	95.90
9.5	7,155,785	37,822	0.0053	0.9947	94.19
10.5	6,952,152	62,348	0.0090	0.9910	93.69
11.5	5,996,028	55,186	0.0092	0.9908	92.85
12.5	5,836,040	40,897	0.0070	0.9930	92.00
13.5	5,549,977	68,173	0.0123	0.9877	91.35
14.5	4,849,904	20,793	0.0043	0.9957	90.23
15.5	4,626,253	39,696	0.0086	0.9914	89.84
16.5	4,530,303	38,553	0.0085	0.9915	89.07
17.5	4,694,402	50,081	0.0107	0.9893	88.31
18.5	4,528,260	25,408	0.0056	0.9944	87.37
19.5	4,056,115	12,139	0.0030	0.9970	86.88
20.5	3,997,056	23,763	0.0059	0.9941	86.62
21.5	3,812,828	22,064	0.0058	0.9942	86.11
22.5	3,725,266	24,800	0.0067	0.9933	85.61
23.5	3,448,650	15,490	0.0045	0.9955	85.04
24.5	3,349,670	39,974	0.0119	0.9881	84.66
25.5	3,208,883	24,850	0.0077	0.9923	83.65
26.5	2,960,472	14,640	0.0049	0.9951	83.00
27.5	2,842,805	13,454	0.0047	0.9953	82.59
28.5	2,745,559	10,603	0.0039	0.9961	82.20
29.5	2,714,123	55,394	0.0204	0.9796	81.88
30.5	2,301,480	17,748	0.0077	0.9923	80.21
31.5	2,248,026	7,517	0.0033	0.9967	79.59
32.5	2,231,799	16,569	0.0074	0.9926	79.32
33.5	2,157,829	13,797	0.0064	0.9936	78.73
34.5	2,111,480	17,850	0.0085	0.9915	78.23
35.5	1,627,823	6,722	0.0041	0.9959	77.57
36.5	1,611,549	7,737	0.0048	0.9952	77.25
37.5	1,402,143	11,369	0.0081	0.9919	76.88
38.5	1,367,055	9,444	0.0069	0.9931	76.25

DUKE ENERGY KENTUCKY

ACCOUNT 3550 POLES AND FIXTURES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1910-2018 EXPERIENCE BAND 1956-2018

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	1,157,365	10,659	0.0092	0.9908	75.73
40.5	1,143,479	11,505	0.0101	0.9899	75.03
41.5	1,122,622	8,426	0.0075	0.9925	74.28
42.5	1,024,343	12,637	0.0123	0.9877	73.72
43.5	979,412	8,493	0.0087	0.9913	72.81
44.5	749,350	9,849	0.0131	0.9869	72.18
45.5	589,867	534	0.0009	0.9991	71.23
46.5	565,375	21,508	0.0380	0.9620	71.16
47.5	433,421	120	0.0003	0.9997	68.46
48.5	427,909	2,946	0.0069	0.9931	68.44
49.5	404,012	3,011	0.0075	0.9925	67.97
50.5	400,829	551	0.0014	0.9986	67.46
51.5	384,748	4,749	0.0123	0.9877	67.37
52.5	366,932	1,651	0.0045	0.9955	66.54
53.5	326,709	5,885	0.0180	0.9820	66.24
54.5	169,383	244	0.0014	0.9986	65.04
55.5	160,469	1,374	0.0086	0.9914	64.95
56.5	158,478	1,680	0.0106	0.9894	64.39
57.5	81,494	1,150	0.0141	0.9859	63.71
58.5	73,784	226	0.0031	0.9969	62.81
59.5	63,438	1,304	0.0205	0.9795	62.62
60.5	3,694		0.0000	1.0000	61.33
61.5	3,694	27	0.0073	0.9927	61.33
62.5	2,455	48	0.0194	0.9806	60.88
63.5	274		0.0000	1.0000	59.70
64.5	274		0.0000	1.0000	59.70
65.5	274		0.0000	1.0000	59.70
66.5	274		0.0000	1.0000	59.70
67.5	274		0.0000	1.0000	59.70
68.5	274	4	0.0153	0.9847	59.70
69.5	81		0.0000	1.0000	58.79
70.5	81	69	0.8500	0.1500	58.79
71.5	12	0	0.0221	0.9779	8.82
72.5					8.62

DUKE ENERGY KENTUCKY

ACCOUNT 3550 POLES AND FIXTURES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1944-2018 EXPERIENCE BAND 1989-2018

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	7,117,605	9,078	0.0013	0.9987	100.00
0.5	7,099,831	21,768	0.0031	0.9969	99.87
1.5	6,704,233	29,631	0.0044	0.9956	99.57
2.5	6,500,774	34,587	0.0053	0.9947	99.13
3.5	6,192,041	23,057	0.0037	0.9963	98.60
4.5	5,872,658	14,765	0.0025	0.9975	98.23
5.5	5,818,231	10,481	0.0018	0.9982	97.98
6.5	5,504,927	10,521	0.0019	0.9981	97.81
7.5	5,638,008	194,647	0.0345	0.9655	97.62
8.5	5,081,765	119,603	0.0235	0.9765	94.25
9.5	4,860,153	25,883	0.0053	0.9947	92.03
10.5	4,680,150	48,267	0.0103	0.9897	91.54
11.5	3,964,022	47,903	0.0121	0.9879	90.60
12.5	4,034,678	20,776	0.0051	0.9949	89.50
13.5	3,809,774	61,402	0.0161	0.9839	89.04
14.5	3,370,505	9,044	0.0027	0.9973	87.61
15.5	3,324,515	30,529	0.0092	0.9908	87.37
16.5	3,270,164	21,440	0.0066	0.9934	86.57
17.5	3,364,028	42,743	0.0127	0.9873	86.00
18.5	3,212,250	18,666	0.0058	0.9942	84.91
19.5	3,123,394	3,788	0.0012	0.9988	84.42
20.5	3,073,107	19,946	0.0065	0.9935	84.31
21.5	2,905,888	13,637	0.0047	0.9953	83.77
22.5	2,850,064	7,305	0.0026	0.9974	83.37
23.5	2,637,605	5,218	0.0020	0.9980	83.16
24.5	2,729,188	3,085	0.0011	0.9989	83.00
25.5	2,643,200	15,725	0.0059	0.9941	82.90
26.5	2,406,843	3,053	0.0013	0.9987	82.41
27.5	2,432,475	6,865	0.0028	0.9972	82.30
28.5	2,375,884	6,194	0.0026	0.9974	82.07
29.5	2,340,140	17,866	0.0076	0.9924	81.86
30.5	2,057,541	13,117	0.0064	0.9936	81.23
31.5	2,008,718	839	0.0004	0.9996	80.71
32.5	2,002,416	12,523	0.0063	0.9937	80.68
33.5	1,940,717	12,177	0.0063	0.9937	80.18
34.5	1,914,843	17,302	0.0090	0.9910	79.67
35.5	1,431,735	5,805	0.0041	0.9959	78.95
36.5	1,416,378	4,497	0.0032	0.9968	78.63
37.5	1,210,263	11,272	0.0093	0.9907	78.38
38.5	1,175,860	4,526	0.0038	0.9962	77.65

DUKE ENERGY KENTUCKY

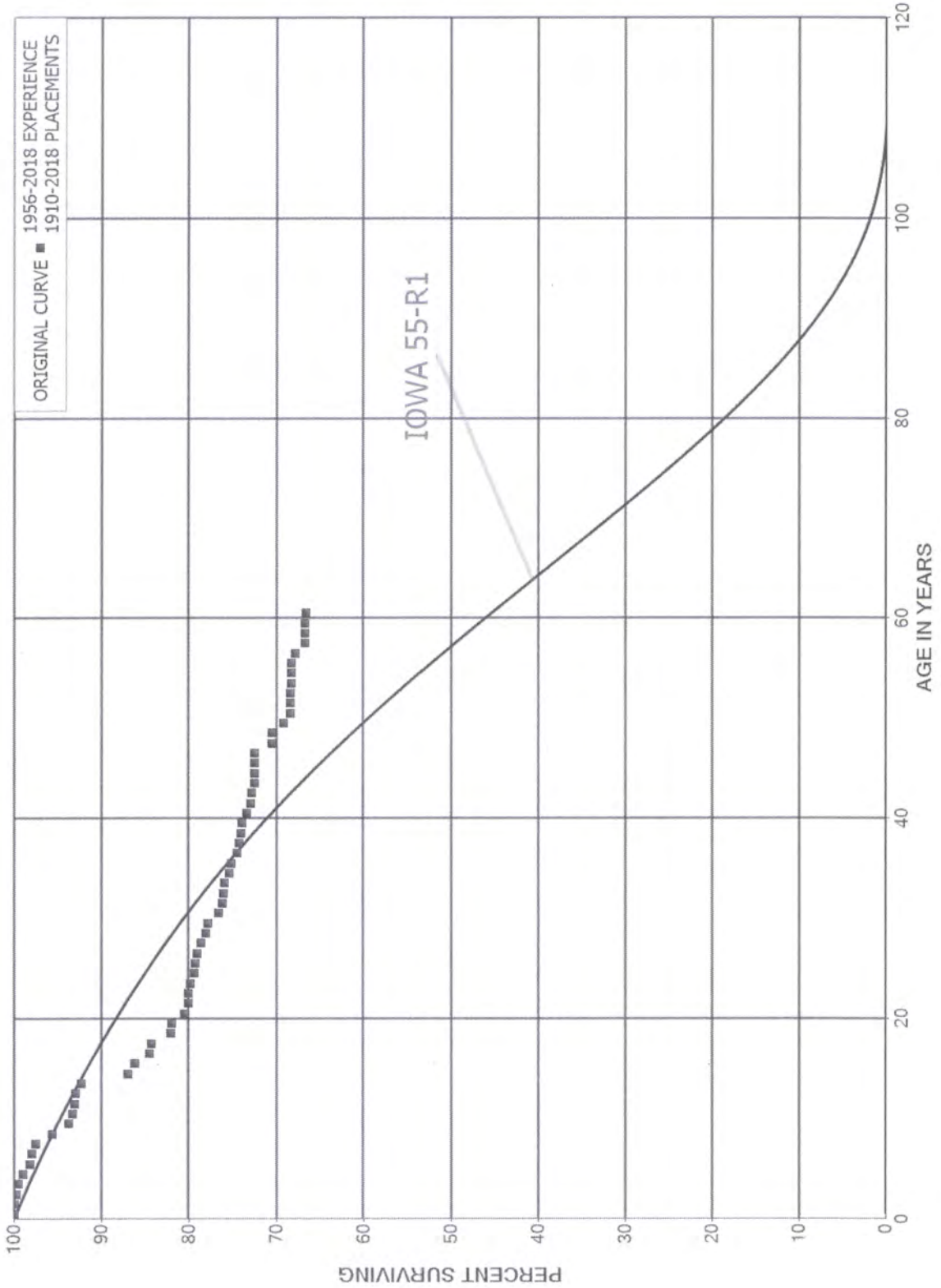
ACCOUNT 3550 POLES AND FIXTURES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1944-2018 EXPERIENCE BAND 1989-2018

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	1,147,573	10,595	0.0092	0.9908	77.35
40.5	1,133,751	11,505	0.0101	0.9899	76.64
41.5	1,112,894	8,334	0.0075	0.9925	75.86
42.5	1,014,789	12,628	0.0124	0.9876	75.29
43.5	969,866	8,414	0.0087	0.9913	74.36
44.5	739,945	9,849	0.0133	0.9867	73.71
45.5	580,399	534	0.0009	0.9991	72.73
46.5	555,906	21,373	0.0384	0.9616	72.66
47.5	424,088	120	0.0003	0.9997	69.87
48.5	418,576	2,946	0.0070	0.9930	69.85
49.5	394,679	3,011	0.0076	0.9924	69.36
50.5	391,496	551	0.0014	0.9986	68.83
51.5	384,575	4,749	0.0123	0.9877	68.73
52.5	366,908	1,651	0.0045	0.9955	67.88
53.5	326,684	5,885	0.0180	0.9820	67.58
54.5	169,358	244	0.0014	0.9986	66.36
55.5	160,469	1,374	0.0086	0.9914	66.27
56.5	158,478	1,680	0.0106	0.9894	65.70
57.5	81,494	1,150	0.0141	0.9859	65.00
58.5	73,784	226	0.0031	0.9969	64.09
59.5	63,438	1,304	0.0205	0.9795	63.89
60.5	3,694		0.0000	1.0000	62.58
61.5	3,694	27	0.0073	0.9927	62.58
62.5	2,455	48	0.0194	0.9806	62.12
63.5	274		0.0000	1.0000	60.91
64.5	274		0.0000	1.0000	60.91
65.5	274		0.0000	1.0000	60.91
66.5	274		0.0000	1.0000	60.91
67.5	274		0.0000	1.0000	60.91
68.5	274	4	0.0153	0.9847	60.91
69.5	81		0.0000	1.0000	59.98
70.5	81	69	0.8500	0.1500	59.98
71.5	12	0	0.0221	0.9779	9.00
72.5					8.80

DUKE ENERGY KENTUCKY
ACCOUNT 3560 OVERHEAD CONDUCTORS AND DEVICES
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY

ACCOUNT 3560 OVERHEAD CONDUCTORS AND DEVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1910-2018 EXPERIENCE BAND 1956-2018

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	10,079,323	203	0.0000	1.0000	100.00
0.5	9,295,608	2,071	0.0002	0.9998	100.00
1.5	8,859,337	23,452	0.0026	0.9974	99.98
2.5	8,723,470	19,822	0.0023	0.9977	99.71
3.5	8,258,353	45,337	0.0055	0.9945	99.48
4.5	8,290,160	61,632	0.0074	0.9926	98.94
5.5	7,799,060	21,379	0.0027	0.9973	98.20
6.5	7,439,508	31,245	0.0042	0.9958	97.93
7.5	7,297,829	141,544	0.0194	0.9806	97.52
8.5	6,671,043	136,171	0.0204	0.9796	95.63
9.5	6,412,470	24,412	0.0038	0.9962	93.68
10.5	6,358,641	16,121	0.0025	0.9975	93.32
11.5	5,398,827	6,421	0.0012	0.9988	93.09
12.5	5,215,051	40,189	0.0077	0.9923	92.97
13.5	5,125,087	293,630	0.0573	0.9427	92.26
14.5	4,611,468	43,753	0.0095	0.9905	86.97
15.5	4,369,464	85,451	0.0196	0.9804	86.15
16.5	4,239,070	11,676	0.0028	0.9972	84.46
17.5	4,360,247	109,946	0.0252	0.9748	84.23
18.5	4,098,755	8,181	0.0020	0.9980	82.11
19.5	3,938,255	67,204	0.0171	0.9829	81.94
20.5	3,855,372	24,201	0.0063	0.9937	80.54
21.5	3,723,771	488	0.0001	0.9999	80.04
22.5	3,652,473	10,767	0.0029	0.9971	80.03
23.5	3,413,955	15,472	0.0045	0.9955	79.79
24.5	3,393,576	4,102	0.0012	0.9988	79.43
25.5	3,336,574	10,676	0.0032	0.9968	79.33
26.5	2,999,299	19,461	0.0065	0.9935	79.08
27.5	2,900,171	19,873	0.0069	0.9931	78.57
28.5	2,813,571	5,396	0.0019	0.9981	78.03
29.5	2,810,766	46,149	0.0164	0.9836	77.88
30.5	2,366,210	12,654	0.0053	0.9947	76.60
31.5	2,352,955	4,992	0.0021	0.9979	76.19
32.5	2,344,524	3,130	0.0013	0.9987	76.03
33.5	2,304,190	15,437	0.0067	0.9933	75.93
34.5	2,286,719	6,840	0.0030	0.9970	75.42
35.5	1,680,057	14,441	0.0086	0.9914	75.19
36.5	1,589,829	5,245	0.0033	0.9967	74.55
37.5	1,351,782	4,445	0.0033	0.9967	74.30
38.5	1,335,712	1,437	0.0011	0.9989	74.06

DUKE ENERGY KENTUCKY

ACCOUNT 3560 OVERHEAD CONDUCTORS AND DEVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1910-2018 EXPERIENCE BAND 1956-2018

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	1,218,057	8,811	0.0072	0.9928	73.98
40.5	1,208,946	8,065	0.0067	0.9933	73.44
41.5	1,177,923	1,138	0.0010	0.9990	72.95
42.5	1,073,830	5,428	0.0051	0.9949	72.88
43.5	1,046,834	373	0.0004	0.9996	72.51
44.5	876,470	83	0.0001	0.9999	72.49
45.5	742,170	7	0.0000	1.0000	72.48
46.5	732,602	20,302	0.0277	0.9723	72.48
47.5	632,924	56	0.0001	0.9999	70.47
48.5	631,759	11,922	0.0189	0.9811	70.47
49.5	590,715	6,693	0.0113	0.9887	69.14
50.5	583,930	76	0.0001	0.9999	68.35
51.5	576,457	18	0.0000	1.0000	68.34
52.5	552,940	210	0.0004	0.9996	68.34
53.5	483,312	289	0.0006	0.9994	68.32
54.5	243,053	33	0.0001	0.9999	68.27
55.5	231,445	1,514	0.0065	0.9935	68.26
56.5	229,062	3,735	0.0163	0.9837	67.82
57.5	143,615	18	0.0001	0.9999	66.71
58.5	126,056	8	0.0001	0.9999	66.70
59.5	118,644	68	0.0006	0.9994	66.70
60.5	6,765	1	0.0001	0.9999	66.66
61.5	6,678		0.0000	1.0000	66.66
62.5	6,678	2	0.0003	0.9997	66.66
63.5	3,501		0.0000	1.0000	66.64
64.5	3,501	16	0.0046	0.9954	66.64
65.5	3,485		0.0000	1.0000	66.33
66.5	3,485		0.0000	1.0000	66.33
67.5	3,485		0.0000	1.0000	66.33
68.5	3,485	1	0.0002	0.9998	66.33
69.5	2,191		0.0000	1.0000	66.31
70.5	2,191		0.0000	1.0000	66.31
71.5	2,191		0.0000	1.0000	66.31
72.5	2,191		0.0000	1.0000	66.31
73.5	2,191		0.0000	1.0000	66.31
74.5	2,191		0.0000	1.0000	66.31
75.5	2,191		0.0000	1.0000	66.31
76.5	2,191		0.0000	1.0000	66.31
77.5	2,191		0.0000	1.0000	66.31
78.5	2,191		0.0000	1.0000	66.31

DUKE ENERGY KENTUCKY

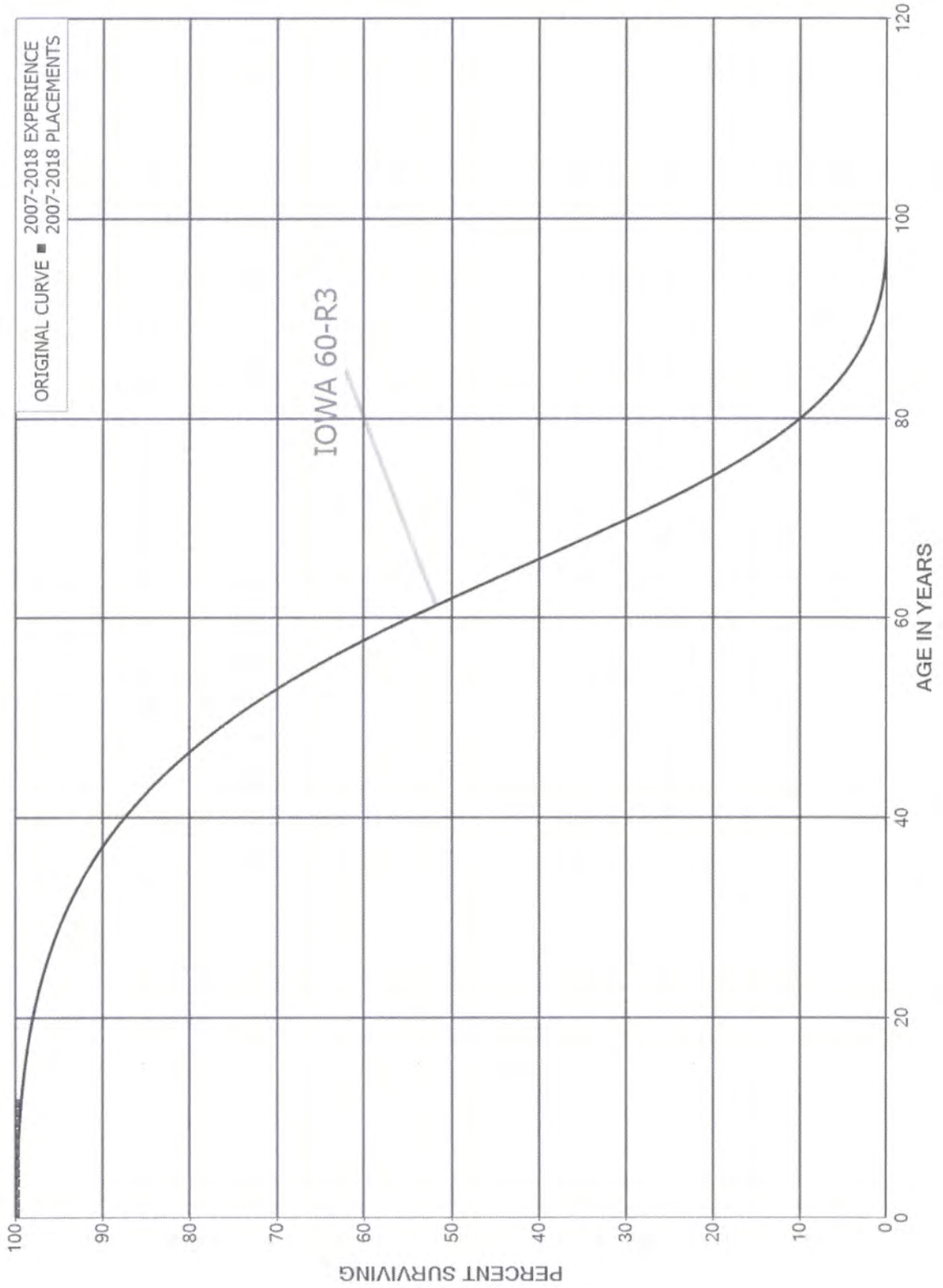
ACCOUNT 3560 OVERHEAD CONDUCTORS AND DEVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1910-2018 EXPERIENCE BAND 1956-2018

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	2,191	1,883	0.8596	0.1404	66.31
80.5	308		0.0000	1.0000	9.31
81.5	308		0.0000	1.0000	9.31
82.5	308		0.0000	1.0000	9.31
83.5	308		0.0000	1.0000	9.31
84.5	308		0.0000	1.0000	9.31
85.5	308		0.0000	1.0000	9.31
86.5	308		0.0000	1.0000	9.31
87.5	308		0.0000	1.0000	9.31
88.5	308	27	0.0889	0.9111	9.31
89.5	280		0.0000	1.0000	8.48
90.5	280		0.0000	1.0000	8.48
91.5	280		0.0000	1.0000	8.48
92.5	280	0	0.0006	0.9994	8.48
93.5					8.48

DUKE ENERGY KENTUCKY
ACCOUNT 3561 OVERHEAD CONDUCTORS AND DEVICES - CLEARING AND RIGHT OF WAY
ORIGINAL AND SMOOTH SURVIVOR CURVES



