COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

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

CASE NO. 2025-00125

FILING REQUIREMENTS

VOLUME 15

Duke Energy Kentucky, Inc.
Case No. 2025-00125
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.	Thomas J. Heath, Jr. Linda L. Miller
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 Sarah E. Lawler
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.	Bruce L. Sailers
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.	Bruce L. Sailers
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.	Clare C. Hudson
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.	Jefferson “Jay” P. Brown Claire C. Hudson Sharif S. Mitchell
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.	Jefferson “Jay” P. Brown
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.	Claire C. Hudson

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.	Claire C. Hudson
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.	Jefferson "Jay" P. Brown
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.	Claire C. Hudson Brian R. Weisker
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.	Claire C. Hudson
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.	Claire C. Hudson
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.	Claire C. Hudson Brian R. Weisker
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.	Claire C. Hudson Brian R. Weisker

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.	Claire C. Hudson Jonathon C. Thorpe Brian R. Weisker
1	29	807 KAR 5:001 Section 16(7)(i)	Most recent FERC or FCC audit reports.	Linda L. Miller
1	30	807 KAR 5:001 Section 16(7)(j)	Prospectuses of most recent stock or bond offerings.	Thomas J. Heath, Jr.
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).	Linda L. Miller
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.	Thomas J. Heath, Jr.
3	33	807 KAR 5:001 Section 16(7)(m)	Current chart of accounts if more detailed than Uniform System of Accounts charts.	Linda L. Miller
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.	Linda L. Miller
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.	Linda L. Miller Claire C. Hudson
3-8	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.	Linda L. Miller
8	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.	Linda L. Miller
8	38	807 KAR 5:001 Section 16(7)(r)	Quarterly reports to the stockholders for the most recent 5 quarters.	Thomas J. Heath, Jr.

9	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
9	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	Jefferson "Jay" P. Brown
9	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.	Rebekah E. Buck
9	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.	Douglas J. Heitkamp
9	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.	Not Applicable
9	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.	Jefferson "Jay" P. Brown

9	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.	Jefferson "Jay" P. Brown Douglas J. Heitkamp Claire C. Hudson Linda L. Miller Sharif S. Mitchell John R. Panizza
9	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.	Jefferson "Jay" P. Brown
9	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.	Jefferson "Jay" P. Brown Douglas J. Heitkmap Claire C. Hudson Sharif S. Mitchell Lindsay B. Philemon
9	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
9	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.	Jefferson "Jay" P. Brown
9	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.	Jefferson "Jay" P. Brown Shannon A. Caldwell
9	51	807 KAR 5:001 Section 16(8)(h)	Computation of gross revenue conversion factor for forecasted period.	Jefferson "Jay" P. Brown
9	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.	Claire C. Hudson Linda L. Miller
9	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.	Thomas J. Heath, Jr.
9	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.	Thomas J. Heath, Jr. Claire C. Hudson Linda L. Miller Sharif S. Mitchell
9	55	807 KAR 5:001 Section 16(8)(l)	Narrative description and explanation of all proposed tariff changes.	Bruce L. Sailers
9	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.	Bruce L. Sailers
9	57	807 KAR 5:001 Section 16(8)(n)	Typical bill comparison under present and proposed rates for all customer classes.	Bruce L. Sailers
9	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.	Sarah E. Lawler

9	59	807 KAR 5:001 Section 16(10)	A request for a waiver 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. In determining if good cause has been shown, the commission shall consider: 1. if other information that the utility would provide if the waiver is granted is sufficient to allow the commission to effectively and efficiently review the rate application; 2. if the information that is the subject of the waiver request is normally maintained by the utility or reasonably available to it from the information that it maintains; and 3. the expense to the utility in providing the information that is the subject of the waiver request.	Not Applicable
9	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
9	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

9	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

9	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.	Bruce L. Sailers
9	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.	Not Applicable

10	-	807 KAR 5:001 Section 16(8)(a) through (k)	Schedule Book (Schedules A-K)	Various
11	-	807 KAR 5:001 Section 16(8)(l) through (n)	Schedules L-N	Bruce L. Sailers
12	-	-	Workpapers	Various
13	-	807 KAR 5:001 Section 16(7)(a)	Testimony (Volume 1 of 3)	Various
14	-	807 KAR 5:001 Section 16(7)(a)	Testimony (Volume 2 of 3)	Various
15	-	807 KAR 5:001 Section 16(7)(a)	Testimony (Volume 3 of 3)	Various
16-17	-	KRS 278.2205(6)	Cost Allocation Manual	Rebekah E. Buck

TESTIMONY

VOLUME 3 OF 3

JOSHUA C. NOWAK
JOHN R. PANIZZA
LINDSAY B. PHILEMON
BRUCE L. SAILERS
JOHN J. SPANOS
JONATHON C. THORPE
BRIAN R. WEISKER

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 NATURAL GAS RATES; 2) APPROVAL OF NEW TARIFFS; AND 3) ALL OTHER REQUIRED APPROVALS, WAIVERS, AND RELIEF.	))))))	CASE NO. 2025-00125

DIRECT TESTIMONY OF

JOSHUA C. NOWAK

ON BEHALF OF

DUKE ENERGY KENTUCKY, INC.

June 2, 2025

TABLE OF CONTENTS

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND OCCUPATION.