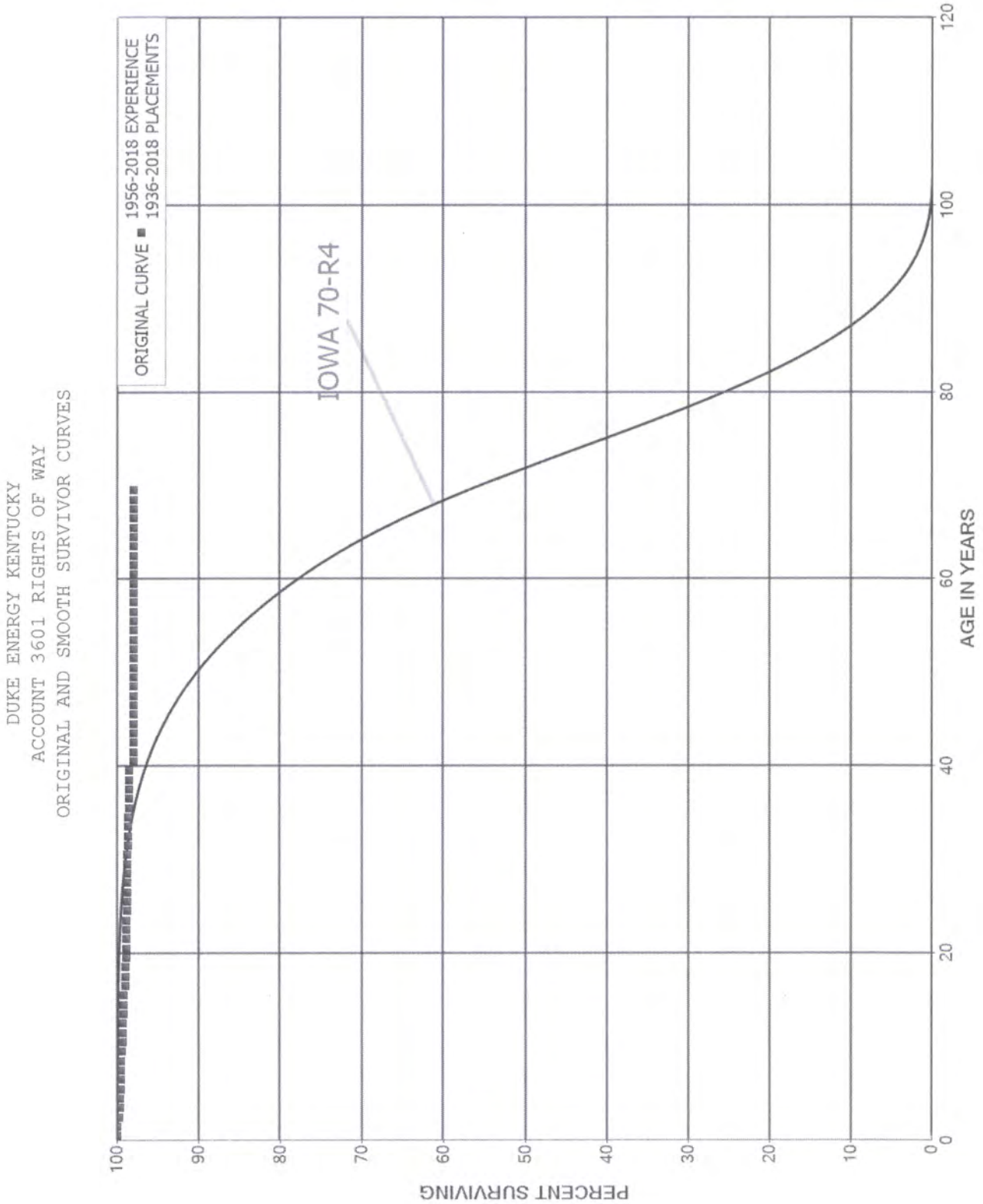
DUKE ENERGY KENTUCKY

ACCOUNT 3561 OVERHEAD CONDUCTORS AND DEVICES - CLEARING AND RIGHT OF WAY

ORIGINAL LIFE TABLE

PLACEMENT BAND 2007-2018 EXPERIENCE BAND 2007-2018

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	581,037		0.0000	1.0000	100.00
0.5	364,842		0.0000	1.0000	100.00
1.5	82,105		0.0000	1.0000	100.00
2.5	76,380		0.0000	1.0000	100.00
3.5	58,060		0.0000	1.0000	100.00
4.5	67,515		0.0000	1.0000	100.00
5.5	66,294		0.0000	1.0000	100.00
6.5	29,568		0.0000	1.0000	100.00
7.5	18,926		0.0000	1.0000	100.00
8.5	11,603		0.0000	1.0000	100.00
9.5	4,953		0.0000	1.0000	100.00
10.5	4,274		0.0000	1.0000	100.00
11.5					100.00


DUKE ENERGY KENTUCKY
ACCOUNT 3601 RIGHTS OF WAY
ORIGINAL AND SMOOTH SURVIVOR CURVES
ORIGINAL CURVE ■ 1956-2018 EXPERIENCE
1936-2018 PLACEMENTS
IOWA 70-R4
PERCENT SURVIVING
100
90
80
70
60
50
40
30
20
10
0
AGE IN YEARS
0
20
40
60
80
100
120

DUKE ENERGY KENTUCKY

ACCOUNT 3601 RIGHTS OF WAY

ORIGINAL LIFE TABLE

PLACEMENT BAND 1936-2018 EXPERIENCE BAND 1956-2018

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	4,449,109		0.0000	1.0000	100.00
0.5	4,455,773	948	0.0002	0.9998	100.00
1.5	4,444,499	10,790	0.0024	0.9976	99.98
2.5	4,436,324	3,382	0.0008	0.9992	99.74
3.5	4,445,669	1,615	0.0004	0.9996	99.66
4.5	4,452,400	3,935	0.0009	0.9991	99.62
5.5	4,450,230	209	0.0000	1.0000	99.54
6.5	4,458,828	1,239	0.0003	0.9997	99.53
7.5	4,460,938	980	0.0002	0.9998	99.50
8.5	4,461,793	2,431	0.0005	0.9995	99.48
9.5	4,460,165	5,195	0.0012	0.9988	99.43
10.5	4,455,301	2,117	0.0005	0.9995	99.31
11.5	4,453,646	1,347	0.0003	0.9997	99.26
12.5	4,457,196	1,492	0.0003	0.9997	99.23
13.5	4,460,869	139	0.0000	1.0000	99.20
14.5	4,462,304	1,621	0.0004	0.9996	99.20
15.5	4,463,714	8,197	0.0018	0.9982	99.16
16.5	4,456,083	1,492	0.0003	0.9997	98.98
17.5	4,459,147	2,116	0.0005	0.9995	98.95
18.5	4,459,894	1,091	0.0002	0.9998	98.90
19.5	4,458,835	1,160	0.0003	0.9997	98.88
20.5	4,457,675	79	0.0000	1.0000	98.85
21.5	4,457,596	388	0.0001	0.9999	98.85
22.5	4,390,430	1,110	0.0003	0.9997	98.84
23.5	4,210,369	1,535	0.0004	0.9996	98.81
24.5	4,065,950	650	0.0002	0.9998	98.78
25.5	3,898,675	179	0.0000	1.0000	98.76
26.5	3,691,560	554	0.0002	0.9998	98.76
27.5	3,406,906	410	0.0001	0.9999	98.74
28.5	3,168,140	750	0.0002	0.9998	98.73
29.5	2,894,032	883	0.0003	0.9997	98.71
30.5	2,730,887	344	0.0001	0.9999	98.68
31.5	2,356,360	1,255	0.0005	0.9995	98.67
32.5	2,128,223	323	0.0002	0.9998	98.61
33.5	1,905,671	411	0.0002	0.9998	98.60
34.5	1,764,642	459	0.0003	0.9997	98.58
35.5	1,525,874	268	0.0002	0.9998	98.55
36.5	1,410,776	139	0.0001	0.9999	98.53
37.5	1,286,666	113	0.0001	0.9999	98.52
38.5	1,166,095	143	0.0001	0.9999	98.52

DUKE ENERGY KENTUCKY

ACCOUNT 3601 RIGHTS OF WAY

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1936-2018 EXPERIENCE BAND 1956-2018

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	1,094,824	6,052	0.0055	0.9945	98.50
40.5	1,026,462	8	0.0000	1.0000	97.96
41.5	973,851	54	0.0001	0.9999	97.96
42.5	898,245	121	0.0001	0.9999	97.95
43.5	836,235	10	0.0000	1.0000	97.94
44.5	695,419	1	0.0000	1.0000	97.94
45.5	617,241		0.0000	1.0000	97.94
46.5	549,669		0.0000	1.0000	97.94
47.5	503,932	84	0.0002	0.9998	97.94
48.5	456,732		0.0000	1.0000	97.92
49.5	425,713		0.0000	1.0000	97.92
50.5	391,103		0.0000	1.0000	97.92
51.5	353,442		0.0000	1.0000	97.92
52.5	324,873		0.0000	1.0000	97.92
53.5	277,816	10	0.0000	1.0000	97.92
54.5	256,509		0.0000	1.0000	97.92
55.5	232,919	26	0.0001	0.9999	97.92
56.5	202,826	12	0.0001	0.9999	97.91
57.5	166,852	14	0.0001	0.9999	97.90
58.5	149,610		0.0000	1.0000	97.89
59.5	138,012		0.0000	1.0000	97.89
60.5	123,907		0.0000	1.0000	97.89
61.5	110,002		0.0000	1.0000	97.89
62.5	95,957		0.0000	1.0000	97.89
63.5	91,197		0.0000	1.0000	97.89
64.5	81,694		0.0000	1.0000	97.89
65.5	79,091		0.0000	1.0000	97.89
66.5	66,364		0.0000	1.0000	97.89
67.5	58,017		0.0000	1.0000	97.89
68.5	56,279		0.0000	1.0000	97.89
69.5	47,603		0.0000	1.0000	97.89
70.5	44,254		0.0000	1.0000	97.89
71.5	42,454		0.0000	1.0000	97.89
72.5	41,672		0.0000	1.0000	97.89
73.5	41,342		0.0000	1.0000	97.89
74.5	40,879		0.0000	1.0000	97.89
75.5	35,982		0.0000	1.0000	97.89
76.5	30,818		0.0000	1.0000	97.89
77.5	29,244		0.0000	1.0000	97.89
78.5	26,213		0.0000	1.0000	97.89

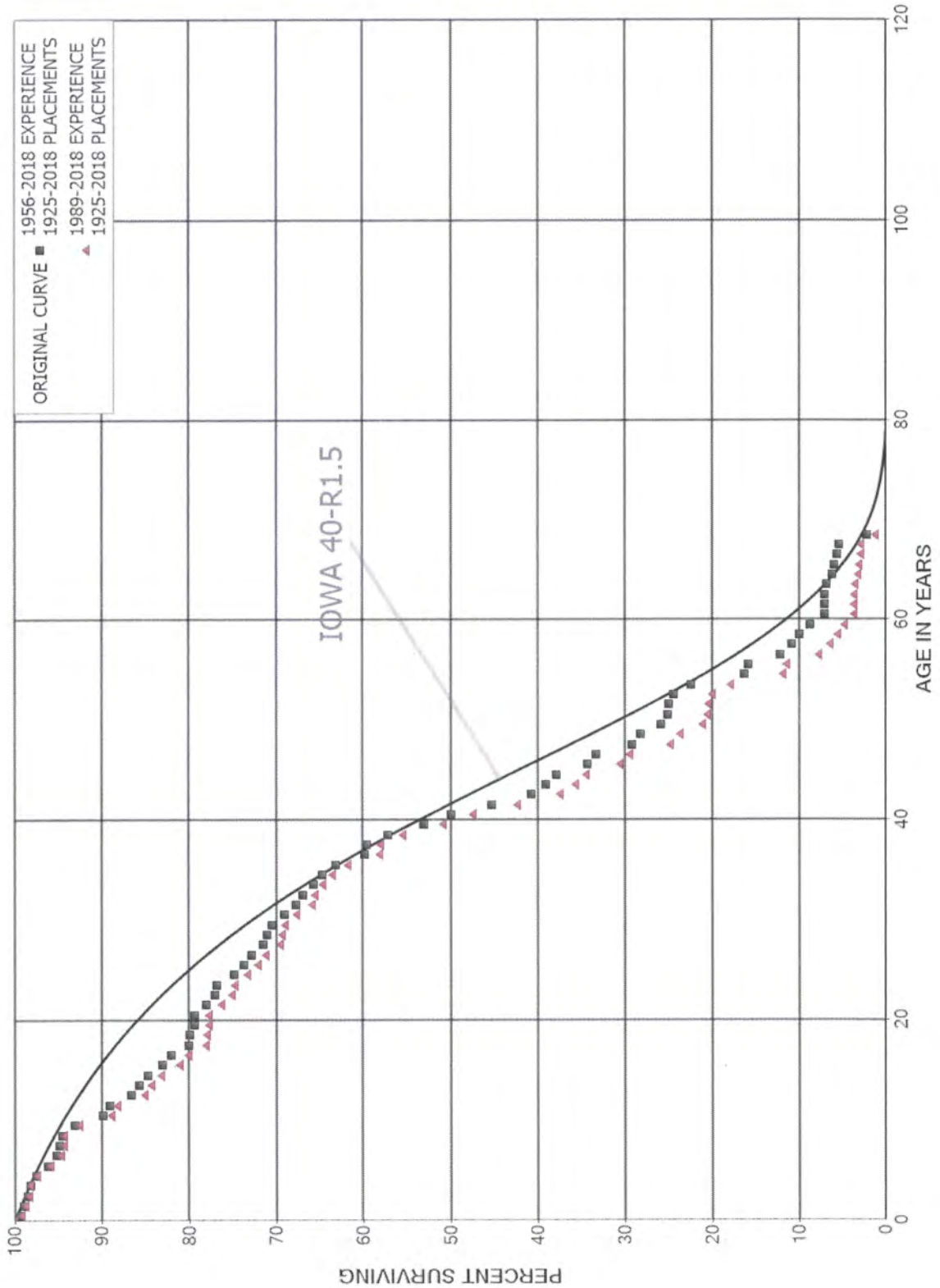
DUKE ENERGY KENTUCKY

ACCOUNT 3601 RIGHTS OF WAY

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1936-2018			EXPERIENCE BAND 1956-2018		
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	25,646		0.0000	1.0000	97.89
80.5	21,091		0.0000	1.0000	97.89
81.5					97.89

DUKE ENERGY KENTUCKY
ACCOUNT 3620 STATION EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY

ACCOUNT 3620 STATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1925-2018 EXPERIENCE BAND 1956-2018

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	50,363,010	370,036	0.0073	0.9927	100.00
0.5	43,007,461	159,104	0.0037	0.9963	99.27
1.5	39,710,598	146,435	0.0037	0.9963	98.90
2.5	37,552,508	143,606	0.0038	0.9962	98.53
3.5	37,092,270	246,743	0.0067	0.9933	98.16
4.5	33,525,852	457,170	0.0136	0.9864	97.50
5.5	30,521,190	304,432	0.0100	0.9900	96.17
6.5	28,634,714	116,992	0.0041	0.9959	95.21
7.5	28,308,915	91,817	0.0032	0.9968	94.83
8.5	28,121,044	429,224	0.0153	0.9847	94.52
9.5	27,123,137	929,963	0.0343	0.9657	93.08
10.5	24,614,432	220,866	0.0090	0.9910	89.88
11.5	23,409,636	657,671	0.0281	0.9719	89.08
12.5	21,482,479	211,516	0.0098	0.9902	86.58
13.5	19,458,789	225,307	0.0116	0.9884	85.72
14.5	18,205,061	364,244	0.0200	0.9800	84.73
15.5	16,987,624	197,237	0.0116	0.9884	83.03
16.5	15,946,377	380,695	0.0239	0.9761	82.07
17.5	14,429,654	28,706	0.0020	0.9980	80.11
18.5	14,382,436	92,639	0.0064	0.9936	79.95
19.5	14,274,356	16,820	0.0012	0.9988	79.44
20.5	14,235,475	229,414	0.0161	0.9839	79.34
21.5	13,785,874	174,197	0.0126	0.9874	78.06
22.5	13,538,481	52,327	0.0039	0.9961	77.08
23.5	12,784,779	325,544	0.0255	0.9745	76.78
24.5	12,455,858	188,127	0.0151	0.9849	74.83
25.5	11,597,311	141,363	0.0122	0.9878	73.70
26.5	10,740,683	197,119	0.0184	0.9816	72.80
27.5	9,239,514	47,632	0.0052	0.9948	71.46
28.5	9,189,150	74,737	0.0081	0.9919	71.09
29.5	9,188,006	191,663	0.0209	0.9791	70.51
30.5	8,193,775	159,492	0.0195	0.9805	69.04
31.5	7,929,344	93,289	0.0118	0.9882	67.70
32.5	7,826,201	139,248	0.0178	0.9822	66.90
33.5	7,676,110	115,932	0.0151	0.9849	65.71
34.5	7,258,547	169,985	0.0234	0.9766	64.72
35.5	6,652,044	359,170	0.0540	0.9460	63.20
36.5	5,892,965	19,237	0.0033	0.9967	59.79
37.5	5,751,306	228,811	0.0398	0.9602	59.60
38.5	5,324,326	384,813	0.0723	0.9277	57.23

DUKE ENERGY KENTUCKY

ACCOUNT 3620 STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1925-2018 EXPERIENCE BAND 1956-2018

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	4,610,744	276,871	0.0600	0.9400	53.09
40.5	4,333,873	404,598	0.0934	0.9066	49.90
41.5	3,909,862	391,895	0.1002	0.8998	45.24
42.5	3,022,626	124,110	0.0411	0.9589	40.71
43.5	2,897,534	90,027	0.0311	0.9689	39.04
44.5	2,596,369	241,916	0.0932	0.9068	37.82
45.5	2,336,468	66,695	0.0285	0.9715	34.30
46.5	2,239,814	277,601	0.1239	0.8761	33.32
47.5	1,833,976	64,857	0.0354	0.9646	29.19
48.5	1,722,833	143,482	0.0833	0.9167	28.16
49.5	1,481,649	43,846	0.0296	0.9704	25.81
50.5	1,437,802	8,158	0.0057	0.9943	25.05
51.5	1,378,968	26,850	0.0195	0.9805	24.91
52.5	1,301,849	110,161	0.0846	0.9154	24.42
53.5	1,191,688	323,777	0.2717	0.7283	22.36
54.5	867,911	22,007	0.0254	0.9746	16.28
55.5	845,904	196,403	0.2322	0.7678	15.87
56.5	649,502	72,634	0.1118	0.8882	12.18
57.5	576,867	43,793	0.0759	0.9241	10.82
58.5	533,074	65,996	0.1238	0.8762	10.00
59.5	467,078	88,459	0.1894	0.8106	8.76
60.5	378,619	95	0.0003	0.9997	7.10
61.5	378,524	1,117	0.0029	0.9971	7.10
62.5	377,408	11,990	0.0318	0.9682	7.08
63.5	365,417	38,084	0.1042	0.8958	6.86
64.5	327,334	8,926	0.0273	0.9727	6.14
65.5	318,407	19,948	0.0626	0.9374	5.97
66.5	298,459	9,663	0.0324	0.9676	5.60
67.5	288,797	175,517	0.6078	0.3922	5.42
68.5	113,279	3,547	0.0313	0.9687	2.13
69.5	109,732	6,907	0.0629	0.9371	2.06
70.5	102,825		0.0000	1.0000	1.93
71.5	102,825	2,935	0.0285	0.9715	1.93
72.5	99,890	4,990	0.0500	0.9500	1.87
73.5	94,900		0.0000	1.0000	1.78
74.5	94,900	40	0.0004	0.9996	1.78
75.5	94,861	73	0.0008	0.9992	1.78
76.5	94,788	1,590	0.0168	0.9832	1.78
77.5	93,197		0.0000	1.0000	1.75
78.5	93,197	435	0.0047	0.9953	1.75

DUKE ENERGY KENTUCKY

ACCOUNT 3620 STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1925-2018 EXPERIENCE BAND 1956-2018

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	92,762	6,434	0.0694	0.9306	1.74
80.5	86,328		0.0000	1.0000	1.62
81.5	86,328		0.0000	1.0000	1.62
82.5	86,328		0.0000	1.0000	1.62
83.5	86,328		0.0000	1.0000	1.62
84.5	86,328	51,525	0.5969	0.4031	1.62
85.5	34,803		0.0000	1.0000	0.65
86.5	34,803	34,803	1.0000		0.65
87.5					

DUKE ENERGY KENTUCKY

ACCOUNT 3620 STATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1925-2018 EXPERIENCE BAND 1989-2018

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	41,459,631	370,031	0.0089	0.9911	100.00
0.5	34,706,220	155,838	0.0045	0.9955	99.11
1.5	31,288,487	140,831	0.0045	0.9955	98.66
2.5	29,055,970	60,579	0.0021	0.9979	98.22
3.5	28,487,877	198,801	0.0070	0.9930	98.01
4.5	25,173,291	422,079	0.0168	0.9832	97.33
5.5	22,726,797	290,213	0.0128	0.9872	95.70
6.5	20,939,263	57,020	0.0027	0.9973	94.48
7.5	20,893,565	14,224	0.0007	0.9993	94.22
8.5	21,227,466	403,326	0.0190	0.9810	94.15
9.5	20,500,639	818,691	0.0399	0.9601	92.37
10.5	18,102,550	123,823	0.0068	0.9932	88.68
11.5	17,574,068	623,276	0.0355	0.9645	88.07
12.5	16,977,764	153,125	0.0090	0.9910	84.95
13.5	14,999,389	194,653	0.0130	0.9870	84.18
14.5	14,012,099	351,196	0.0251	0.9749	83.09
15.5	12,963,291	162,556	0.0125	0.9875	81.01
16.5	12,026,844	315,435	0.0262	0.9738	79.99
17.5	10,813,104	8,475	0.0008	0.9992	77.89
18.5	10,833,203	25,059	0.0023	0.9977	77.83
19.5	10,940,795	11,374	0.0010	0.9990	77.65
20.5	10,917,969	200,197	0.0183	0.9817	77.57
21.5	10,547,903	161,316	0.0153	0.9847	76.15
22.5	10,639,745	48,345	0.0045	0.9955	74.98
23.5	9,916,386	199,365	0.0201	0.9799	74.64
24.5	10,258,716	174,558	0.0170	0.9830	73.14
25.5	9,264,394	109,392	0.0118	0.9882	71.90
26.5	8,597,456	195,820	0.0228	0.9772	71.05
27.5	7,136,412	30,212	0.0042	0.9958	69.43
28.5	7,086,330	27,031	0.0038	0.9962	69.14
29.5	7,161,042	147,335	0.0206	0.9794	68.87
30.5	6,380,608	158,642	0.0249	0.9751	67.46
31.5	6,217,848	37,523	0.0060	0.9940	65.78
32.5	6,303,987	84,434	0.0134	0.9866	65.38
33.5	6,327,568	114,005	0.0180	0.9820	64.51
34.5	6,139,851	167,153	0.0272	0.9728	63.34
35.5	5,550,938	325,205	0.0586	0.9414	61.62
36.5	4,953,676	14,664	0.0030	0.9970	58.01
37.5	4,889,515	212,354	0.0434	0.9566	57.84
38.5	4,520,482	377,857	0.0836	0.9164	55.33

DUKE ENERGY KENTUCKY

ACCOUNT 3620 STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1925-2018 EXPERIENCE BAND 1989-2018

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	4,052,569	276,871	0.0683	0.9317	50.70
40.5	3,780,578	402,916	0.1066	0.8934	47.24
41.5	3,358,283	391,895	0.1167	0.8833	42.20
42.5	2,478,947	118,218	0.0477	0.9523	37.28
43.5	2,360,402	79,609	0.0337	0.9663	35.50
44.5	2,091,162	240,181	0.1149	0.8851	34.30
45.5	1,834,366	66,614	0.0363	0.9637	30.36
46.5	1,750,175	276,154	0.1578	0.8422	29.26
47.5	1,416,034	64,778	0.0457	0.9543	24.64
48.5	1,304,969	142,555	0.1092	0.8908	23.52
49.5	1,066,497	25,409	0.0238	0.9762	20.95
50.5	1,196,073	8,158	0.0068	0.9932	20.45
51.5	1,137,239	26,850	0.0236	0.9764	20.31
52.5	1,060,120	110,161	0.1039	0.8961	19.83
53.5	949,959	323,777	0.3408	0.6592	17.77
54.5	626,182	22,007	0.0351	0.9649	11.71
55.5	604,175	196,403	0.3251	0.6749	11.30
56.5	407,772	72,634	0.1781	0.8219	7.63
57.5	335,138	43,793	0.1307	0.8693	6.27
58.5	412,978	65,996	0.1598	0.8402	5.45
59.5	380,532	88,459	0.2325	0.7675	4.58
60.5	292,073	95	0.0003	0.9997	3.51
61.5	326,781	1,117	0.0034	0.9966	3.51
62.5	377,190	11,990	0.0318	0.9682	3.50
63.5	365,417	38,084	0.1042	0.8958	3.39
64.5	327,334	8,926	0.0273	0.9727	3.04
65.5	318,407	19,948	0.0626	0.9374	2.95
66.5	298,459	9,663	0.0324	0.9676	2.77
67.5	288,797	175,517	0.6078	0.3922	2.68
68.5	113,279	3,547	0.0313	0.9687	1.05
69.5	109,732	6,907	0.0629	0.9371	1.02
70.5	102,825		0.0000	1.0000	0.95
71.5	102,825	2,935	0.0285	0.9715	0.95
72.5	99,890	4,990	0.0500	0.9500	0.93
73.5	94,900		0.0000	1.0000	0.88
74.5	94,900	40	0.0004	0.9996	0.88
75.5	94,861	73	0.0008	0.9992	0.88
76.5	94,788	1,590	0.0168	0.9832	0.88
77.5	93,197		0.0000	1.0000	0.86
78.5	93,197	435	0.0047	0.9953	0.86

DUKE ENERGY KENTUCKY

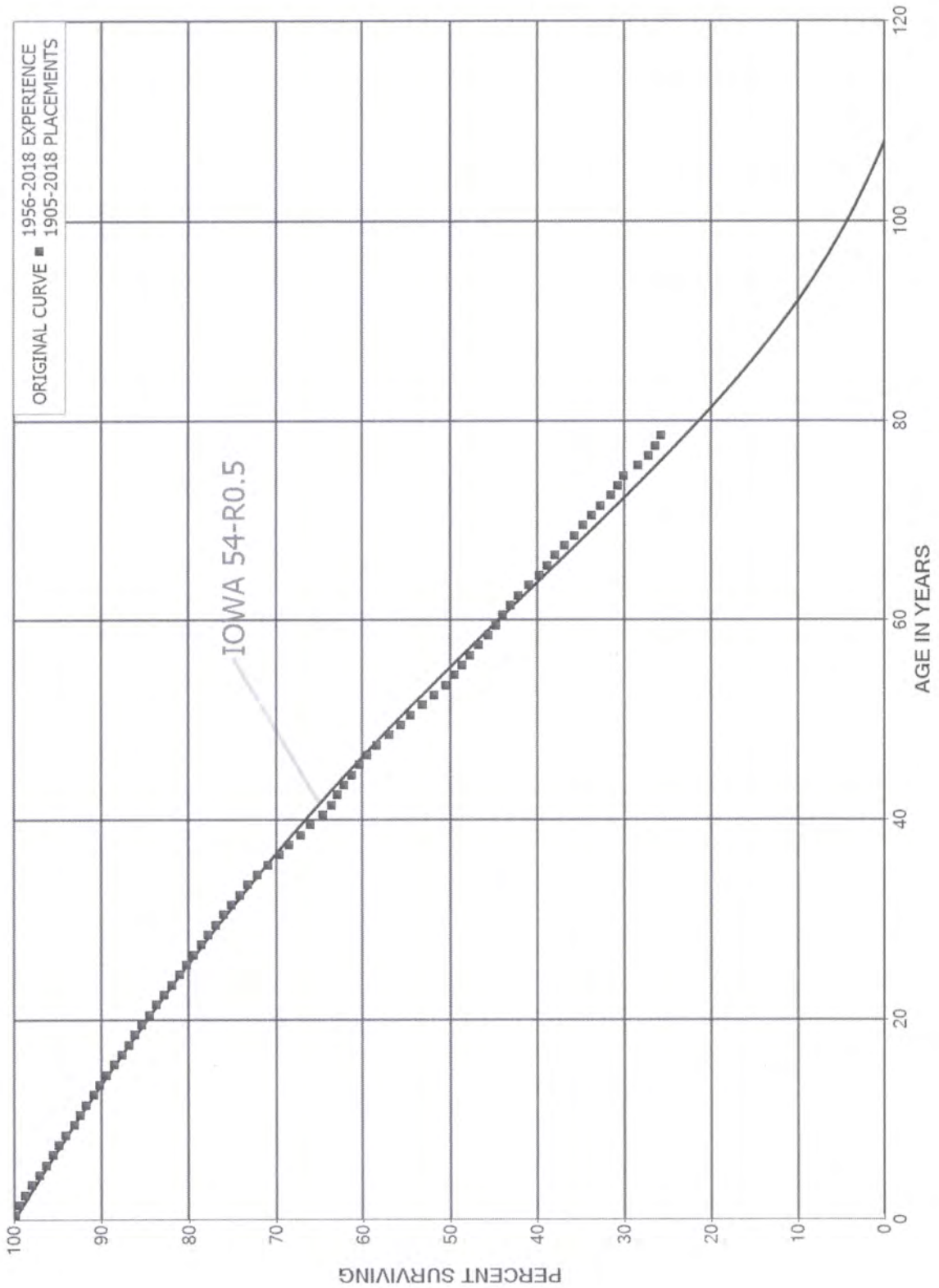
ACCOUNT 3620 STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1925-2018 EXPERIENCE BAND 1989-2018

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	92,762	6,434	0.0694	0.9306	0.86
80.5	86,328		0.0000	1.0000	0.80
81.5	86,328		0.0000	1.0000	0.80
82.5	86,328		0.0000	1.0000	0.80
83.5	86,328		0.0000	1.0000	0.80
84.5	86,328	51,525	0.5969	0.4031	0.80
85.5	34,803		0.0000	1.0000	0.32
86.5	34,803	34,803	1.0000		0.32
87.5					

DUKE ENERGY KENTUCKY
ACCOUNT 3640 POLES, TOWERS AND FIXTURES
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY

ACCOUNT 3640 POLES, TOWERS AND FIXTURES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1905-2018 EXPERIENCE BAND 1956-2018

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	89,978,311	111,427	0.0012	0.9988	100.00
0.5	81,660,063	381,795	0.0047	0.9953	99.88
1.5	76,937,873	543,868	0.0071	0.9929	99.41
2.5	70,873,838	562,245	0.0079	0.9921	98.71
3.5	61,464,052	537,639	0.0087	0.9913	97.92
4.5	55,782,598	417,780	0.0075	0.9925	97.07
5.5	53,008,197	435,244	0.0082	0.9918	96.34
6.5	50,268,574	375,606	0.0075	0.9925	95.55
7.5	49,290,957	402,877	0.0082	0.9918	94.83
8.5	47,746,895	492,189	0.0103	0.9897	94.06
9.5	45,642,000	364,947	0.0080	0.9920	93.09
10.5	45,327,245	299,996	0.0066	0.9934	92.35
11.5	43,830,652	406,909	0.0093	0.9907	91.73
12.5	41,815,383	317,886	0.0076	0.9924	90.88
13.5	40,311,269	340,331	0.0084	0.9916	90.19
14.5	39,268,980	389,494	0.0099	0.9901	89.43
15.5	38,074,730	401,389	0.0105	0.9895	88.54
16.5	37,612,012	325,421	0.0087	0.9913	87.61
17.5	36,630,558	302,731	0.0083	0.9917	86.85
18.5	35,328,364	310,844	0.0088	0.9912	86.13
19.5	33,702,131	330,604	0.0098	0.9902	85.38
20.5	31,925,997	300,571	0.0094	0.9906	84.54
21.5	30,476,751	313,858	0.0103	0.9897	83.74
22.5	28,809,865	339,577	0.0118	0.9882	82.88
23.5	26,828,606	269,057	0.0100	0.9900	81.90
24.5	24,757,048	233,050	0.0094	0.9906	81.08
25.5	22,794,948	218,563	0.0096	0.9904	80.32
26.5	20,927,756	235,905	0.0113	0.9887	79.55
27.5	19,348,720	212,369	0.0110	0.9890	78.65
28.5	18,164,616	195,400	0.0108	0.9892	77.79
29.5	16,254,664	177,341	0.0109	0.9891	76.95
30.5	15,341,592	188,850	0.0123	0.9877	76.11
31.5	14,040,228	189,394	0.0135	0.9865	75.18
32.5	13,064,481	148,643	0.0114	0.9886	74.16
33.5	12,198,010	194,437	0.0159	0.9841	73.32
34.5	11,377,883	193,565	0.0170	0.9830	72.15
35.5	10,488,804	191,051	0.0182	0.9818	70.92
36.5	9,622,774	162,982	0.0169	0.9831	69.63
37.5	8,701,247	168,891	0.0194	0.9806	68.45
38.5	7,640,466	115,811	0.0152	0.9848	67.12

DUKE ENERGY KENTUCKY

ACCOUNT 3640 POLES, TOWERS AND FIXTURES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1905-2018 EXPERIENCE BAND 1956-2018

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	6,930,645	160,343	0.0231	0.9769	66.10
40.5	6,317,520	90,515	0.0143	0.9857	64.58
41.5	5,787,719	63,659	0.0110	0.9890	63.65
42.5	5,447,495	70,775	0.0130	0.9870	62.95
43.5	5,116,852	66,494	0.0130	0.9870	62.13
44.5	4,755,800	69,739	0.0147	0.9853	61.32
45.5	4,262,252	64,487	0.0151	0.9849	60.43
46.5	3,862,618	75,578	0.0196	0.9804	59.51
47.5	3,532,686	86,939	0.0246	0.9754	58.35
48.5	3,200,450	72,362	0.0226	0.9774	56.91
49.5	2,922,566	59,078	0.0202	0.9798	55.62
50.5	2,671,306	64,444	0.0241	0.9759	54.50
51.5	2,453,077	61,542	0.0251	0.9749	53.18
52.5	2,244,797	58,225	0.0259	0.9741	51.85
53.5	2,020,356	38,696	0.0192	0.9808	50.51
54.5	1,812,269	33,644	0.0186	0.9814	49.54
55.5	1,680,067	31,125	0.0185	0.9815	48.62
56.5	1,544,622	32,186	0.0208	0.9792	47.72
57.5	1,368,761	33,793	0.0247	0.9753	46.72
58.5	1,245,393	23,652	0.0190	0.9810	45.57
59.5	1,115,949	17,343	0.0155	0.9845	44.70
60.5	1,001,985	21,875	0.0218	0.9782	44.01
61.5	889,051	17,704	0.0199	0.9801	43.05
62.5	795,126	23,484	0.0295	0.9705	42.19
63.5	679,503	19,457	0.0286	0.9714	40.95
64.5	589,952	14,345	0.0243	0.9757	39.77
65.5	509,886	11,030	0.0216	0.9784	38.81
66.5	429,011	12,815	0.0299	0.9701	37.97
67.5	366,497	10,494	0.0286	0.9714	36.83
68.5	310,034	8,911	0.0287	0.9713	35.78
69.5	268,973	8,201	0.0305	0.9695	34.75
70.5	242,865	6,950	0.0286	0.9714	33.69
71.5	214,108	8,137	0.0380	0.9620	32.73
72.5	197,733	4,756	0.0241	0.9759	31.48
73.5	182,266	3,956	0.0217	0.9783	30.73
74.5	173,078	9,873	0.0570	0.9430	30.06
75.5	160,170	6,796	0.0424	0.9576	28.34
76.5	138,073	3,816	0.0276	0.9724	27.14
77.5	124,487	3,022	0.0243	0.9757	26.39
78.5	108,798	4,530	0.0416	0.9584	25.75

DUKE ENERGY KENTUCKY

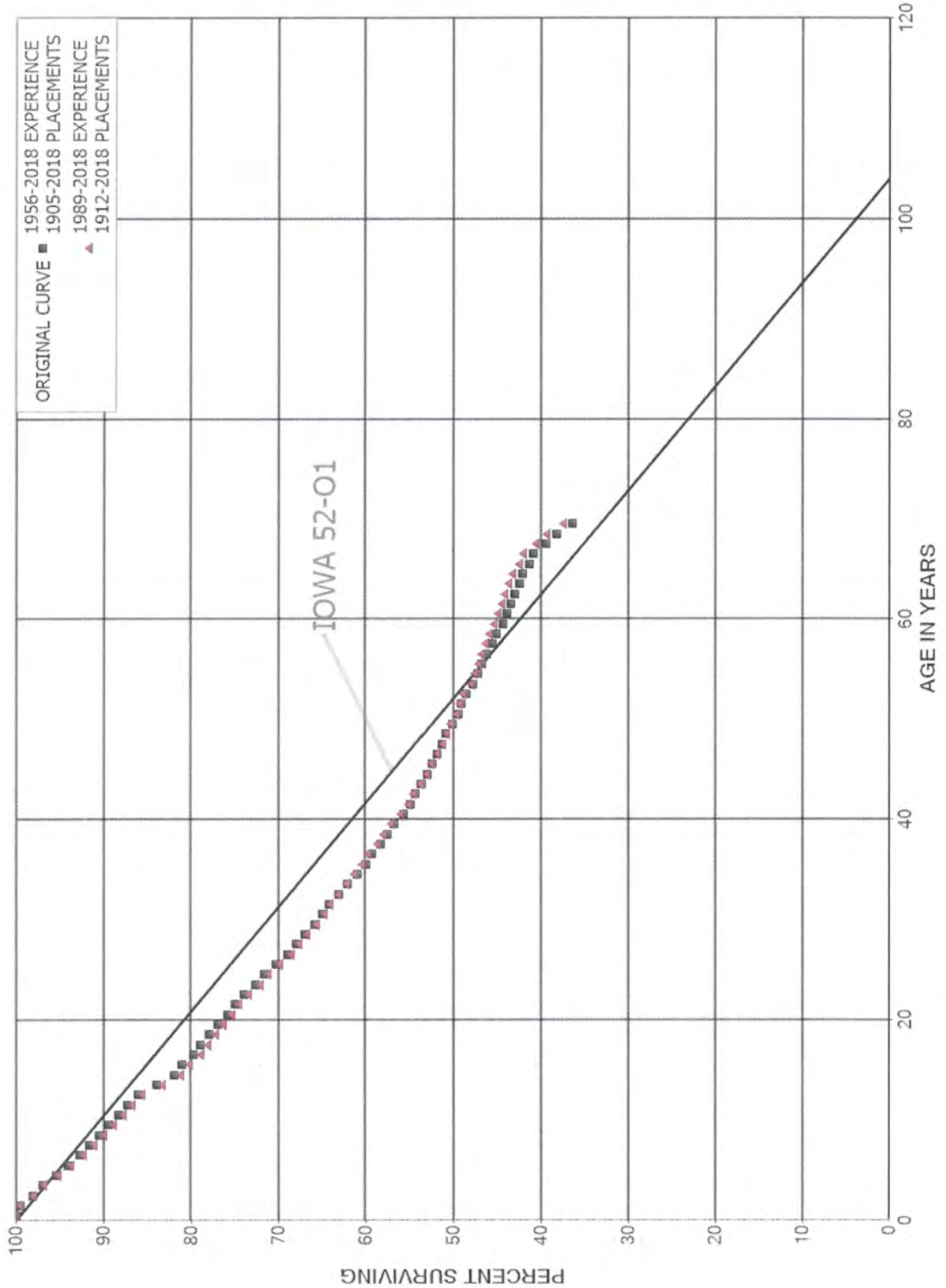
ACCOUNT 3640 POLES, TOWERS AND FIXTURES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1905-2018 EXPERIENCE BAND 1956-2018

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	97,298	2,541	0.0261	0.9739	24.68
80.5	86,317	2,664	0.0309	0.9691	24.03
81.5	75,200	3,661	0.0487	0.9513	23.29
82.5	69,277	3,893	0.0562	0.9438	22.16
83.5	57,790	2,986	0.0517	0.9483	20.91
84.5	45,973	3,839	0.0835	0.9165	19.83
85.5	33,795	3,378	0.1000	0.9000	18.18
86.5	25,730	3,482	0.1353	0.8647	16.36
87.5	15,585	4,014	0.2575	0.7425	14.15
88.5	9,701	3,099	0.3195	0.6805	10.50
89.5	5,406	1,229	0.2272	0.7728	7.15
90.5	3,268	572	0.1750	0.8250	5.52
91.5	2,148	307	0.1431	0.8569	4.56
92.5	1,360	23	0.0167	0.9833	3.90
93.5	602	9	0.0156	0.9844	3.84
94.5	510	12	0.0242	0.9758	3.78
95.5	461	101	0.2193	0.7807	3.69
96.5	320	81	0.2525	0.7475	2.88
97.5	204	6	0.0271	0.9729	2.15
98.5	194	33	0.1686	0.8314	2.09
99.5	141	3	0.0234	0.9766	1.74
100.5	117	48	0.4100	0.5900	1.70
101.5	48	22	0.4659	0.5341	1.00
102.5	25	0	0.0012	0.9988	0.54
103.5					0.54

DUKE ENERGY KENTUCKY
ACCOUNT 3650 OVERHEAD CONDUCTORS AND DEVICES
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY

ACCOUNT 3650 OVERHEAD CONDUCTORS AND DEVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1905-2018 EXPERIENCE BAND 1956-2018

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	135,384,532	147,634	0.0011	0.9989	100.00
0.5	124,966,402	484,750	0.0039	0.9961	99.89
1.5	121,944,018	1,762,255	0.0145	0.9855	99.50
2.5	119,932,441	1,408,920	0.0117	0.9883	98.07
3.5	114,559,125	1,801,722	0.0157	0.9843	96.91
4.5	111,103,071	1,519,987	0.0137	0.9863	95.39
5.5	104,635,765	1,525,851	0.0146	0.9854	94.08
6.5	93,915,860	1,146,546	0.0122	0.9878	92.71
7.5	92,210,736	1,086,177	0.0118	0.9882	91.58
8.5	86,094,253	1,032,625	0.0120	0.9880	90.50
9.5	82,603,240	1,084,857	0.0131	0.9869	89.42
10.5	79,618,376	910,882	0.0114	0.9886	88.24
11.5	75,354,994	989,392	0.0131	0.9869	87.23
12.5	68,751,633	1,726,645	0.0251	0.9749	86.09
13.5	64,266,330	1,478,211	0.0230	0.9770	83.92
14.5	57,863,307	691,404	0.0119	0.9881	81.99
15.5	52,037,792	798,924	0.0154	0.9846	81.01
16.5	51,105,480	557,219	0.0109	0.9891	79.77
17.5	48,701,699	601,006	0.0123	0.9877	78.90
18.5	43,385,513	533,039	0.0123	0.9877	77.93
19.5	41,067,882	579,876	0.0141	0.9859	76.97
20.5	38,545,228	457,076	0.0119	0.9881	75.88
21.5	37,141,512	529,486	0.0143	0.9857	74.98
22.5	35,319,553	638,572	0.0181	0.9819	73.91
23.5	32,800,478	452,609	0.0138	0.9862	72.58
24.5	29,062,442	502,852	0.0173	0.9827	71.58
25.5	26,657,292	515,340	0.0193	0.9807	70.34
26.5	24,107,338	359,499	0.0149	0.9851	68.98
27.5	21,788,351	316,518	0.0145	0.9855	67.95
28.5	20,210,334	339,341	0.0168	0.9832	66.96
29.5	17,666,122	252,887	0.0143	0.9857	65.84
30.5	17,013,534	202,847	0.0119	0.9881	64.90
31.5	15,606,106	249,459	0.0160	0.9840	64.12
32.5	14,460,599	234,590	0.0162	0.9838	63.10
33.5	13,352,857	251,371	0.0188	0.9812	62.07
34.5	12,497,947	205,502	0.0164	0.9836	60.91
35.5	11,308,708	119,361	0.0106	0.9894	59.90
36.5	10,586,951	182,374	0.0172	0.9828	59.27
37.5	9,948,778	122,680	0.0123	0.9877	58.25
38.5	9,002,758	133,993	0.0149	0.9851	57.53

DUKE ENERGY KENTUCKY

ACCOUNT 3650 OVERHEAD CONDUCTORS AND DEVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1905-2018 EXPERIENCE BAND 1956-2018

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	8,218,708	149,719	0.0182	0.9818	56.68
40.5	7,770,641	105,592	0.0136	0.9864	55.64
41.5	7,342,033	79,585	0.0108	0.9892	54.89
42.5	6,908,934	88,974	0.0129	0.9871	54.29
43.5	6,384,038	72,654	0.0114	0.9886	53.59
44.5	5,749,311	65,167	0.0113	0.9887	52.98
45.5	5,031,367	53,444	0.0106	0.9894	52.38
46.5	4,615,865	51,173	0.0111	0.9889	51.83
47.5	4,144,574	37,095	0.0090	0.9910	51.25
48.5	3,684,040	50,433	0.0137	0.9863	50.79
49.5	3,421,293	44,226	0.0129	0.9871	50.10
50.5	3,140,812	23,663	0.0075	0.9925	49.45
51.5	2,909,876	30,860	0.0106	0.9894	49.08
52.5	2,587,928	44,603	0.0172	0.9828	48.56
53.5	2,280,571	25,173	0.0110	0.9890	47.72
54.5	1,983,079	19,363	0.0098	0.9902	47.19
55.5	1,767,876	20,435	0.0116	0.9884	46.73
56.5	1,572,106	23,405	0.0149	0.9851	46.19
57.5	1,369,596	14,818	0.0108	0.9892	45.50
58.5	1,262,686	19,320	0.0153	0.9847	45.01
59.5	1,170,724	13,584	0.0116	0.9884	44.32
60.5	1,064,335	9,655	0.0091	0.9909	43.81
61.5	973,364	10,024	0.0103	0.9897	43.41
62.5	879,784	10,568	0.0120	0.9880	42.96
63.5	788,246	7,822	0.0099	0.9901	42.45
64.5	682,545	12,589	0.0184	0.9816	42.03
65.5	628,489	6,129	0.0098	0.9902	41.25
66.5	519,701	18,081	0.0348	0.9652	40.85
67.5	449,053	13,991	0.0312	0.9688	39.43
68.5	357,072	17,297	0.0484	0.9516	38.20
69.5	306,926	3,195	0.0104	0.9896	36.35
70.5	288,222	2,119	0.0074	0.9926	35.97
71.5	258,990	720	0.0028	0.9972	35.71
72.5	248,679	711	0.0029	0.9971	35.61
73.5	244,229	549	0.0022	0.9978	35.51
74.5	242,972	2,009	0.0083	0.9917	35.43
75.5	235,564	5,615	0.0238	0.9762	35.13
76.5	220,559	560	0.0025	0.9975	34.30
77.5	209,243	786	0.0038	0.9962	34.21
78.5	207,989	1,443	0.0069	0.9931	34.08

DUKE ENERGY KENTUCKY

ACCOUNT 3650 OVERHEAD CONDUCTORS AND DEVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1905-2018 EXPERIENCE BAND 1956-2018

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	197,478	7,052	0.0357	0.9643	33.84
80.5	173,674	1,527	0.0088	0.9912	32.64
81.5	172,147	1,300	0.0076	0.9924	32.35
82.5	170,847	928	0.0054	0.9946	32.10
83.5	169,919	564	0.0033	0.9967	31.93
84.5	169,355	1,869	0.0110	0.9890	31.82
85.5	167,486	3,280	0.0196	0.9804	31.47
86.5	164,789	2,521	0.0153	0.9847	30.86
87.5	162,959	7,460	0.0458	0.9542	30.38
88.5	155,499	9,372	0.0603	0.9397	28.99
89.5	146,127	1,735	0.0119	0.9881	27.25
90.5	144,392	13,545	0.0938	0.9062	26.92
91.5	130,823	1,817	0.0139	0.9861	24.40
92.5	129,004	6,335	0.0491	0.9509	24.06
93.5					22.88

DUKE ENERGY KENTUCKY

ACCOUNT 3650 OVERHEAD CONDUCTORS AND DEVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1912-2018 EXPERIENCE BAND 1989-2018

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	113,388,550	115,918	0.0010	0.9990	100.00
0.5	104,007,899	366,377	0.0035	0.9965	99.90
1.5	102,490,527	1,659,204	0.0162	0.9838	99.55
2.5	101,666,568	1,224,242	0.0120	0.9880	97.93
3.5	97,564,693	1,698,712	0.0174	0.9826	96.76
4.5	94,928,290	1,427,850	0.0150	0.9850	95.07
5.5	89,619,455	1,425,384	0.0159	0.9841	93.64
6.5	79,865,721	1,030,328	0.0129	0.9871	92.15
7.5	78,901,036	951,072	0.0121	0.9879	90.96
8.5	73,982,614	898,300	0.0121	0.9879	89.87
9.5	71,447,973	933,881	0.0131	0.9869	88.77
10.5	68,998,885	769,409	0.0112	0.9888	87.61
11.5	65,318,409	878,871	0.0135	0.9865	86.64
12.5	59,305,933	1,629,883	0.0275	0.9725	85.47
13.5	55,417,058	1,389,135	0.0251	0.9749	83.12
14.5	49,801,209	610,313	0.0123	0.9877	81.04
15.5	44,886,605	715,374	0.0159	0.9841	80.05
16.5	44,540,535	460,180	0.0103	0.9897	78.77
17.5	42,672,059	501,156	0.0117	0.9883	77.96
18.5	38,036,943	437,964	0.0115	0.9885	77.04
19.5	36,112,866	447,826	0.0124	0.9876	76.15
20.5	34,040,348	376,887	0.0111	0.9889	75.21
21.5	33,002,287	469,259	0.0142	0.9858	74.38
22.5	31,622,542	567,469	0.0179	0.9821	73.32
23.5	29,541,862	405,150	0.0137	0.9863	72.00
24.5	26,219,170	461,476	0.0176	0.9824	71.02
25.5	24,101,174	468,944	0.0195	0.9805	69.77
26.5	21,833,986	290,774	0.0133	0.9867	68.41
27.5	19,843,221	266,557	0.0134	0.9866	67.50
28.5	18,422,888	297,018	0.0161	0.9839	66.59
29.5	16,034,168	213,129	0.0133	0.9867	65.52
30.5	15,279,042	171,097	0.0112	0.9888	64.65
31.5	14,016,873	199,168	0.0142	0.9858	63.92
32.5	13,035,688	187,839	0.0144	0.9856	63.01
33.5	12,096,276	186,038	0.0154	0.9846	62.11
34.5	11,448,003	164,149	0.0143	0.9857	61.15
35.5	10,367,674	112,825	0.0109	0.9891	60.27
36.5	9,813,750	176,101	0.0179	0.9821	59.62
37.5	9,261,862	118,793	0.0128	0.9872	58.55
38.5	8,426,130	131,624	0.0156	0.9844	57.80

DUKE ENERGY KENTUCKY

ACCOUNT 3650 OVERHEAD CONDUCTORS AND DEVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1912-2018 EXPERIENCE BAND 1989-2018

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	7,686,298	148,231	0.0193	0.9807	56.89
40.5	7,262,638	104,594	0.0144	0.9856	55.80
41.5	6,878,294	77,665	0.0113	0.9887	54.99
42.5	6,464,556	87,987	0.0136	0.9864	54.37
43.5	5,946,505	72,017	0.0121	0.9879	53.63
44.5	5,313,763	64,291	0.0121	0.9879	52.98
45.5	4,602,626	52,891	0.0115	0.9885	52.34
46.5	4,218,527	50,954	0.0121	0.9879	51.74
47.5	3,761,612	36,697	0.0098	0.9902	51.12
48.5	3,302,407	31,910	0.0097	0.9903	50.62
49.5	3,069,072	37,777	0.0123	0.9877	50.13
50.5	2,821,340	20,492	0.0073	0.9927	49.51
51.5	2,593,575	24,930	0.0096	0.9904	49.15
52.5	2,277,557	40,432	0.0178	0.9822	48.68
53.5	1,974,370	16,841	0.0085	0.9915	47.81
54.5	1,685,210	15,091	0.0090	0.9910	47.41
55.5	1,474,279	13,044	0.0088	0.9912	46.98
56.5	1,286,076	12,267	0.0095	0.9905	46.57
57.5	1,094,705	8,760	0.0080	0.9920	46.12
58.5	993,853	11,957	0.0120	0.9880	45.75
59.5	909,254	10,246	0.0113	0.9887	45.20
60.5	825,793	6,728	0.0081	0.9919	44.69
61.5	737,780	6,909	0.0094	0.9906	44.33
62.5	647,314	5,679	0.0088	0.9912	43.91
63.5	788,064	7,822	0.0099	0.9901	43.53
64.5	682,363	12,589	0.0184	0.9816	43.10
65.5	628,308	6,129	0.0098	0.9902	42.30
66.5	519,691	18,081	0.0348	0.9652	41.89
67.5	449,043	13,991	0.0312	0.9688	40.43
68.5	357,062	17,297	0.0484	0.9516	39.17
69.5	306,916	3,195	0.0104	0.9896	37.27
70.5	288,212	2,119	0.0074	0.9926	36.89
71.5	258,980	720	0.0028	0.9972	36.62
72.5	248,669	711	0.0029	0.9971	36.51
73.5	244,219	549	0.0022	0.9978	36.41
74.5	242,961	2,009	0.0083	0.9917	36.33
75.5	235,554	5,615	0.0238	0.9762	36.03
76.5	220,559	560	0.0025	0.9975	35.17
77.5	209,243	786	0.0038	0.9962	35.08
78.5	207,989	1,443	0.0069	0.9931	34.95

DUKE ENERGY KENTUCKY

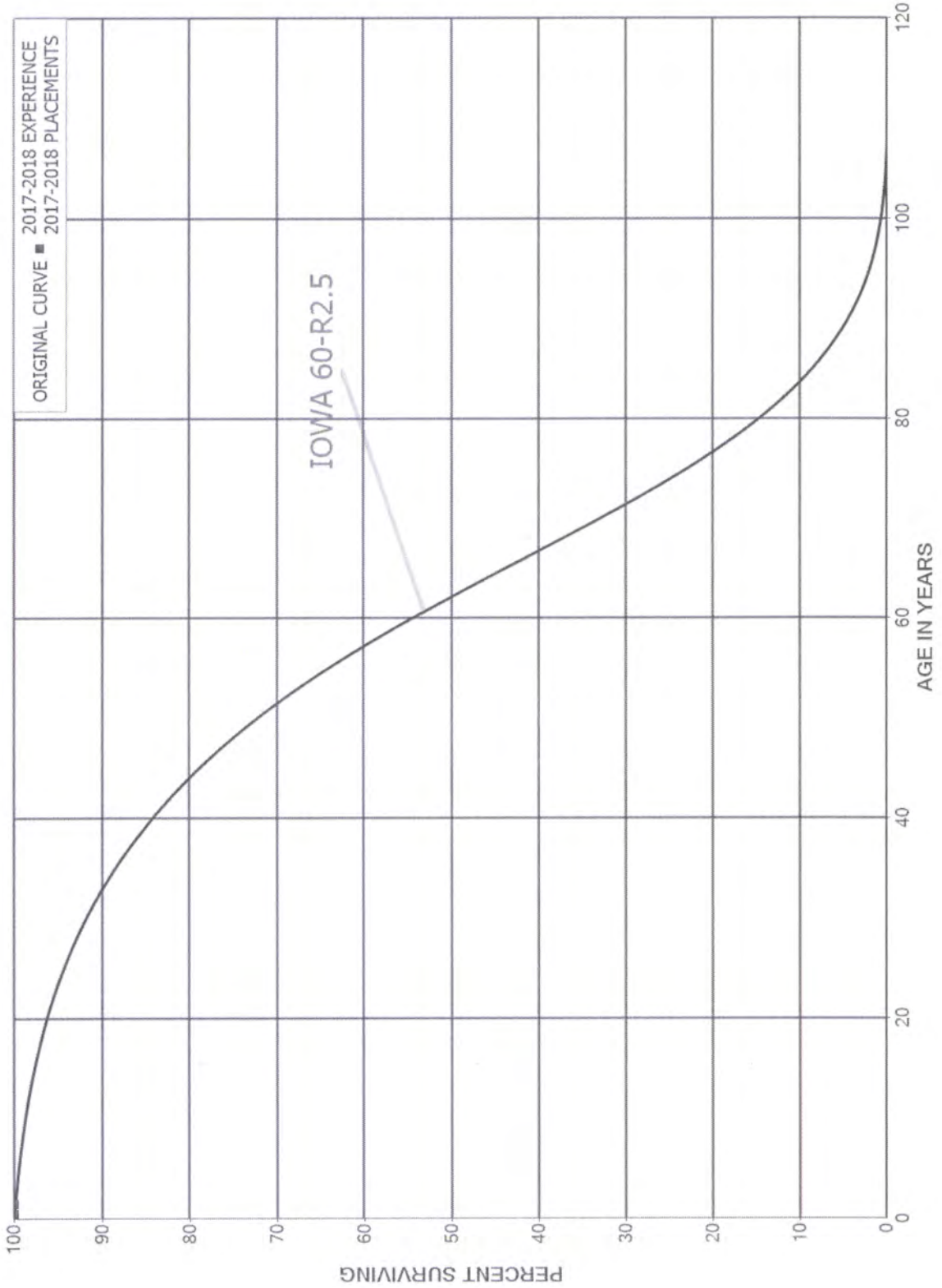
ACCOUNT 3650 OVERHEAD CONDUCTORS AND DEVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1912-2018 EXPERIENCE BAND 1989-2018

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	197,478	7,052	0.0357	0.9643	34.70
80.5	173,674	1,527	0.0088	0.9912	33.47
81.5	172,147	1,300	0.0076	0.9924	33.17
82.5	170,847	928	0.0054	0.9946	32.92
83.5	169,919	564	0.0033	0.9967	32.74
84.5	169,355	1,869	0.0110	0.9890	32.63
85.5	167,486	3,280	0.0196	0.9804	32.27
86.5	164,789	2,521	0.0153	0.9847	31.64
87.5	162,959	7,460	0.0458	0.9542	31.16
88.5	155,499	9,372	0.0603	0.9397	29.73
89.5	146,127	1,735	0.0119	0.9881	27.94
90.5	144,392	13,545	0.0938	0.9062	27.61
91.5	130,823	1,817	0.0139	0.9861	25.02
92.5	129,004	6,335	0.0491	0.9509	24.67
93.5					23.46

DUKE ENERGY KENTUCKY
ACCOUNT 3651 OVERHEAD CONDUCTORS AND DEVICES - CLEARING AND RIGHT OF WAY
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY

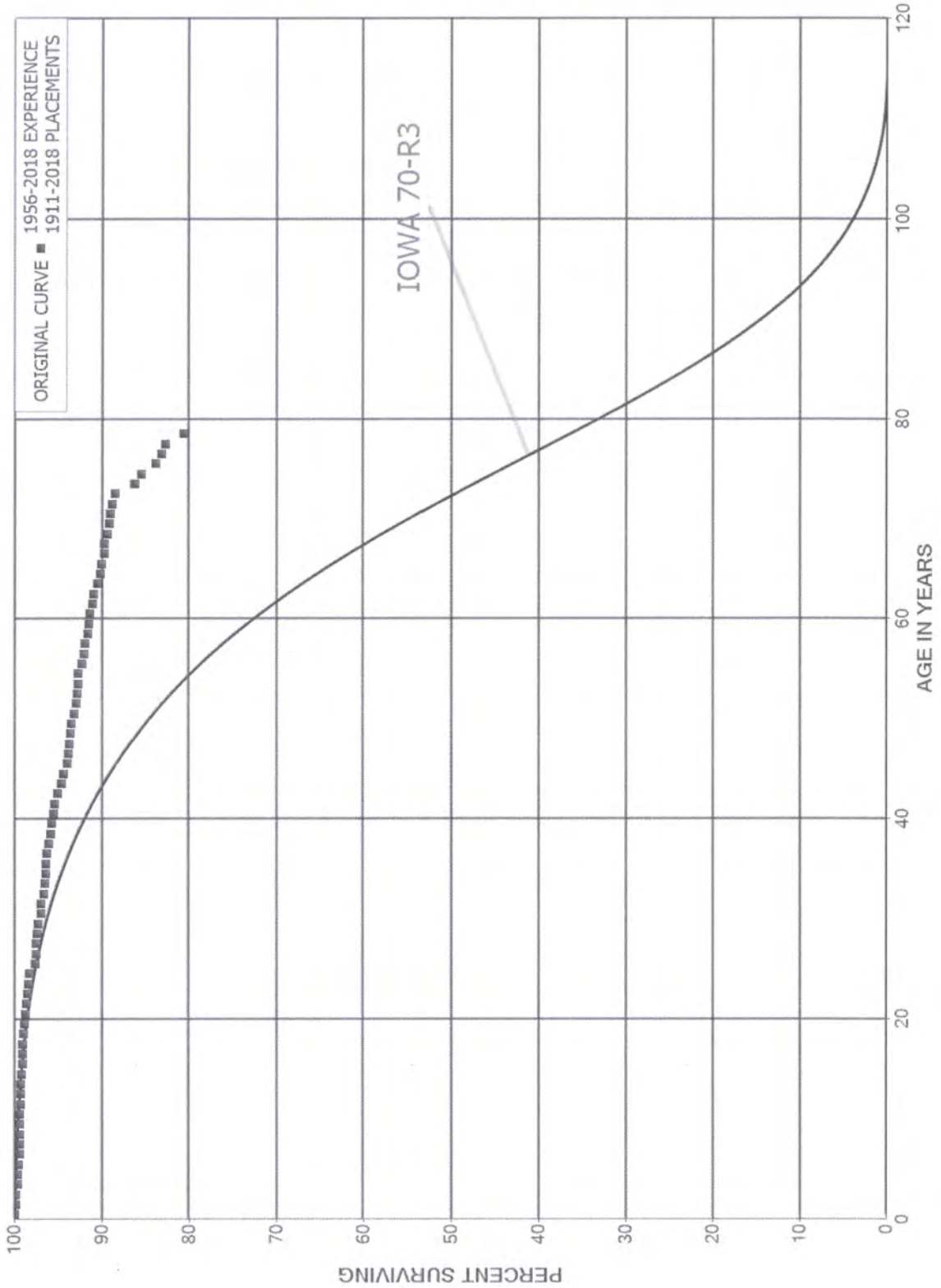
ACCOUNT 3651 OVERHEAD CONDUCTORS AND DEVICES - CLEARING AND RIGHT OF WAY

ORIGINAL LIFE TABLE

PLACEMENT BAND 2017-2018 EXPERIENCE BAND 2017-2018

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	4,808,993		0.0000	1.0000	100.00
0.5	4,136,476		0.0000	1.0000	100.00
1.5					100.00

DUKE ENERGY KENTUCKY
ACCOUNT 3660 UNDERGROUND CONDUIT
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY

ACCOUNT 3660 UNDERGROUND CONDUIT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1911-2018 EXPERIENCE BAND 1956-2018

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	22,371,142	2,984	0.0001	0.9999	100.00
0.5	20,152,794	37,043	0.0018	0.9982	99.99
1.5	17,686,807	3,689	0.0002	0.9998	99.80
2.5	17,961,804	23,300	0.0013	0.9987	99.78
3.5	17,692,767	15,870	0.0009	0.9991	99.65
4.5	16,980,632	5,544	0.0003	0.9997	99.56
5.5	16,688,840	16,525	0.0010	0.9990	99.53
6.5	16,250,021	8,186	0.0005	0.9995	99.43
7.5	15,935,535	1,528	0.0001	0.9999	99.38
8.5	15,626,993	2,147	0.0001	0.9999	99.37
9.5	15,320,244	1,926	0.0001	0.9999	99.36
10.5	15,042,195	2,071	0.0001	0.9999	99.35
11.5	14,515,792	1,717	0.0001	0.9999	99.33
12.5	14,011,327	10,159	0.0007	0.9993	99.32
13.5	13,631,013	6,775	0.0005	0.9995	99.25
14.5	13,401,766	12,434	0.0009	0.9991	99.20
15.5	10,396,733	4,494	0.0004	0.9996	99.11
16.5	10,312,948	4,996	0.0005	0.9995	99.06
17.5	10,184,153	5,116	0.0005	0.9995	99.02
18.5	9,778,622	11,709	0.0012	0.9988	98.97
19.5	7,977,802	6,707	0.0008	0.9992	98.85
20.5	7,138,857	12,695	0.0018	0.9982	98.77
21.5	6,243,764	5,764	0.0009	0.9991	98.59
22.5	5,461,927	8,384	0.0015	0.9985	98.50
23.5	4,631,311	5,525	0.0012	0.9988	98.35
24.5	3,579,375	21,551	0.0060	0.9940	98.23
25.5	2,724,132	4,037	0.0015	0.9985	97.64
26.5	2,108,046	784	0.0004	0.9996	97.49
27.5	2,048,732	1,614	0.0008	0.9992	97.46
28.5	1,882,687	1,807	0.0010	0.9990	97.38
29.5	1,705,740	5,615	0.0033	0.9967	97.29
30.5	1,570,913	1,102	0.0007	0.9993	96.97
31.5	1,552,732	3,835	0.0025	0.9975	96.90
32.5	1,504,855	1,851	0.0012	0.9988	96.66
33.5	1,497,006	1,759	0.0012	0.9988	96.54
34.5	1,395,143	298	0.0002	0.9998	96.43
35.5	1,377,494	2,153	0.0016	0.9984	96.41
36.5	1,335,908	3,023	0.0023	0.9977	96.26
37.5	1,332,885	2,759	0.0021	0.9979	96.04
38.5	1,201,827	1,918	0.0016	0.9984	95.84

DUKE ENERGY KENTUCKY

ACCOUNT 3660 UNDERGROUND CONDUIT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1911-2018 EXPERIENCE BAND 1956-2018

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	1,197,369	2,552	0.0021	0.9979	95.69
40.5	1,189,311	1,523	0.0013	0.9987	95.48
41.5	1,154,549	3,711	0.0032	0.9968	95.36
42.5	973,552	4,173	0.0043	0.9957	95.05
43.5	763,553	2,342	0.0031	0.9969	94.65
44.5	685,532	3,145	0.0046	0.9954	94.36
45.5	562,903	515	0.0009	0.9991	93.92
46.5	540,807	868	0.0016	0.9984	93.84
47.5	455,281	546	0.0012	0.9988	93.69
48.5	419,408	438	0.0010	0.9990	93.57
49.5	396,345	1,365	0.0034	0.9966	93.48
50.5	394,845	762	0.0019	0.9981	93.16
51.5	385,702	411	0.0011	0.9989	92.98
52.5	384,295	414	0.0011	0.9989	92.88
53.5	370,114	421	0.0011	0.9989	92.78
54.5	364,275	1,566	0.0043	0.9957	92.67
55.5	283,385	541	0.0019	0.9981	92.27
56.5	271,429	435	0.0016	0.9984	92.10
57.5	252,301	863	0.0034	0.9966	91.95
58.5	250,327	408	0.0016	0.9984	91.63
59.5	246,295	388	0.0016	0.9984	91.48
60.5	236,577	647	0.0027	0.9973	91.34
61.5	229,751	445	0.0019	0.9981	91.09
62.5	220,641	1,102	0.0050	0.9950	90.91
63.5	196,248	665	0.0034	0.9966	90.46
64.5	191,929	269	0.0014	0.9986	90.15
65.5	188,457	563	0.0030	0.9970	90.03
66.5	176,511	171	0.0010	0.9990	89.76
67.5	171,245	460	0.0027	0.9973	89.67
68.5	151,883	497	0.0033	0.9967	89.43
69.5	138,899	168	0.0012	0.9988	89.14
70.5	138,597	297	0.0021	0.9979	89.03
71.5	136,058	570	0.0042	0.9958	88.84
72.5	135,488	3,395	0.0251	0.9749	88.47
73.5	131,136	1,100	0.0084	0.9916	86.25
74.5	129,772	2,634	0.0203	0.9797	85.53
75.5	125,252	1,000	0.0080	0.9920	83.79
76.5	122,240	593	0.0049	0.9951	83.12
77.5	112,623	2,938	0.0261	0.9739	82.72
78.5	64,567	73	0.0011	0.9989	80.56

DUKE ENERGY KENTUCKY

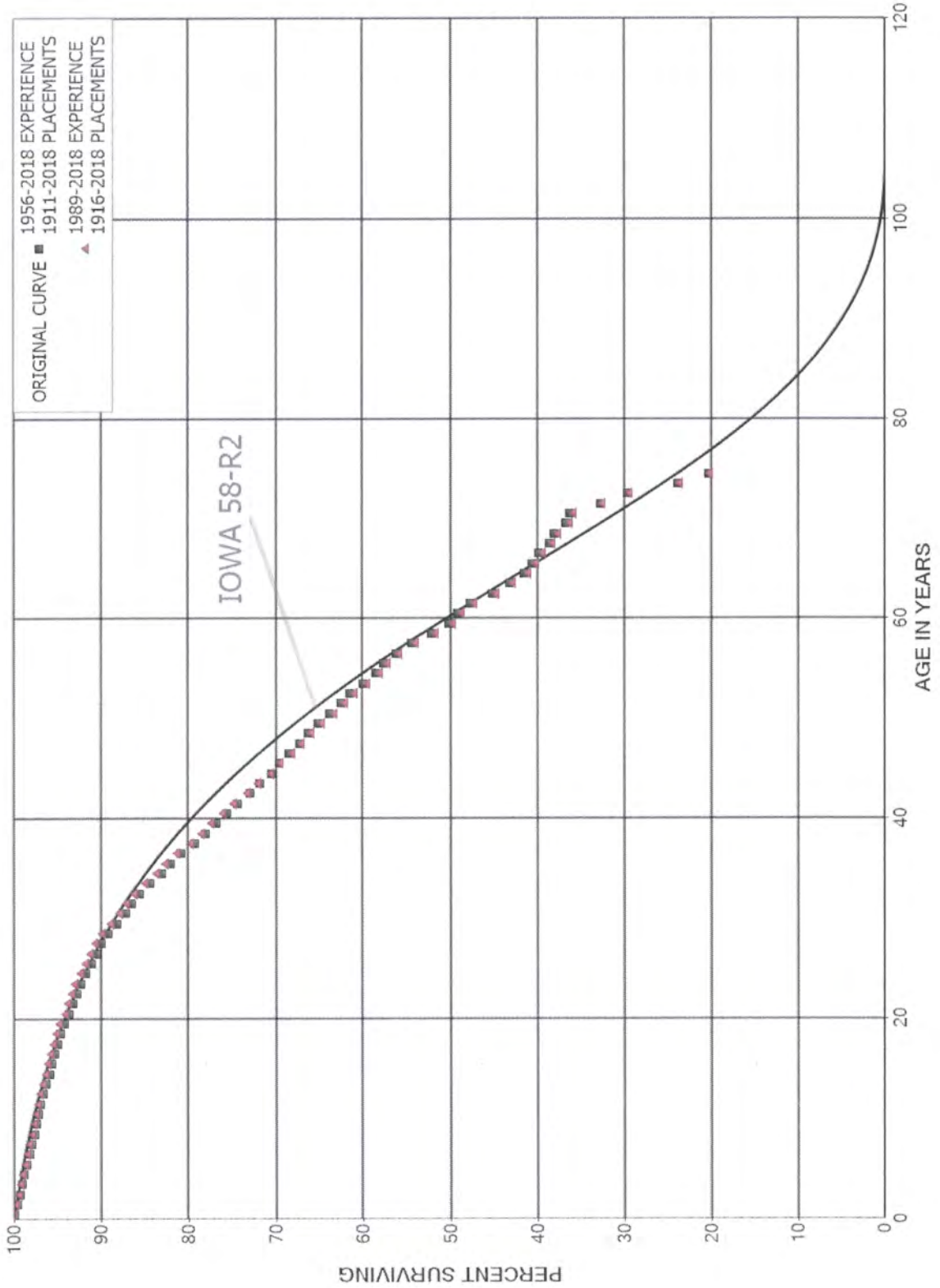
ACCOUNT 3660 UNDERGROUND CONDUIT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1911-2018 EXPERIENCE BAND 1956-2018

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	64,493	1,746	0.0271	0.9729	80.47
80.5	40,083	187	0.0047	0.9953	78.29
81.5	39,805	1,500	0.0377	0.9623	77.93
82.5	38,306	659	0.0172	0.9828	74.99
83.5	36,192	1,062	0.0293	0.9707	73.70
84.5	35,097	353	0.0100	0.9900	71.54
85.5	34,521	432	0.0125	0.9875	70.82
86.5	31,336	1,260	0.0402	0.9598	69.93
87.5	19,596	78	0.0040	0.9960	67.12
88.5	19,328	709	0.0367	0.9633	66.85
89.5	11,720	1,231	0.1050	0.8950	64.40
90.5	10,263	514	0.0501	0.9499	57.64
91.5	8,094	164	0.0202	0.9798	54.76
92.5	7,303	97	0.0132	0.9868	53.65
93.5	7,206	25	0.0034	0.9966	52.94
94.5	7,112	837	0.1177	0.8823	52.76
95.5	1,674	2	0.0011	0.9989	46.55
96.5	1,672	225	0.1347	0.8653	46.50
97.5	1,447	95	0.0653	0.9347	40.23
98.5	1,245	15	0.0124	0.9876	37.61
99.5	1,229	10	0.0081	0.9919	37.14
100.5	1,219	2	0.0020	0.9980	36.84
101.5	1,217	414	0.3405	0.6595	36.77
102.5	317	52	0.1645	0.8355	24.24
103.5	265	14	0.0526	0.9474	20.26
104.5	251	9	0.0362	0.9638	19.19
105.5	242		0.0000	1.0000	18.50
106.5	242	154	0.6372	0.3628	18.50
107.5					6.71

DUKE ENERGY KENTUCKY
ACCOUNT 3670 UNDERGROUND CONDUCTORS AND DEVICES
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY

ACCOUNT 3670 UNDERGROUND CONDUCTORS AND DEVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1911-2018 EXPERIENCE BAND 1956-2018

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	60,857,556	53,724	0.0009	0.9991	100.00
0.5	55,602,035	178,771	0.0032	0.9968	99.91
1.5	53,194,974	159,918	0.0030	0.9970	99.59
2.5	55,154,359	120,449	0.0022	0.9978	99.29
3.5	52,658,285	153,394	0.0029	0.9971	99.07
4.5	53,238,844	167,858	0.0032	0.9968	98.79
5.5	52,472,994	159,868	0.0030	0.9970	98.47
6.5	49,319,566	128,404	0.0026	0.9974	98.17
7.5	48,738,182	138,643	0.0028	0.9972	97.92
8.5	46,703,438	142,056	0.0030	0.9970	97.64
9.5	43,813,137	75,882	0.0017	0.9983	97.34
10.5	41,992,270	103,851	0.0025	0.9975	97.17
11.5	39,728,437	120,440	0.0030	0.9970	96.93
12.5	36,804,589	154,039	0.0042	0.9958	96.64
13.5	32,672,462	120,351	0.0037	0.9963	96.24
14.5	30,827,046	102,889	0.0033	0.9967	95.88
15.5	28,350,387	84,808	0.0030	0.9970	95.56
16.5	27,692,253	97,063	0.0035	0.9965	95.28
17.5	25,662,996	84,587	0.0033	0.9967	94.94
18.5	22,962,596	99,779	0.0043	0.9957	94.63
19.5	20,614,026	135,283	0.0066	0.9934	94.22
20.5	19,749,981	78,573	0.0040	0.9960	93.60
21.5	18,579,761	99,453	0.0054	0.9946	93.23
22.5	17,816,571	83,042	0.0047	0.9953	92.73
23.5	17,014,550	114,293	0.0067	0.9933	92.30
24.5	15,842,227	100,397	0.0063	0.9937	91.68
25.5	14,133,250	86,176	0.0061	0.9939	91.09
26.5	13,041,933	89,806	0.0069	0.9931	90.54
27.5	11,935,499	103,589	0.0087	0.9913	89.92
28.5	10,655,694	117,597	0.0110	0.9890	89.14
29.5	9,299,450	99,777	0.0107	0.9893	88.15
30.5	8,265,581	70,362	0.0085	0.9915	87.21
31.5	7,011,755	68,152	0.0097	0.9903	86.46
32.5	6,354,564	93,579	0.0147	0.9853	85.62
33.5	5,756,789	84,780	0.0147	0.9853	84.36
34.5	5,031,968	62,975	0.0125	0.9875	83.12
35.5	4,564,555	71,080	0.0156	0.9844	82.08
36.5	4,246,871	78,269	0.0184	0.9816	80.80
37.5	3,922,518	60,752	0.0155	0.9845	79.31
38.5	3,442,233	53,180	0.0154	0.9846	78.08

DUKE ENERGY KENTUCKY

ACCOUNT 3670 UNDERGROUND CONDUCTORS AND DEVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1911-2018 EXPERIENCE BAND 1956-2018

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	2,818,884	47,491	0.0168	0.9832	76.88
40.5	2,564,956	39,285	0.0153	0.9847	75.58
41.5	2,097,871	40,328	0.0192	0.9808	74.42
42.5	1,559,583	24,296	0.0156	0.9844	72.99
43.5	1,368,707	25,600	0.0187	0.9813	71.86
44.5	1,150,998	15,224	0.0132	0.9868	70.51
45.5	811,408	12,944	0.0160	0.9840	69.58
46.5	724,033	13,032	0.0180	0.9820	68.47
47.5	633,832	8,777	0.0138	0.9862	67.24
48.5	555,996	9,132	0.0164	0.9836	66.31
49.5	530,037	11,322	0.0214	0.9786	65.22
50.5	508,115	10,294	0.0203	0.9797	63.82
51.5	484,794	8,207	0.0169	0.9831	62.53
52.5	467,148	11,283	0.0242	0.9758	61.47
53.5	434,987	10,792	0.0248	0.9752	59.99
54.5	397,235	6,332	0.0159	0.9841	58.50
55.5	341,655	8,045	0.0235	0.9765	57.57
56.5	327,935	10,590	0.0323	0.9677	56.21
57.5	306,914	12,484	0.0407	0.9593	54.40
58.5	287,544	11,172	0.0389	0.9611	52.18
59.5	265,461	5,156	0.0194	0.9806	50.16
60.5	258,680	7,671	0.0297	0.9703	49.18
61.5	245,516	13,241	0.0539	0.9461	47.72
62.5	220,934	9,406	0.0426	0.9574	45.15
63.5	157,104	6,440	0.0410	0.9590	43.23
64.5	147,357	2,933	0.0199	0.9801	41.46
65.5	143,203	2,717	0.0190	0.9810	40.63
66.5	139,883	4,209	0.0301	0.9699	39.86
67.5	132,799	2,119	0.0160	0.9840	38.66
68.5	115,776	4,035	0.0348	0.9652	38.04
69.5	106,673	1,319	0.0124	0.9876	36.72
70.5	105,354	10,191	0.0967	0.9033	36.26
71.5	93,908	9,105	0.0970	0.9030	32.76
72.5	84,803	16,591	0.1956	0.8044	29.58
73.5	67,985	10,029	0.1475	0.8525	23.79
74.5	57,956	7,555	0.1304	0.8696	20.28
75.5	50,314	7,150	0.1421	0.8579	17.64
76.5	43,045	4,569	0.1061	0.8939	15.13
77.5	38,187	4,405	0.1154	0.8846	13.53
78.5	12,817	935	0.0729	0.9271	11.97

DUKE ENERGY KENTUCKY

ACCOUNT 3670 UNDERGROUND CONDUCTORS AND DEVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1911-2018 EXPERIENCE BAND 1956-2018

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	11,655	1,210	0.1038	0.8962	11.09
80.5	6,581	372	0.0565	0.9435	9.94
81.5	6,145	886	0.1442	0.8558	9.38
82.5	5,259	680	0.1294	0.8706	8.03
83.5	4,549	898	0.1973	0.8027	6.99
84.5	3,652	546	0.1495	0.8505	5.61
85.5	3,065	443	0.1444	0.8556	4.77
86.5	2,587	323	0.1247	0.8753	4.08
87.5	2,130	464	0.2178	0.7822	3.57
88.5	1,666	342	0.2054	0.7946	2.79
89.5	1,088	459	0.4215	0.5785	2.22
90.5	630	105	0.1664	0.8336	1.28
91.5	512	76	0.1476	0.8524	1.07
92.5	413	76	0.1846	0.8154	0.91
93.5	337	37	0.1088	0.8912	0.74
94.5	300	96	0.3191	0.6809	0.66
95.5	158	57	0.3605	0.6395	0.45
96.5	100	64	0.6410	0.3590	0.29
97.5	36	21	0.5714	0.4286	0.10
98.5	15	8	0.5003	0.4997	0.04
99.5	8	4	0.5337	0.4663	0.02
100.5	4	2	0.4278	0.5722	0.01
101.5	2	1	0.5049	0.4951	0.01
102.5					0.00

DUKE ENERGY KENTUCKY

ACCOUNT 3670 UNDERGROUND CONDUCTORS AND DEVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1916-2018 EXPERIENCE BAND 1989-2018

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	50,769,372	52,243	0.0010	0.9990	100.00
0.5	46,438,932	148,217	0.0032	0.9968	99.90
1.5	45,405,592	133,532	0.0029	0.9971	99.58
2.5	48,045,733	86,996	0.0018	0.9982	99.29
3.5	46,145,713	129,092	0.0028	0.9972	99.11
4.5	47,475,614	133,951	0.0028	0.9972	98.83
5.5	47,161,403	125,684	0.0027	0.9973	98.55
6.5	44,289,363	110,184	0.0025	0.9975	98.29
7.5	44,040,936	118,080	0.0027	0.9973	98.04
8.5	42,516,466	130,276	0.0031	0.9969	97.78
9.5	40,325,893	60,578	0.0015	0.9985	97.48
10.5	38,802,667	94,399	0.0024	0.9976	97.33
11.5	37,090,668	90,147	0.0024	0.9976	97.10
12.5	34,807,685	113,286	0.0033	0.9967	96.86
13.5	30,934,196	105,834	0.0034	0.9966	96.55
14.5	29,383,261	95,683	0.0033	0.9967	96.22
15.5	27,245,859	80,341	0.0029	0.9971	95.90
16.5	26,709,800	94,388	0.0035	0.9965	95.62
17.5	24,768,624	79,367	0.0032	0.9968	95.28
18.5	22,161,610	95,662	0.0043	0.9957	94.98
19.5	19,847,682	124,509	0.0063	0.9937	94.57
20.5	19,018,304	69,577	0.0037	0.9963	93.97
21.5	17,881,105	91,335	0.0051	0.9949	93.63
22.5	17,142,608	67,422	0.0039	0.9961	93.15
23.5	16,391,706	107,800	0.0066	0.9934	92.78
24.5	15,263,281	93,031	0.0061	0.9939	92.17
25.5	13,651,379	82,413	0.0060	0.9940	91.61
26.5	12,584,988	83,382	0.0066	0.9934	91.06
27.5	11,503,993	96,833	0.0084	0.9916	90.46
28.5	10,242,464	114,607	0.0112	0.9888	89.69
29.5	8,906,078	95,416	0.0107	0.9893	88.69
30.5	7,881,445	69,374	0.0088	0.9912	87.74
31.5	6,644,561	65,423	0.0098	0.9902	86.97
32.5	6,009,871	90,652	0.0151	0.9849	86.11
33.5	5,526,914	83,230	0.0151	0.9849	84.81
34.5	4,811,059	59,014	0.0123	0.9877	83.54
35.5	4,349,976	71,015	0.0163	0.9837	82.51
36.5	4,040,497	76,392	0.0189	0.9811	81.16
37.5	3,727,545	59,037	0.0158	0.9842	79.63
38.5	3,284,846	46,621	0.0142	0.9858	78.37

DUKE ENERGY KENTUCKY

ACCOUNT 3670 UNDERGROUND CONDUCTORS AND DEVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1916-2018 EXPERIENCE BAND 1989-2018

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	2,683,952	47,427	0.0177	0.9823	77.26
40.5	2,430,088	38,513	0.0158	0.9842	75.89
41.5	1,967,055	40,268	0.0205	0.9795	74.69
42.5	1,428,827	24,166	0.0169	0.9831	73.16
43.5	1,239,336	25,357	0.0205	0.9795	71.92
44.5	1,021,386	14,920	0.0146	0.9854	70.45
45.5	682,394	12,829	0.0188	0.9812	69.42
46.5	597,858	10,395	0.0174	0.9826	68.12
47.5	511,675	8,777	0.0172	0.9828	66.93
48.5	522,403	9,132	0.0175	0.9825	65.78
49.5	497,509	10,817	0.0217	0.9783	64.63
50.5	497,728	10,144	0.0204	0.9796	63.23
51.5	474,920	8,207	0.0173	0.9827	61.94
52.5	457,353	10,696	0.0234	0.9766	60.87
53.5	425,970	10,450	0.0245	0.9755	59.45
54.5	388,560	6,183	0.0159	0.9841	57.99
55.5	333,452	7,984	0.0239	0.9761	57.06
56.5	320,138	10,590	0.0331	0.9669	55.70
57.5	300,491	12,277	0.0409	0.9591	53.86
58.5	281,328	11,172	0.0397	0.9603	51.66
59.5	262,444	5,156	0.0196	0.9804	49.60
60.5	255,662	7,671	0.0300	0.9700	48.63
61.5	242,708	13,241	0.0546	0.9454	47.17
62.5	218,510	9,406	0.0430	0.9570	44.60
63.5	154,680	6,440	0.0416	0.9584	42.68
64.5	144,933	2,933	0.0202	0.9798	40.90
65.5	142,497	2,717	0.0191	0.9809	40.07
66.5	139,201	4,209	0.0302	0.9698	39.31
67.5	132,117	2,119	0.0160	0.9840	38.12
68.5	115,094	4,035	0.0351	0.9649	37.51
69.5	105,991	1,319	0.0124	0.9876	36.19
70.5	104,672	9,786	0.0935	0.9065	35.74
71.5	93,632	9,105	0.0972	0.9028	32.40
72.5	84,803	16,591	0.1956	0.8044	29.25
73.5	67,985	10,029	0.1475	0.8525	23.53
74.5	57,956	7,555	0.1304	0.8696	20.06
75.5	50,314	7,150	0.1421	0.8579	17.44
76.5	43,045	4,569	0.1061	0.8939	14.96
77.5	38,187	4,405	0.1154	0.8846	13.38
78.5	12,817	935	0.0729	0.9271	11.83

DUKE ENERGY KENTUCKY

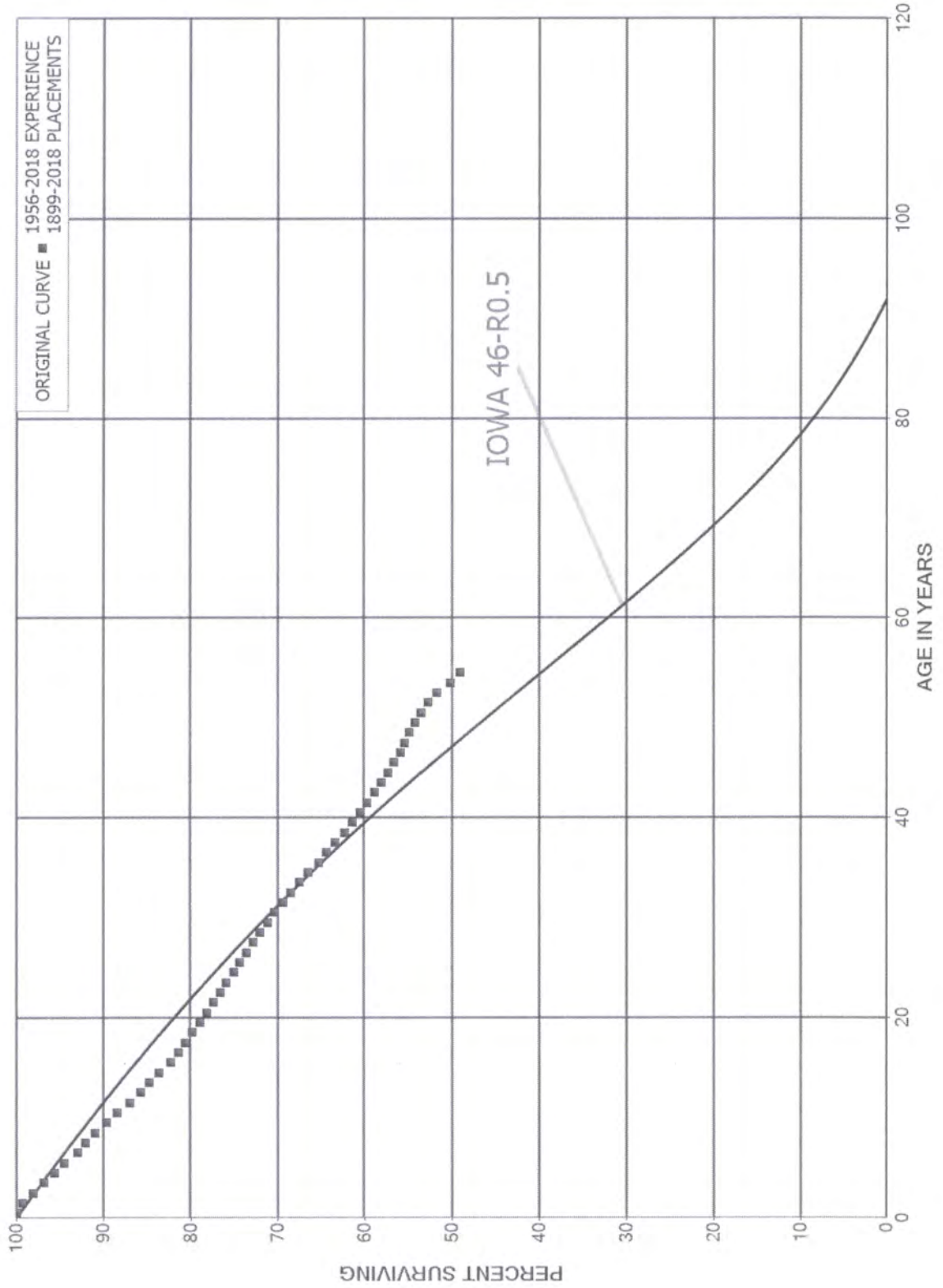
ACCOUNT 3670 UNDERGROUND CONDUCTORS AND DEVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1916-2018 EXPERIENCE BAND 1989-2018

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	11,655	1,210	0.1038	0.8962	10.97
80.5	6,581	372	0.0565	0.9435	9.83
81.5	6,145	886	0.1442	0.8558	9.28
82.5	5,259	680	0.1294	0.8706	7.94
83.5	4,549	898	0.1973	0.8027	6.91
84.5	3,652	546	0.1495	0.8505	5.55
85.5	3,065	443	0.1444	0.8556	4.72
86.5	2,587	323	0.1247	0.8753	4.04
87.5	2,130	464	0.2178	0.7822	3.53
88.5	1,666	342	0.2054	0.7946	2.76
89.5	1,088	459	0.4215	0.5785	2.20
90.5	630	105	0.1664	0.8336	1.27
91.5	512	76	0.1476	0.8524	1.06
92.5	413	76	0.1846	0.8154	0.90
93.5	337	37	0.1088	0.8912	0.74
94.5	300	96	0.3191	0.6809	0.66
95.5	158	57	0.3605	0.6395	0.45
96.5	100	64	0.6410	0.3590	0.29
97.5	36	21	0.5714	0.4286	0.10
98.5	15	8	0.5003	0.4997	0.04
99.5	8	4	0.5337	0.4663	0.02
100.5	4	2	0.4278	0.5722	0.01
101.5	2	1	0.5049	0.4951	0.01
102.5					0.00

DUKE ENERGY KENTUCKY
ACCOUNT 3680 LINE TRANSFORMERS
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY

ACCOUNT 3680 LINE TRANSFORMERS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1899-2018 EXPERIENCE BAND 1956-2018

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	79,513,430	71,960	0.0009	0.9991	100.00
0.5	77,838,220	505,599	0.0065	0.9935	99.91
1.5	80,379,072	1,010,921	0.0126	0.9874	99.26
2.5	78,962,623	958,260	0.0121	0.9879	98.01
3.5	76,110,182	929,896	0.0122	0.9878	96.82
4.5	72,509,590	845,621	0.0117	0.9883	95.64
5.5	71,391,159	1,175,674	0.0165	0.9835	94.52
6.5	68,401,043	700,074	0.0102	0.9898	92.97
7.5	67,255,423	801,068	0.0119	0.9881	92.02
8.5	63,845,654	917,909	0.0144	0.9856	90.92
9.5	60,901,272	864,377	0.0142	0.9858	89.61
10.5	59,151,582	936,384	0.0158	0.9842	88.34
11.5	55,892,738	759,196	0.0136	0.9864	86.94
12.5	53,216,170	648,259	0.0122	0.9878	85.76
13.5	51,265,549	644,251	0.0126	0.9874	84.72
14.5	48,783,081	812,930	0.0167	0.9833	83.65
15.5	46,454,807	506,872	0.0109	0.9891	82.26
16.5	45,056,798	433,056	0.0096	0.9904	81.36
17.5	43,900,168	419,559	0.0096	0.9904	80.58
18.5	42,001,570	430,194	0.0102	0.9898	79.81
19.5	39,952,602	435,808	0.0109	0.9891	78.99
20.5	37,783,077	362,840	0.0096	0.9904	78.13
21.5	35,482,077	326,182	0.0092	0.9908	77.38
22.5	33,857,480	329,184	0.0097	0.9903	76.67
23.5	32,087,212	347,137	0.0108	0.9892	75.92
24.5	29,215,251	272,309	0.0093	0.9907	75.10
25.5	26,944,771	272,253	0.0101	0.9899	74.40
26.5	25,214,976	276,854	0.0110	0.9890	73.65
27.5	22,986,185	248,561	0.0108	0.9892	72.84
28.5	20,790,583	245,434	0.0118	0.9882	72.05
29.5	18,569,929	223,029	0.0120	0.9880	71.20
30.5	16,320,853	210,231	0.0129	0.9871	70.35
31.5	14,916,980	211,929	0.0142	0.9858	69.44
32.5	13,636,539	196,446	0.0144	0.9856	68.45
33.5	12,386,863	181,529	0.0147	0.9853	67.47
34.5	11,237,685	197,877	0.0176	0.9824	66.48
35.5	9,989,539	140,516	0.0141	0.9859	65.31
36.5	9,265,780	148,799	0.0161	0.9839	64.39
37.5	8,260,880	133,737	0.0162	0.9838	63.36
38.5	7,468,383	112,410	0.0151	0.9849	62.33

DUKE ENERGY KENTUCKY

ACCOUNT 3680 LINE TRANSFORMERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1899-2018 EXPERIENCE BAND 1956-2018

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	6,743,551	99,216	0.0147	0.9853	61.39
40.5	6,008,617	78,458	0.0131	0.9869	60.49
41.5	5,444,440	78,274	0.0144	0.9856	59.70
42.5	5,039,805	71,152	0.0141	0.9859	58.84
43.5	4,570,946	56,773	0.0124	0.9876	58.01
44.5	3,846,768	44,496	0.0116	0.9884	57.29
45.5	3,214,304	43,099	0.0134	0.9866	56.63
46.5	2,676,597	22,290	0.0083	0.9917	55.87
47.5	2,198,237	22,591	0.0103	0.9897	55.40
48.5	1,757,123	21,318	0.0121	0.9879	54.83
49.5	1,444,019	17,252	0.0119	0.9881	54.17
50.5	1,210,226	16,846	0.0139	0.9861	53.52
51.5	1,039,292	21,536	0.0207	0.9793	52.78
52.5	835,774	23,917	0.0286	0.9714	51.68
53.5	700,676	16,202	0.0231	0.9769	50.20
54.5	534,748	8,408	0.0157	0.9843	49.04
55.5	463,853	12,203	0.0263	0.9737	48.27
56.5	403,418	5,709	0.0142	0.9858	47.00
57.5	343,818	6,298	0.0183	0.9817	46.34
58.5	294,929	2,366	0.0080	0.9920	45.49
59.5	245,799	3,084	0.0125	0.9875	45.12
60.5	209,069	2,852	0.0136	0.9864	44.56
61.5	194,588	2,368	0.0122	0.9878	43.95
62.5	144,565	3,019	0.0209	0.9791	43.41
63.5	104,137	1,642	0.0158	0.9842	42.51
64.5	76,730	1,619	0.0211	0.9789	41.84
65.5	69,324	2,581	0.0372	0.9628	40.95
66.5	56,706	1,094	0.0193	0.9807	39.43
67.5	38,766	3,793	0.0978	0.9022	38.67
68.5	26,975	698	0.0259	0.9741	34.89
69.5	22,486	203	0.0090	0.9910	33.98
70.5	20,420	421	0.0206	0.9794	33.68
71.5	17,728	53	0.0030	0.9970	32.98
72.5	17,152	231	0.0135	0.9865	32.88
73.5	16,267	508	0.0312	0.9688	32.44
74.5	15,728		0.0000	1.0000	31.43
75.5	15,728	13	0.0008	0.9992	31.43
76.5	15,384	0	0.0000	1.0000	31.40
77.5	13,235	48	0.0036	0.9964	31.40
78.5	10,383	24	0.0023	0.9977	31.29

DUKE ENERGY KENTUCKY

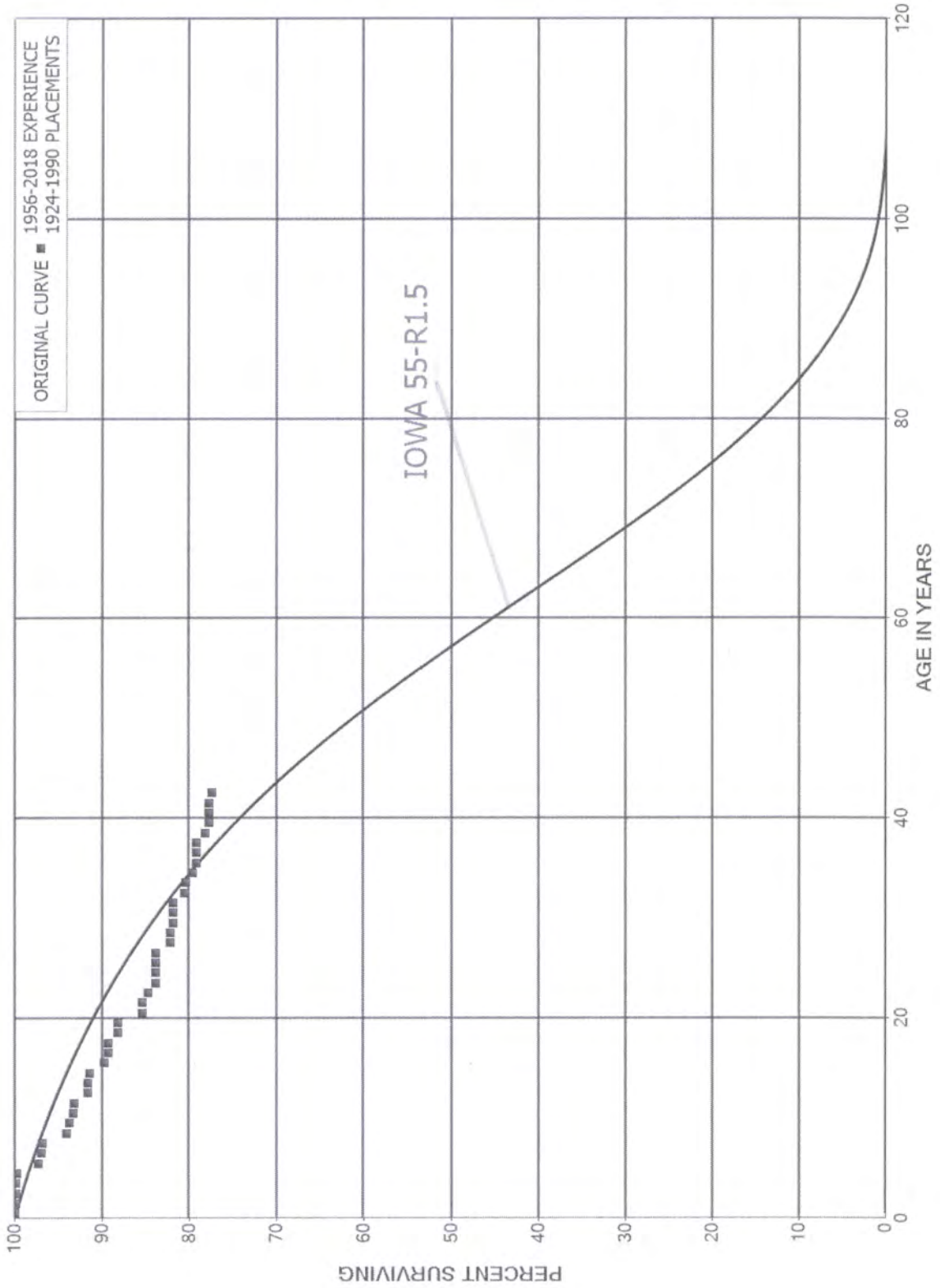
ACCOUNT 3680 LINE TRANSFORMERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1899-2018 EXPERIENCE BAND 1956-2018

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	10,114	250	0.0247	0.9753	31.21
80.5	9,750	25	0.0026	0.9974	30.44
81.5	7,468	0	0.0000	1.0000	30.36
82.5	5,815	36	0.0063	0.9937	30.36
83.5	5,712	13	0.0022	0.9978	30.17
84.5	5,699	13	0.0022	0.9978	30.11
85.5	5,504	0	0.0000	1.0000	30.04
86.5	4,849		0.0000	1.0000	30.04
87.5	4,158	0	0.0000	1.0000	30.04
88.5	3,972	0	0.0000	1.0000	30.04
89.5	5,543	1,950	0.3517	0.6483	30.04
90.5	3,413	0	0.0000	1.0000	19.47
91.5	3,024	0	0.0000	1.0000	19.47
92.5	2,699	0	0.0000	1.0000	19.47
93.5	2,039		0.0000	1.0000	19.47
94.5	3,904	933	0.2389	0.7611	19.47
95.5	2,728	0	0.0000	1.0000	14.82
96.5	2,074	0	0.0000	1.0000	14.82
97.5	1,956	0	0.0001	0.9999	14.82
98.5	1,065		0.0000	1.0000	14.82
99.5	1,065		0.0000	1.0000	14.82
100.5	1,065	0	0.0000	1.0000	14.82
101.5	1,026	0	0.0000	1.0000	14.82
102.5	933		0.0000	1.0000	14.82
103.5	933		0.0000	1.0000	14.82
104.5	933		0.0000	1.0000	14.82
105.5	933		0.0000	1.0000	14.82
106.5	933		0.0000	1.0000	14.82
107.5	933	0	0.0002	0.9998	14.82
108.5					14.81

DUKE ENERGY KENTUCKY
ACCOUNT 3682 LINE TRANSFORMERS - CUSTOMER
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY

ACCOUNT 3682 LINE TRANSFORMERS - CUSTOMER

ORIGINAL LIFE TABLE

PLACEMENT BAND 1924-1990 EXPERIENCE BAND 1956-2018

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	267,971		0.0000	1.0000	100.00
0.5	277,289	442	0.0016	0.9984	100.00
1.5	290,361	139	0.0005	0.9995	99.84
2.5	320,097	17	0.0001	0.9999	99.79
3.5	323,303	92	0.0003	0.9997	99.79
4.5	334,199	8,295	0.0248	0.9752	99.76
5.5	331,764	1,266	0.0038	0.9962	97.28
6.5	339,385	339	0.0010	0.9990	96.91
7.5	345,628	9,890	0.0286	0.9714	96.82
8.5	338,039	1,100	0.0033	0.9967	94.04
9.5	340,268	1,484	0.0044	0.9956	93.74
10.5	340,703	393	0.0012	0.9988	93.33
11.5	340,310	5,669	0.0167	0.9833	93.22
12.5	334,708		0.0000	1.0000	91.67
13.5	334,719	811	0.0024	0.9976	91.67
14.5	335,744	6,359	0.0189	0.9811	91.45
15.5	329,385	1,561	0.0047	0.9953	89.72
16.5	330,701		0.0000	1.0000	89.29
17.5	330,703	3,956	0.0120	0.9880	89.29
18.5	326,748		0.0000	1.0000	88.22
19.5	326,748	10,565	0.0323	0.9677	88.22
20.5	321,257		0.0000	1.0000	85.37
21.5	321,826	2,358	0.0073	0.9927	85.37
22.5	319,469	3,363	0.0105	0.9895	84.74
23.5	317,846	64	0.0002	0.9998	83.85
24.5	322,183	52	0.0002	0.9998	83.84
25.5	312,484		0.0000	1.0000	83.82
26.5	309,240	6,196	0.0200	0.9800	83.82
27.5	303,216	67	0.0002	0.9998	82.14
28.5	283,079	1,029	0.0036	0.9964	82.12
29.5	280,457		0.0000	1.0000	81.83
30.5	279,757		0.0000	1.0000	81.83
31.5	278,214	4,497	0.0162	0.9838	81.83
32.5	267,141	444	0.0017	0.9983	80.50
33.5	266,697	2,405	0.0090	0.9910	80.37
34.5	258,336	1,404	0.0054	0.9946	79.64
35.5	256,304		0.0000	1.0000	79.21
36.5	256,304		0.0000	1.0000	79.21
37.5	256,304	3,431	0.0134	0.9866	79.21
38.5	252,873	1,452	0.0057	0.9943	78.15

DUKE ENERGY KENTUCKY

ACCOUNT 3682 LINE TRANSFORMERS - CUSTOMER

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1924-1990 EXPERIENCE BAND 1956-2018

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	247,188		0.0000	1.0000	77.70
40.5	230,997		0.0000	1.0000	77.70
41.5	223,641	951	0.0043	0.9957	77.70
42.5	199,558		0.0000	1.0000	77.37
43.5	194,345	731	0.0038	0.9962	77.37
44.5	187,529		0.0000	1.0000	77.08
45.5	181,396		0.0000	1.0000	77.08
46.5	176,874		0.0000	1.0000	77.08
47.5	155,243		0.0000	1.0000	77.08
48.5	150,463		0.0000	1.0000	77.08
49.5	125,172	420	0.0034	0.9966	77.08
50.5	96,040		0.0000	1.0000	76.82
51.5	93,899		0.0000	1.0000	76.82
52.5	87,129		0.0000	1.0000	76.82
53.5	82,013		0.0000	1.0000	76.82
54.5	77,620		0.0000	1.0000	76.82
55.5	63,369		0.0000	1.0000	76.82
56.5	59,386		0.0000	1.0000	76.82
57.5	54,156		0.0000	1.0000	76.82
58.5	54,156		0.0000	1.0000	76.82
59.5	51,458		0.0000	1.0000	76.82
60.5	51,244		0.0000	1.0000	76.82
61.5	48,811		0.0000	1.0000	76.82
62.5	21,685		0.0000	1.0000	76.82
63.5	21,103		0.0000	1.0000	76.82
64.5	19,545		0.0000	1.0000	76.82
65.5	18,092		0.0000	1.0000	76.82
66.5	18,043		0.0000	1.0000	76.82
67.5	12,088		0.0000	1.0000	76.82
68.5	11,671		0.0000	1.0000	76.82
69.5	7,814		0.0000	1.0000	76.82
70.5	7,413		0.0000	1.0000	76.82
71.5	5,113		0.0000	1.0000	76.82
72.5	1,783		0.0000	1.0000	76.82
73.5	18		0.0000	1.0000	76.82
74.5	18		0.0000	1.0000	76.82
75.5	15		0.0000	1.0000	76.82
76.5	5		0.0000	1.0000	76.82
77.5	4		0.0000	1.0000	76.82
78.5	4		0.0000	1.0000	76.82

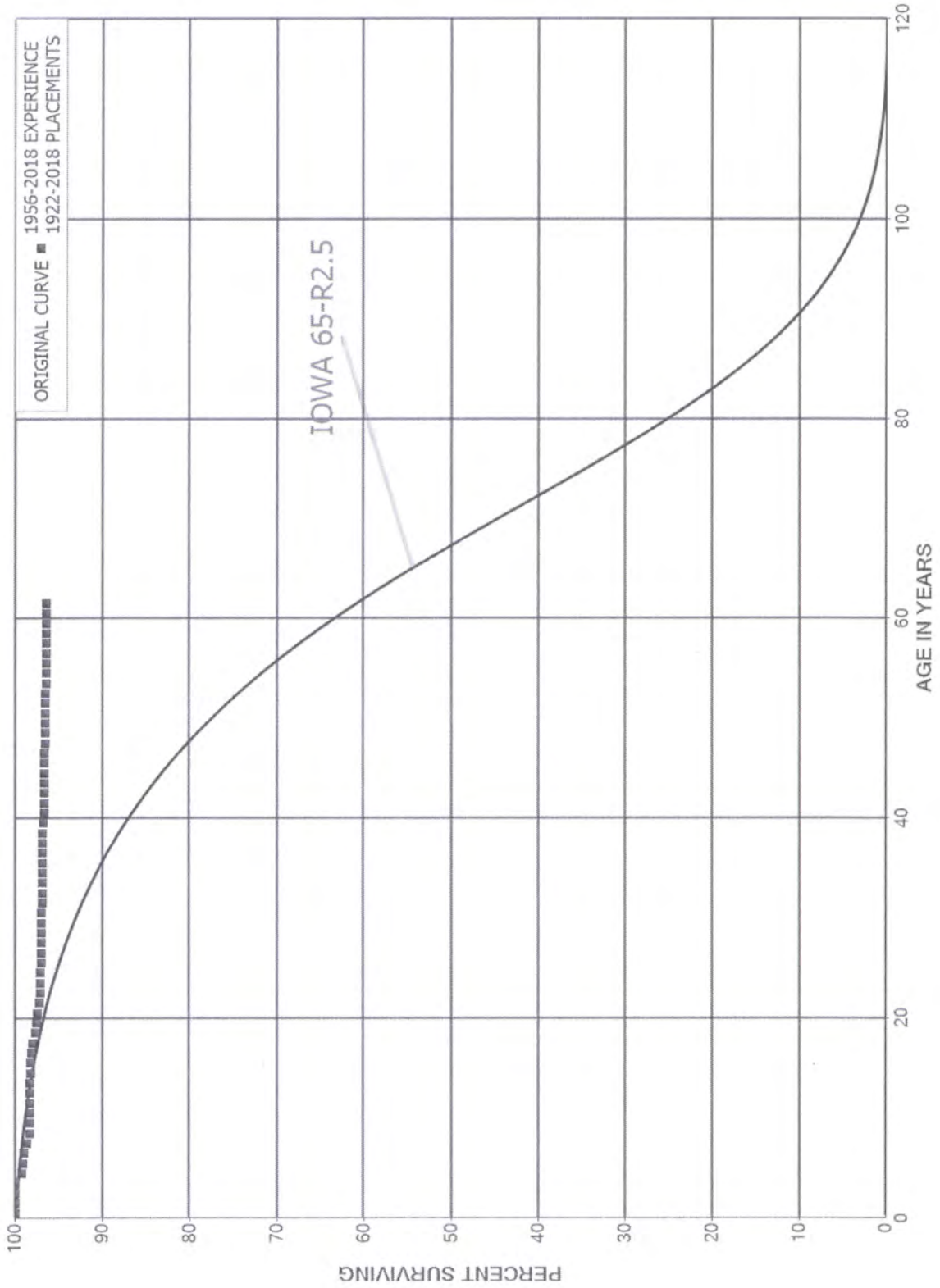
DUKE ENERGY KENTUCKY

ACCOUNT 3682 LINE TRANSFORMERS - CUSTOMER

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1924-1990			EXPERIENCE BAND 1956-2018		
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	4		0.0000	1.0000	76.82
80.5	1		0.0000	1.0000	76.82
81.5					76.82

DUKE ENERGY KENTUCKY
ACCOUNT 3691 SERVICES - UNDERGROUND
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY

ACCOUNT 3691 SERVICES - UNDERGROUND

ORIGINAL LIFE TABLE

PLACEMENT BAND 1922-2018 EXPERIENCE BAND 1956-2018

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	2,434,215		0.0000	1.0000	100.00
0.5	2,430,493	619	0.0003	0.9997	100.00
1.5	2,422,084		0.0000	1.0000	99.97
2.5	2,454,820	665	0.0003	0.9997	99.97
3.5	2,434,564	17,691	0.0073	0.9927	99.95
4.5	438,335	677	0.0015	0.9985	99.22
5.5	441,017	431	0.0010	0.9990	99.07
6.5	441,445	1,602	0.0036	0.9964	98.97
7.5	440,170	1,295	0.0029	0.9971	98.61
8.5	439,161	156	0.0004	0.9996	98.32
9.5	438,039	82	0.0002	0.9998	98.29
10.5	437,880	59	0.0001	0.9999	98.27
11.5	437,519		0.0000	1.0000	98.26
12.5	436,938		0.0000	1.0000	98.26
13.5	437,407	319	0.0007	0.9993	98.26
14.5	436,906	98	0.0002	0.9998	98.18
15.5	124,533	163	0.0013	0.9987	98.16
16.5	124,370	120	0.0010	0.9990	98.03
17.5	124,559	376	0.0030	0.9970	97.94
18.5	126,373	229	0.0018	0.9982	97.64
19.5	125,015	53	0.0004	0.9996	97.47
20.5	124,962	357	0.0029	0.9971	97.42
21.5	124,605	53	0.0004	0.9996	97.15
22.5	124,552	51	0.0004	0.9996	97.10
23.5	124,501		0.0000	1.0000	97.07
24.5	124,501	85	0.0007	0.9993	97.07
25.5	124,415		0.0000	1.0000	97.00
26.5	124,438		0.0000	1.0000	97.00
27.5	124,438	23	0.0002	0.9998	97.00
28.5	124,415	85	0.0007	0.9993	96.98
29.5	124,330	6	0.0000	1.0000	96.91
30.5	124,324	42	0.0003	0.9997	96.91
31.5	122,222		0.0000	1.0000	96.88
32.5	122,508	3	0.0000	1.0000	96.88
33.5	122,515	9	0.0001	0.9999	96.87
34.5	122,506		0.0000	1.0000	96.87
35.5	122,506		0.0000	1.0000	96.87
36.5	122,506	19	0.0002	0.9998	96.87
37.5	122,487	45	0.0004	0.9996	96.85
38.5	122,442	74	0.0006	0.9994	96.82

DUKE ENERGY KENTUCKY

ACCOUNT 3691 SERVICES - UNDERGROUND

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1922-2018 EXPERIENCE BAND 1956-2018

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	122,368	182	0.0015	0.9985	96.76
40.5	122,186		0.0000	1.0000	96.61
41.5	121,316		0.0000	1.0000	96.61
42.5	120,788		0.0000	1.0000	96.61
43.5	120,306		0.0000	1.0000	96.61
44.5	120,306	42	0.0003	0.9997	96.61
45.5	119,489		0.0000	1.0000	96.58
46.5	118,861	57	0.0005	0.9995	96.58
47.5	115,334		0.0000	1.0000	96.53
48.5	104,256		0.0000	1.0000	96.53
49.5	87,748		0.0000	1.0000	96.53
50.5	81,380		0.0000	1.0000	96.53
51.5	72,783		0.0000	1.0000	96.53
52.5	61,969	85	0.0014	0.9986	96.53
53.5	56,880	0	0.0000	1.0000	96.40
54.5	49,390		0.0000	1.0000	96.40
55.5	39,566		0.0000	1.0000	96.40
56.5	35,515		0.0000	1.0000	96.40
57.5	30,520		0.0000	1.0000	96.40
58.5	28,772		0.0000	1.0000	96.40
59.5	26,556		0.0000	1.0000	96.40
60.5	22,165		0.0000	1.0000	96.40
61.5	20,422		0.0000	1.0000	96.40
62.5	15,170		0.0000	1.0000	96.40
63.5	9,481		0.0000	1.0000	96.40
64.5	9,478		0.0000	1.0000	96.40
65.5	7,381		0.0000	1.0000	96.40
66.5	7,220		0.0000	1.0000	96.40
67.5	6,256	1	0.0002	0.9998	96.40
68.5	3,532		0.0000	1.0000	96.38
69.5	2,821		0.0000	1.0000	96.38
70.5	2,788		0.0000	1.0000	96.38
71.5	2,787		0.0000	1.0000	96.38
72.5	2,674		0.0000	1.0000	96.38
73.5	2,619		0.0000	1.0000	96.38
74.5	2,611		0.0000	1.0000	96.38
75.5	2,571		0.0000	1.0000	96.38
76.5	2,491		0.0000	1.0000	96.38
77.5	2,430		0.0000	1.0000	96.38
78.5	2,388		0.0000	1.0000	96.38

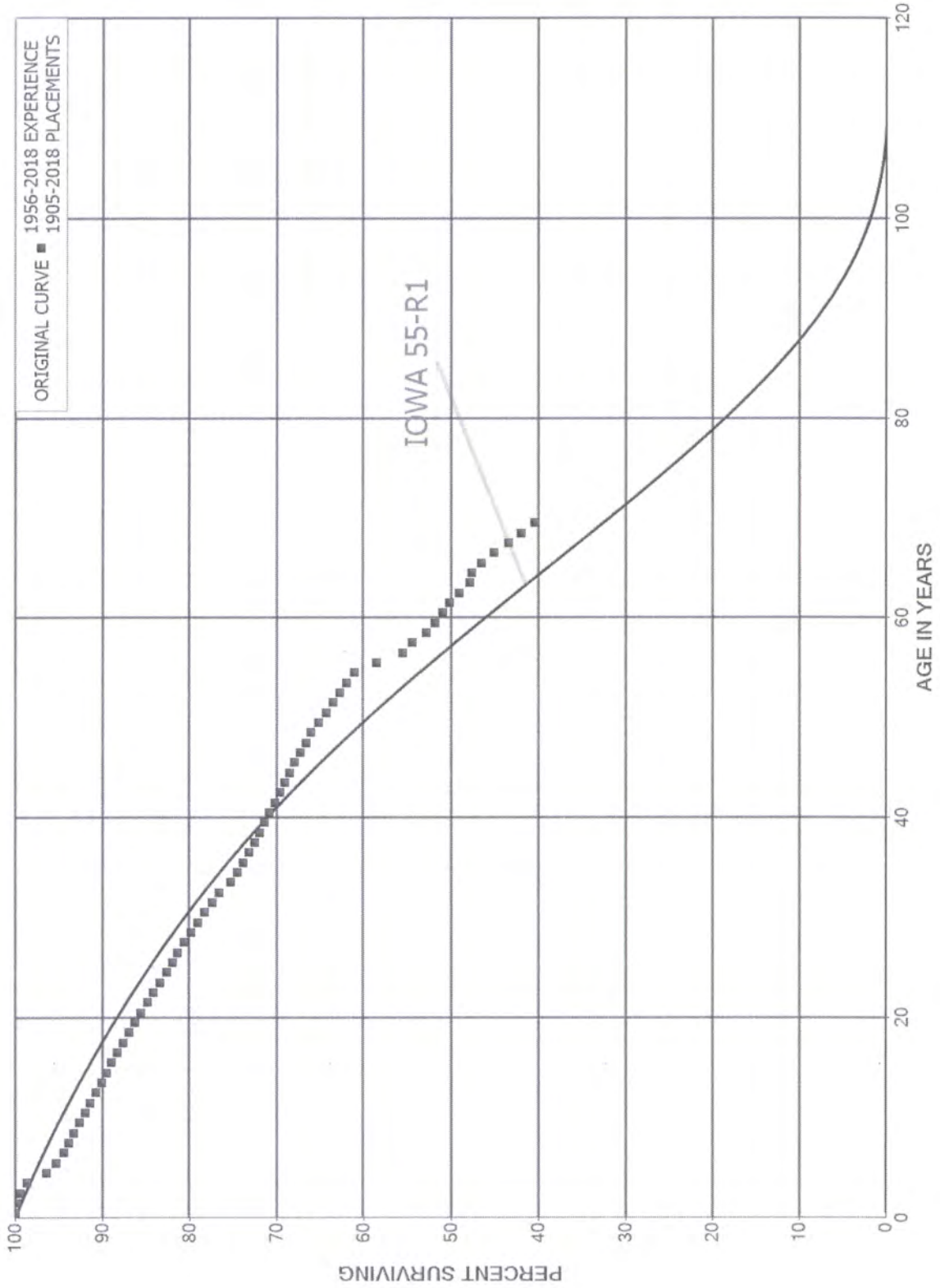
DUKE ENERGY KENTUCKY

ACCOUNT 3691 SERVICES - UNDERGROUND

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1922-2018			EXPERIENCE BAND 1956-2018		
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	2,388		0.0000	1.0000	96.38
80.5	2,103		0.0000	1.0000	96.38
81.5					96.38

DUKE ENERGY KENTUCKY
ACCOUNT 3692 SERVICES - OVERHEAD
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY

ACCOUNT 3692 SERVICES - OVERHEAD

ORIGINAL LIFE TABLE

PLACEMENT BAND 1905-2018 EXPERIENCE BAND 1956-2018

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	21,485,563	14,257	0.0007	0.9993	100.00
0.5	18,800,598	49,506	0.0026	0.9974	99.93
1.5	18,634,849	60,140	0.0032	0.9968	99.67
2.5	18,319,129	133,467	0.0073	0.9927	99.35
3.5	16,567,467	367,892	0.0222	0.9778	98.63
4.5	16,082,337	187,794	0.0117	0.9883	96.43
5.5	14,684,657	147,704	0.0101	0.9899	95.31
6.5	13,919,143	79,386	0.0057	0.9943	94.35
7.5	13,833,296	81,833	0.0059	0.9941	93.81
8.5	13,460,504	88,461	0.0066	0.9934	93.26
9.5	12,761,485	89,289	0.0070	0.9930	92.64
10.5	12,161,423	78,240	0.0064	0.9936	92.00
11.5	11,630,262	85,572	0.0074	0.9926	91.40
12.5	10,999,716	75,724	0.0069	0.9931	90.73
13.5	10,653,373	71,344	0.0067	0.9933	90.11
14.5	10,404,833	68,456	0.0066	0.9934	89.50
15.5	9,418,403	66,449	0.0071	0.9929	88.91
16.5	9,359,582	68,663	0.0073	0.9927	88.29
17.5	9,339,423	71,522	0.0077	0.9923	87.64
18.5	8,757,272	64,337	0.0073	0.9927	86.97
19.5	8,486,612	68,600	0.0081	0.9919	86.33
20.5	8,167,529	72,207	0.0088	0.9912	85.63
21.5	7,809,949	69,361	0.0089	0.9911	84.87
22.5	7,326,832	62,681	0.0086	0.9914	84.12
23.5	6,964,450	63,509	0.0091	0.9909	83.40
24.5	6,623,451	52,482	0.0079	0.9921	82.64
25.5	6,283,210	48,786	0.0078	0.9922	81.99
26.5	5,947,428	53,471	0.0090	0.9910	81.35
27.5	5,684,479	52,232	0.0092	0.9908	80.62
28.5	5,403,511	52,352	0.0097	0.9903	79.88
29.5	5,108,366	54,548	0.0107	0.9893	79.10
30.5	4,876,508	55,242	0.0113	0.9887	78.26
31.5	4,527,915	45,869	0.0101	0.9899	77.37
32.5	4,198,344	68,783	0.0164	0.9836	76.59
33.5	3,880,301	43,411	0.0112	0.9888	75.33
34.5	3,539,394	33,442	0.0094	0.9906	74.49
35.5	3,290,819	26,956	0.0082	0.9918	73.79
36.5	3,049,948	26,040	0.0085	0.9915	73.18
37.5	2,780,385	23,086	0.0083	0.9917	72.56
38.5	2,556,728	20,102	0.0079	0.9921	71.96

DUKE ENERGY KENTUCKY

ACCOUNT 3692 SERVICES - OVERHEAD

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1905-2018 EXPERIENCE BAND 1956-2018

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	2,336,463	19,490	0.0083	0.9917	71.39
40.5	2,117,410	18,494	0.0087	0.9913	70.79
41.5	1,931,818	15,970	0.0083	0.9917	70.18
42.5	1,764,270	13,723	0.0078	0.9922	69.60
43.5	1,593,675	12,849	0.0081	0.9919	69.05
44.5	1,424,011	12,375	0.0087	0.9913	68.50
45.5	1,302,930	12,729	0.0098	0.9902	67.90
46.5	1,175,632	10,704	0.0091	0.9909	67.24
47.5	1,054,095	9,116	0.0086	0.9914	66.63
48.5	959,514	13,357	0.0139	0.9861	66.05
49.5	861,018	10,624	0.0123	0.9877	65.13
50.5	785,827	9,687	0.0123	0.9877	64.33
51.5	700,531	8,700	0.0124	0.9876	63.53
52.5	629,169	8,176	0.0130	0.9870	62.75
53.5	564,221	7,844	0.0139	0.9861	61.93
54.5	506,359	21,004	0.0415	0.9585	61.07
55.5	436,668	22,679	0.0519	0.9481	58.54
56.5	364,924	7,080	0.0194	0.9806	55.50
57.5	306,314	8,837	0.0288	0.9712	54.42
58.5	248,837	4,861	0.0195	0.9805	52.85
59.5	202,827	3,330	0.0164	0.9836	51.82
60.5	164,531	2,595	0.0158	0.9842	50.97
61.5	133,938	2,963	0.0221	0.9779	50.16
62.5	111,841	2,652	0.0237	0.9763	49.05
63.5	108,674	645	0.0059	0.9941	47.89
64.5	98,035	2,344	0.0239	0.9761	47.60
65.5	86,879	2,641	0.0304	0.9696	46.47
66.5	74,941	2,692	0.0359	0.9641	45.05
67.5	67,967	2,347	0.0345	0.9655	43.44
68.5	58,727	2,228	0.0379	0.9621	41.94
69.5	50,755	990	0.0195	0.9805	40.35
70.5	45,015	820	0.0182	0.9818	39.56
71.5	40,854	99	0.0024	0.9976	38.84
72.5	38,460	175	0.0045	0.9955	38.74
73.5	37,220	124	0.0033	0.9967	38.57
74.5	36,127	229	0.0064	0.9936	38.44
75.5	34,865	996	0.0286	0.9714	38.20
76.5	33,124	130	0.0039	0.9961	37.10
77.5	31,543	281	0.0089	0.9911	36.96
78.5	30,013	956	0.0319	0.9681	36.63

DUKE ENERGY KENTUCKY

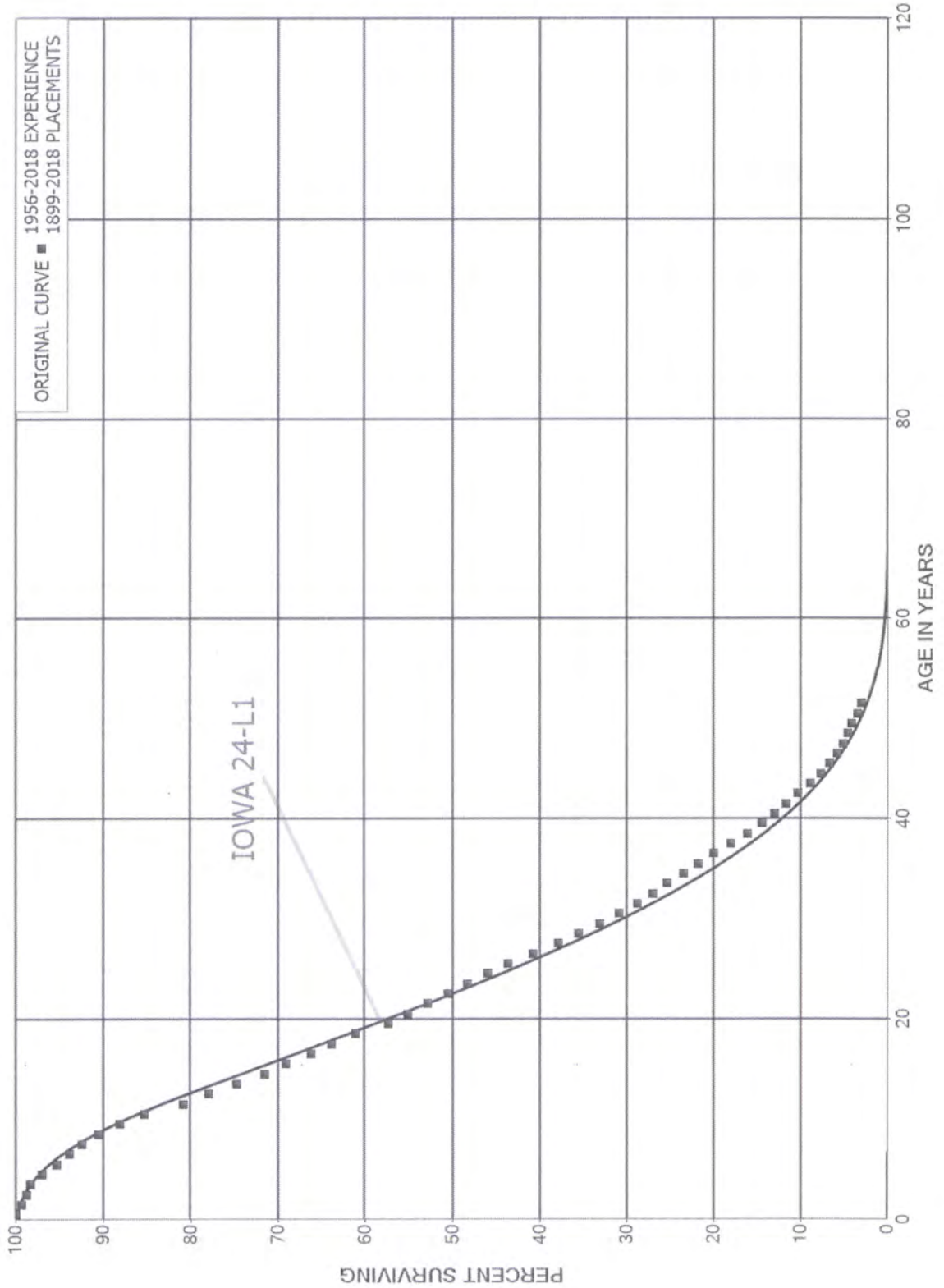
ACCOUNT 3692 SERVICES - OVERHEAD

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1905-2018 EXPERIENCE BAND 1956-2018

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	27,867	947	0.0340	0.9660	35.46
80.5	26,381	307	0.0116	0.9884	34.26
81.5	26,074	351	0.0134	0.9866	33.86
82.5	25,723	351	0.0136	0.9864	33.40
83.5	25,373	207	0.0081	0.9919	32.95
84.5	25,166		0.0000	1.0000	32.68
85.5	25,166	138	0.0055	0.9945	32.68
86.5	25,029	44	0.0018	0.9982	32.50
87.5	24,985	56	0.0023	0.9977	32.45
88.5	24,928	5,211	0.2090	0.7910	32.37
89.5	19,718	895	0.0454	0.9546	25.61
90.5	18,823	1,282	0.0681	0.9319	24.44
91.5	17,541	1,095	0.0624	0.9376	22.78
92.5	16,446	757	0.0460	0.9540	21.36
93.5	27		0.0000	1.0000	20.37
94.5	27		0.0000	1.0000	20.37
95.5	27	27	1.0000		20.37
96.5					

DUKE ENERGY KENTUCKY
ACCOUNT 3700 METERS AND METERING EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY

ACCOUNT 3700 METERS AND METERING EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1899-2018 EXPERIENCE BAND 1956-2018

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	23,849,611	19,032	0.0008	0.9992	100.00
0.5	23,680,503	138,334	0.0058	0.9942	99.92
1.5	23,384,785	148,502	0.0064	0.9936	99.34
2.5	22,908,064	93,805	0.0041	0.9959	98.71
3.5	22,527,104	307,701	0.0137	0.9863	98.30
4.5	22,047,278	375,863	0.0170	0.9830	96.96
5.5	21,554,037	323,625	0.0150	0.9850	95.31
6.5	20,658,205	323,673	0.0157	0.9843	93.87
7.5	20,024,981	418,206	0.0209	0.9791	92.40
8.5	21,933,890	583,765	0.0266	0.9734	90.47
9.5	21,324,892	673,993	0.0316	0.9684	88.07
10.5	17,692,124	932,757	0.0527	0.9473	85.28
11.5	16,139,149	575,309	0.0356	0.9644	80.79
12.5	15,136,012	621,991	0.0411	0.9589	77.91
13.5	14,157,725	602,587	0.0426	0.9574	74.71
14.5	13,113,172	445,412	0.0340	0.9660	71.53
15.5	12,601,225	536,773	0.0426	0.9574	69.10
16.5	11,935,659	422,669	0.0354	0.9646	66.15
17.5	11,346,136	485,091	0.0428	0.9572	63.81
18.5	10,519,896	663,404	0.0631	0.9369	61.08
19.5	9,833,280	370,148	0.0376	0.9624	57.23
20.5	8,832,112	361,396	0.0409	0.9591	55.08
21.5	7,886,558	337,928	0.0428	0.9572	52.82
22.5	7,337,177	332,259	0.0453	0.9547	50.56
23.5	6,797,105	332,871	0.0490	0.9510	48.27
24.5	6,221,622	305,952	0.0492	0.9508	45.91
25.5	5,643,386	378,704	0.0671	0.9329	43.65
26.5	5,033,926	353,208	0.0702	0.9298	40.72
27.5	4,453,740	276,602	0.0621	0.9379	37.86
28.5	3,952,364	266,555	0.0674	0.9326	35.51
29.5	3,525,784	243,384	0.0690	0.9310	33.12
30.5	3,176,454	213,509	0.0672	0.9328	30.83
31.5	2,842,318	175,641	0.0618	0.9382	28.76
32.5	2,593,047	158,208	0.0610	0.9390	26.98
33.5	2,376,816	178,117	0.0749	0.9251	25.33
34.5	2,151,121	153,226	0.0712	0.9288	23.44
35.5	1,947,742	166,021	0.0852	0.9148	21.77
36.5	1,737,365	174,065	0.1002	0.8998	19.91
37.5	1,524,295	156,713	0.1028	0.8972	17.92
38.5	1,307,046	139,413	0.1067	0.8933	16.07

DUKE ENERGY KENTUCKY

ACCOUNT 3700 METERS AND METERING EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1899-2018 EXPERIENCE BAND 1956-2018

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	1,126,995	114,508	0.1016	0.8984	14.36
40.5	976,959	94,098	0.0963	0.9037	12.90
41.5	845,760	97,534	0.1153	0.8847	11.66
42.5	731,799	108,675	0.1485	0.8515	10.31
43.5	610,811	82,921	0.1358	0.8642	8.78
44.5	499,685	67,334	0.1348	0.8652	7.59
45.5	415,494	53,336	0.1284	0.8716	6.57
46.5	348,420	38,076	0.1093	0.8907	5.72
47.5	301,642	32,295	0.1071	0.8929	5.10
48.5	261,820	30,338	0.1159	0.8841	4.55
49.5	219,408	32,082	0.1462	0.8538	4.03
50.5	173,555	23,387	0.1348	0.8652	3.44
51.5	141,909	3,841	0.0271	0.9729	2.97
52.5	126,546	2,960	0.0234	0.9766	2.89
53.5	120,578	1,670	0.0138	0.9862	2.83
54.5	112,478	1,152	0.0102	0.9898	2.79
55.5	107,661	839	0.0078	0.9922	2.76
56.5	102,704	1,725	0.0168	0.9832	2.74
57.5	93,036	872	0.0094	0.9906	2.69
58.5	84,695	1,129	0.0133	0.9867	2.67
59.5	78,274	734	0.0094	0.9906	2.63
60.5	73,281	1,134	0.0155	0.9845	2.60
61.5	62,201	1,247	0.0200	0.9800	2.56
62.5	55,433	1,157	0.0209	0.9791	2.51
63.5	50,314	614	0.0122	0.9878	2.46
64.5	46,468	193	0.0042	0.9958	2.43
65.5	39,814	295	0.0074	0.9926	2.42
66.5	34,496	274	0.0079	0.9921	2.40
67.5	32,205	124	0.0038	0.9962	2.38
68.5	28,766	315	0.0110	0.9890	2.37
69.5	26,396	315	0.0119	0.9881	2.35
70.5	23,070	1,280	0.0555	0.9445	2.32
71.5	17,500	582	0.0332	0.9668	2.19
72.5	16,097	17	0.0011	0.9989	2.12
73.5	15,806	9	0.0006	0.9994	2.12
74.5	15,358	35	0.0023	0.9977	2.12
75.5	15,119		0.0000	1.0000	2.11
76.5	13,846		0.0000	1.0000	2.11
77.5	11,729		0.0000	1.0000	2.11
78.5	10,970		0.0000	1.0000	2.11

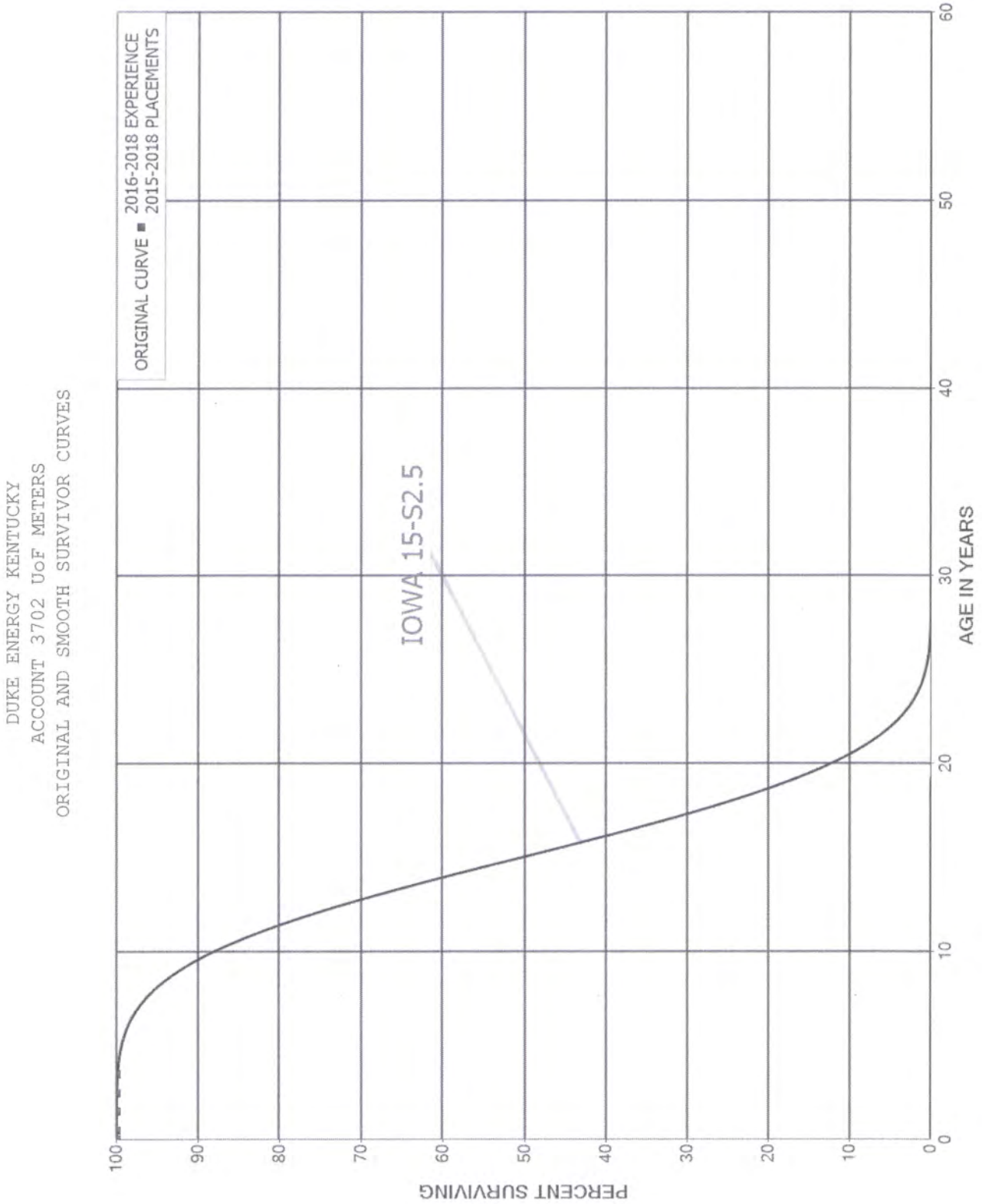
DUKE ENERGY KENTUCKY

ACCOUNT 3700 METERS AND METERING EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1899-2018 EXPERIENCE BAND 1956-2018

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	9,783	30	0.0031	0.9969	2.11
80.5	9,594		0.0000	1.0000	2.10
81.5	8,279		0.0000	1.0000	2.10
82.5	7,380	33	0.0045	0.9955	2.10
83.5	7,106		0.0000	1.0000	2.09
84.5	6,756		0.0000	1.0000	2.09
85.5	6,730		0.0000	1.0000	2.09
86.5	6,730		0.0000	1.0000	2.09
87.5	5,893		0.0000	1.0000	2.09
88.5	5,191		0.0000	1.0000	2.09
89.5	3,711		0.0000	1.0000	2.09
90.5	2,952		0.0000	1.0000	2.09
91.5	2,036		0.0000	1.0000	2.09
92.5	1,642		0.0000	1.0000	2.09
93.5	1,046		0.0000	1.0000	2.09
94.5	708		0.0000	1.0000	2.09
95.5	304		0.0000	1.0000	2.09
96.5	158		0.0000	1.0000	2.09
97.5	125		0.0000	1.0000	2.09
98.5					2.09


DUKE ENERGY KENTUCKY
ACCOUNT 3702 UoF METERS
ORIGINAL AND SMOOTH SURVIVOR CURVES
ORIGINAL CURVE ■ 2016-2018 EXPERIENCE
2015-2018 PLACEMENTS
IOWA 15-S2.5
PERCENT SURVIVING
AGE IN YEARS
100
90
80
70
60
50
40
30
20
10
0
0
10
20
30
40
50
60

DUKE ENERGY KENTUCKY

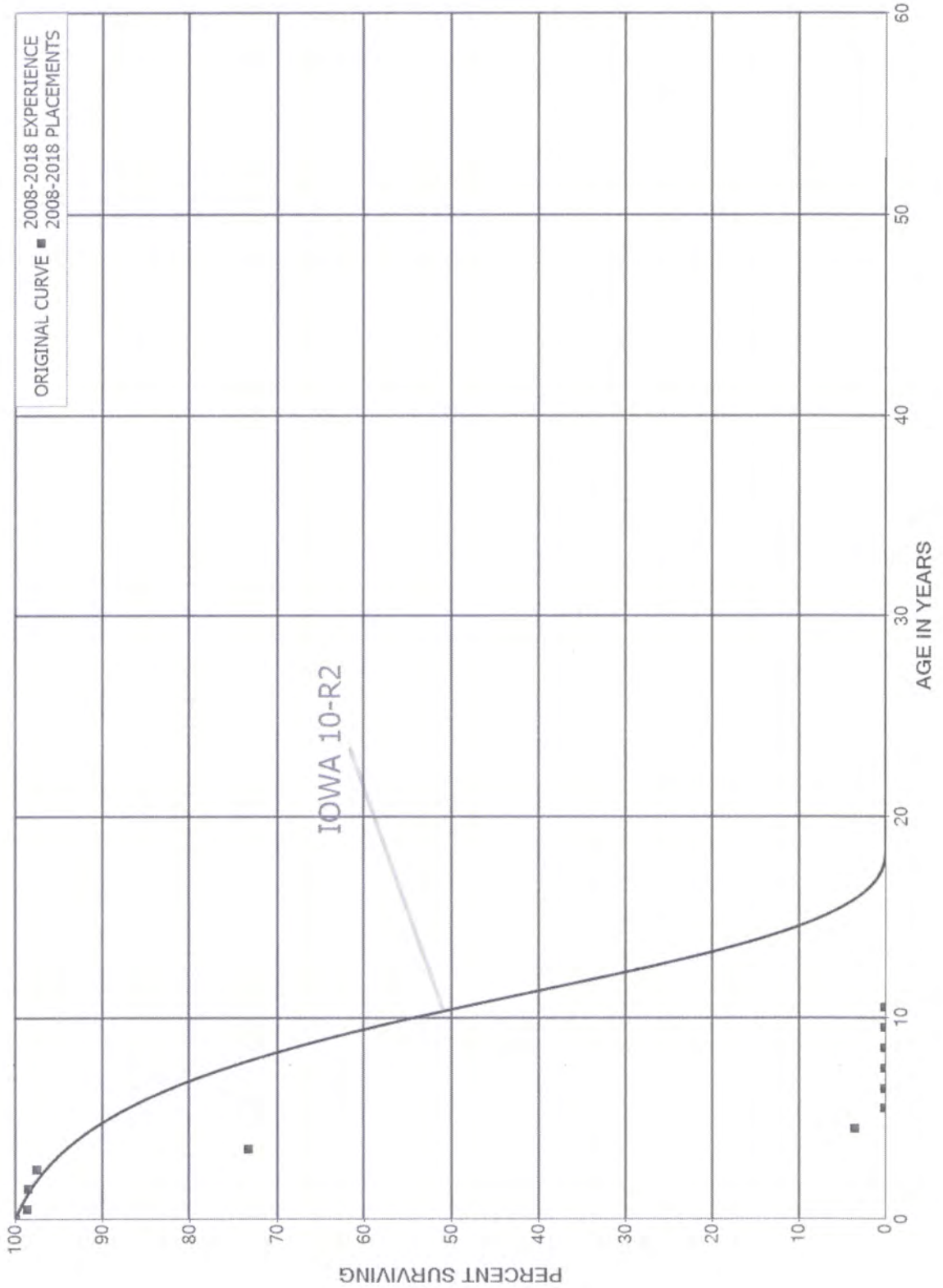
ACCOUNT 3702 UoF METERS

ORIGINAL LIFE TABLE

PLACEMENT BAND 2015-2018 EXPERIENCE BAND 2016-2018

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	21,958,056		0.0000	1.0000	100.00
0.5	10,302,907		0.0000	1.0000	100.00
1.5	302,081		0.0000	1.0000	100.00
2.5	208,337		0.0000	1.0000	100.00
3.5					100.00

DUKE ENERGY KENTUCKY
ACCOUNT 3712 COMPANY-OWNED OUTDOOR LIGHTING
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY

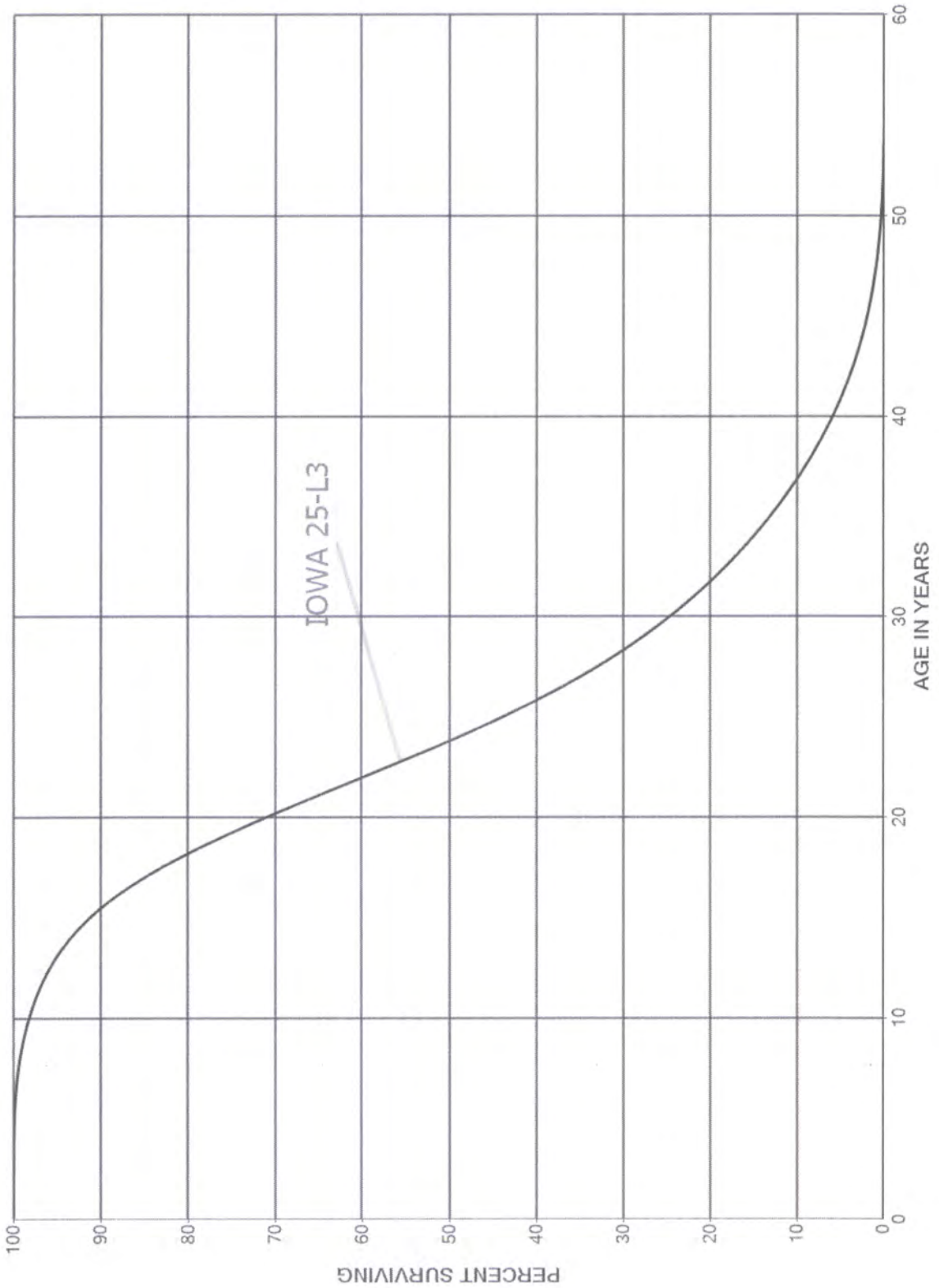
ACCOUNT 3712 COMPANY-OWNED OUTDOOR LIGHTING

ORIGINAL LIFE TABLE

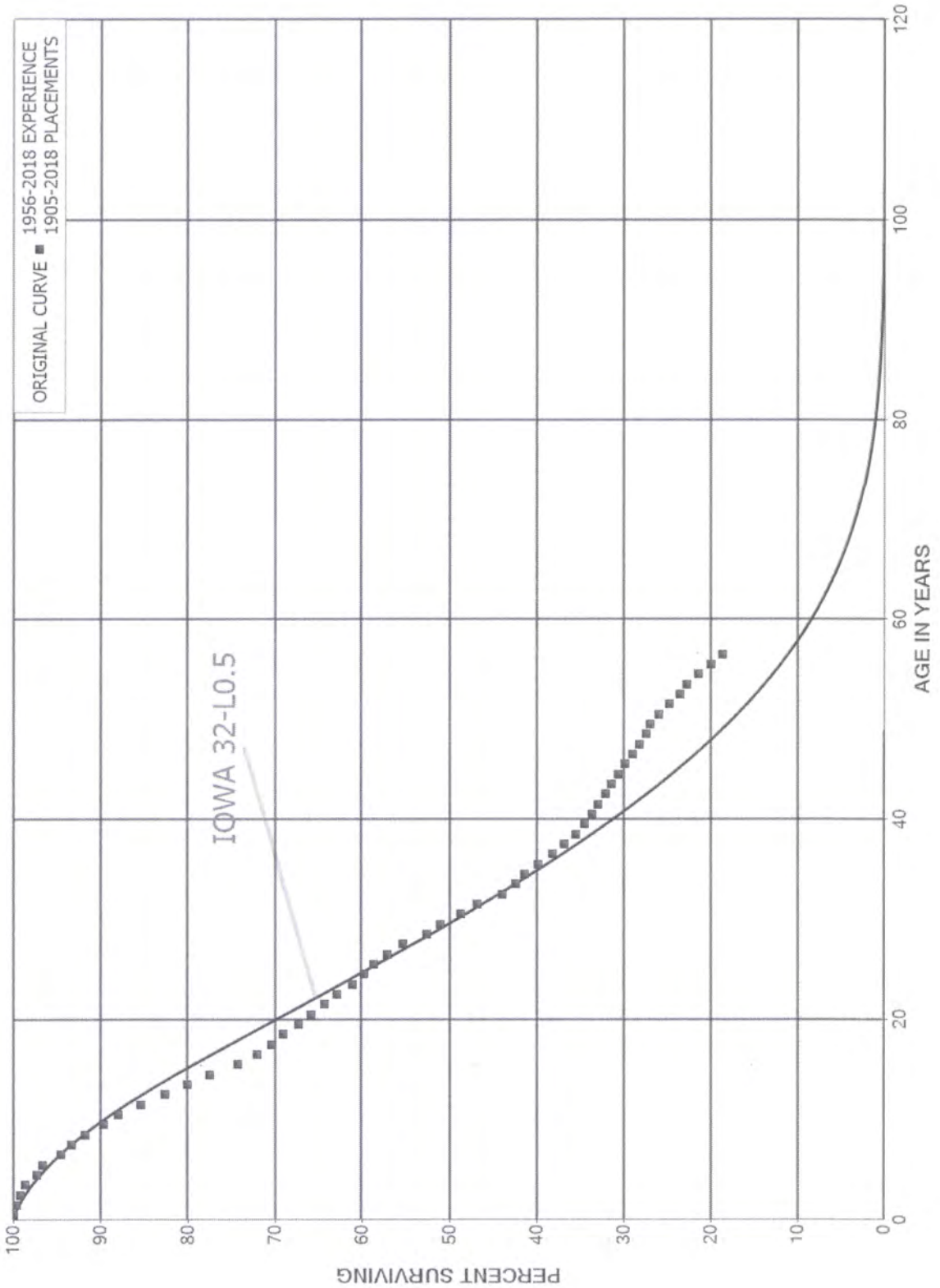
PLACEMENT BAND 2008-2018 EXPERIENCE BAND 2008-2018

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	373,816	5,104	0.0137	0.9863	100.00
0.5	347,179	547	0.0016	0.9984	98.63
1.5	293,532	3,036	0.0103	0.9897	98.48
2.5	167,274	41,525	0.2482	0.7518	97.46
3.5	39,122	37,273	0.9527	0.0473	73.27
4.5	60,624	58,602	0.9667	0.0333	3.46
5.5	2,021	1,583	0.7829	0.2171	0.12
6.5	439		0.0000	1.0000	0.03
7.5	439		0.0000	1.0000	0.03
8.5	439		0.0000	1.0000	0.03
9.5	439		0.0000	1.0000	0.03
10.5					0.03

DUKE ENERGY KENTUCKY
ACCOUNT 3720 LEASED PROPERTY ON CUSTOMERS' PREMISES
SMOOTH SURVIVOR CURVE



DUKE ENERGY KENTUCKY
ACCOUNT 3731 STREET LIGHTING - OVERHEAD
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY

ACCOUNT 3731 STREET LIGHTING - OVERHEAD

ORIGINAL LIFE TABLE

PLACEMENT BAND 1905-2018 EXPERIENCE BAND 1956-2018

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	5,492,438	3,439	0.0006	0.9994	100.00
0.5	5,456,456	19,678	0.0036	0.9964	99.94
1.5	5,377,872	20,946	0.0039	0.9961	99.58
2.5	5,008,819	30,965	0.0062	0.9938	99.19
3.5	4,666,376	58,580	0.0126	0.9874	98.58
4.5	4,209,083	32,808	0.0078	0.9922	97.34
5.5	4,206,461	90,515	0.0215	0.9785	96.58
6.5	4,115,347	50,973	0.0124	0.9876	94.50
7.5	4,081,719	68,926	0.0169	0.9831	93.33
8.5	4,015,468	95,920	0.0239	0.9761	91.76
9.5	3,888,341	67,778	0.0174	0.9826	89.56
10.5	3,807,977	113,239	0.0297	0.9703	88.00
11.5	3,645,808	119,850	0.0329	0.9671	85.39
12.5	3,506,004	105,943	0.0302	0.9698	82.58
13.5	3,364,270	108,714	0.0323	0.9677	80.08
14.5	3,107,911	130,577	0.0420	0.9580	77.50
15.5	2,979,155	88,546	0.0297	0.9703	74.24
16.5	2,889,603	66,939	0.0232	0.9768	72.03
17.5	2,838,211	53,307	0.0188	0.9812	70.36
18.5	2,685,290	68,103	0.0254	0.9746	69.04
19.5	2,475,164	54,892	0.0222	0.9778	67.29
20.5	2,305,611	54,886	0.0238	0.9762	65.80
21.5	2,159,077	45,364	0.0210	0.9790	64.23
22.5	2,054,329	59,794	0.0291	0.9709	62.88
23.5	1,927,073	41,465	0.0215	0.9785	61.05
24.5	1,815,220	34,857	0.0192	0.9808	59.74
25.5	1,711,949	44,353	0.0259	0.9741	58.59
26.5	1,639,443	52,604	0.0321	0.9679	57.07
27.5	1,587,481	74,208	0.0467	0.9533	55.24
28.5	1,484,923	45,108	0.0304	0.9696	52.66
29.5	1,380,840	62,901	0.0456	0.9544	51.06
30.5	1,305,342	51,550	0.0395	0.9605	48.73
31.5	1,238,132	75,915	0.0613	0.9387	46.81
32.5	1,130,652	38,936	0.0344	0.9656	43.94
33.5	1,046,625	25,950	0.0248	0.9752	42.43
34.5	1,006,452	36,662	0.0364	0.9636	41.37
35.5	957,313	41,260	0.0431	0.9569	39.87
36.5	906,229	31,947	0.0353	0.9647	38.15
37.5	855,591	29,632	0.0346	0.9654	36.80
38.5	785,378	21,728	0.0277	0.9723	35.53

DUKE ENERGY KENTUCKY

ACCOUNT 3731 STREET LIGHTING - OVERHEAD

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1905-2018 EXPERIENCE BAND 1956-2018

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	732,971	19,627	0.0268	0.9732	34.55
40.5	694,202	15,104	0.0218	0.9782	33.62
41.5	666,006	17,202	0.0258	0.9742	32.89
42.5	639,576	11,894	0.0186	0.9814	32.04
43.5	606,848	15,845	0.0261	0.9739	31.44
44.5	573,873	14,252	0.0248	0.9752	30.62
45.5	517,336	15,655	0.0303	0.9697	29.86
46.5	464,823	12,539	0.0270	0.9730	28.96
47.5	404,026	11,072	0.0274	0.9726	28.18
48.5	343,068	6,006	0.0175	0.9825	27.41
49.5	287,282	10,690	0.0372	0.9628	26.93
50.5	264,320	12,173	0.0461	0.9539	25.92
51.5	226,736	11,226	0.0495	0.9505	24.73
52.5	175,685	5,919	0.0337	0.9663	23.51
53.5	123,344	7,103	0.0576	0.9424	22.71
54.5	99,318	6,522	0.0657	0.9343	21.41
55.5	72,410	4,878	0.0674	0.9326	20.00
56.5	47,200	1,976	0.0419	0.9581	18.65
57.5	26,229	807	0.0308	0.9692	17.87
58.5	17,720	19	0.0011	0.9989	17.32
59.5	13,213	282	0.0213	0.9787	17.30
60.5	11,743	138	0.0118	0.9882	16.93
61.5	11,066	28	0.0025	0.9975	16.74
62.5	9,702	435	0.0448	0.9552	16.69
63.5	8,844		0.0000	1.0000	15.95
64.5	8,671	648	0.0747	0.9253	15.95
65.5	7,759	348	0.0449	0.9551	14.75
66.5	7,122	249	0.0350	0.9650	14.09
67.5	6,728	178	0.0264	0.9736	13.60
68.5	6,495	248	0.0382	0.9618	13.24
69.5	6,018	11	0.0018	0.9982	12.73
70.5	5,914	2	0.0003	0.9997	12.71
71.5	4,623	346	0.0748	0.9252	12.71
72.5	4,175		0.0000	1.0000	11.76
73.5	4,099		0.0000	1.0000	11.76
74.5	4,077	38	0.0093	0.9907	11.76
75.5	4,029	544	0.1349	0.8651	11.65
76.5	3,461	2	0.0005	0.9995	10.08
77.5	3,080		0.0000	1.0000	10.07
78.5	2,965		0.0000	1.0000	10.07

DUKE ENERGY KENTUCKY

ACCOUNT 3731 STREET LIGHTING - OVERHEAD

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1905-2018 EXPERIENCE BAND 1956-2018

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	2,939		0.0000	1.0000	10.07
80.5	2,768		0.0000	1.0000	10.07
81.5	2,768		0.0000	1.0000	10.07
82.5	2,768		0.0000	1.0000	10.07
83.5	2,768	24	0.0088	0.9912	10.07
84.5	2,744		0.0000	1.0000	9.98
85.5	2,744		0.0000	1.0000	9.98
86.5	2,744		0.0000	1.0000	9.98
87.5	2,744		0.0000	1.0000	9.98
88.5	2,744		0.0000	1.0000	9.98
89.5	2,744	156	0.0567	0.9433	9.98
90.5	2,588	556	0.2150	0.7850	9.42
91.5	2,029	65	0.0320	0.9680	7.39
92.5	1,964		0.0000	1.0000	7.16
93.5	79		0.0000	1.0000	7.16
94.5	79		0.0000	1.0000	7.16
95.5	79		0.0000	1.0000	7.16
96.5	79		0.0000	1.0000	7.16
97.5	79		0.0000	1.0000	7.16
98.5	79		0.0000	1.0000	7.16
99.5	79		0.0000	1.0000	7.16
100.5	79		0.0000	1.0000	7.16
101.5	79		0.0000	1.0000	7.16
102.5	79		0.0000	1.0000	7.16
103.5	79		0.0000	1.0000	7.16
104.5	79		0.0000	1.0000	7.16
105.5	79		0.0000	1.0000	7.16
106.5	79		0.0000	1.0000	7.16
107.5	79		0.0000	1.0000	7.16
108.5					7.16

DUKE ENERGY KENTUCKY
ACCOUNT 3732 STREET LIGHTING - BOULEVARD
ORIGINAL AND SMOOTH SURVIVOR CURVES