A. My name is Joshua C. Nowak. I am employed by Concentric Energy Advisors, Inc. (Concentric) as a Vice President. Concentric is a management consulting and economic advisory firm, focused on the North American energy and water industries. Based in Marlborough, Massachusetts, and Washington, D.C., Concentric specializes in regulatory and litigation support, financial advisory services, energy market strategies, market assessments, energy commodity contracting and procurement, economic feasibility studies, and capital market analyses. My business address is 293 Boston Post Road West, Suite 500, Marlborough, Massachusetts 01752.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING?

A. I am submitting this testimony to the Kentucky Public Service Commission (the Commission) on behalf of Duke Energy Kentucky, Inc. (Duke Energy Kentucky or the Company).

Q. PLEASE DESCRIBE YOUR EXPERIENCE IN THE ENERGY AND UTILITY INDUSTRIES AND YOUR EDUCATIONAL AND PROFESSIONAL QUALIFICATIONS.

A. I hold a Bachelor's degree in Economics from Boston College and have more than 15 years of experience in providing economic, financial, and strategic advisory services. As a consultant, I primarily advise clients in regulated utility industries and have provided testimony regarding financial matters before multiple regulatory

agencies. I have advised numerous energy and utility clients on a wide range of financial and economic issues with primary concentrations in valuation and utility rate matters. Many of these assignments have included the determination of the cost of capital for valuation and ratemaking purposes. I have provided testimony before the Federal Energy Regulatory Commission (FERC) as well as state and provincial jurisdictions in the U.S. and Canada. Prior to joining Concentric in 2018, I was employed by National Grid USA where I was responsible for regulatory filings related to the cost of capital across the company's multiple U.S. operating companies and service territories. A summary of my professional and educational background is presented in Attachment JCN-1.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my direct testimony is to present evidence and provide a recommendation for the return on equity (ROE) for the natural gas utility operations of Duke Energy Kentucky. My direct testimony also discusses the Company's capital structure in comparison to the proxy group of companies supporting my analysis.

Q. ARE YOU SPONSORING ANY ATTACHMENTS IN THIS PROCEEDING?

A. Yes. My analyses and recommendations are supported by the data presented in Attachments JCN-2 through JCN-10, which have been prepared by me or under my direction. I sponsor the following attachments:

- JCN-2 – Comprehensive Summary of ROE Results
- JCN-3 – Proxy Group Screening Analysis

- JCN-4 – Constant Growth Discounted Cash Flow (DCF) Analysis
- JCN-5 – Market Risk Premium (MRP)
- JCN-6 – Capital Asset Pricing Model (CAPM) Analysis
- JCN-7 – Bond Yield Plus Risk Premium Analysis
- JCN-8 – Expected Earnings Analysis
- JCN-9 – Regulatory Framework Comparison
- JCN-10 – Capital Structure Analysis

II. SUMMARY OF TESTIMONY

Q. WHAT IS YOUR CONCLUSION REGARDING THE APPROPRIATE COST OF EQUITY AND CAPITAL STRUCTURE FOR DUKE ENERGY KENTUCKY?

A. I have estimated Duke Energy Kentucky's ROE based on the results of the DCF model, the CAPM, and the Bond Yield Plus Risk Premium (Risk Premium) model and the general economic and capital market environment and the influence such conditions exert over the results. In addition, to assess the reasonableness of the DCF, CAPM, and Risk Premium results and evaluate the available returns for alternative investments, I considered the Expected Earnings analysis. In addition, I analyzed the Company's business and regulatory risk profile that must be considered in determining where the Company's cost of equity falls within the range of analytical results. A summary of the results of my analyses are shown below in Figure 1.

Figure 1: Summary of Results

	Low Mean	Mean	High Mean
Primary Analyses			
DCF Result	10.34%	10.42%	10.51%
CAPM Result	11.23%	11.97%	12.67%
Risk Premium	10.28%	10.36%	10.41%
Average		**10.91%**	
Benchmark Analysis			
Expected Earnings		9.79%	

The DCF, CAPM, and Risk Premium analysis produce a range of estimates of the Company's cost of equity of 10.34 percent to 12.67 percent. Based on these analyses, I consider an ROE range of 10.25 percent to 11.25 percent to be reasonable. From within that range, and considering the Company's risk profile, I recommend an ROE of 10.75 percent which is consistent with the midpoint of the range of reasonableness. As to the capital structure, Duke Energy Kentucky's requested capital structure of 52.649 percent equity and 47.351 percent debt (44.086 percent long-term debt and 3.265 percent short-term debt) is reasonable relative to the range of capital structures for the operating companies held by the proxy group companies.

Q. PLEASE PROVIDE A BRIEF OVERVIEW OF THE ANALYSES THAT YOU CONDUCTED TO SUPPORT YOUR ROE RECOMMENDATION.

A. As mentioned, my ROE recommendation is based on the range of results produced

from four modeling methodologies. Analysts and academics understand that ROE models are tools to be used in the ROE estimation process, and that strict adherence to any single approach, or the specific results of any single approach, can lead to flawed conclusions. No model can exactly pinpoint the correct cost of equity, but each is designed to provide a unique estimate of the return required to attract equity investment. Therefore, my analysis considers the range of results produced by these four different models. The DCF analysis estimates the cost of equity based on market data on dividend yields and analysts' projected earnings per share growth rates from reputable third-party sources. The CAPM analysis is based on both current and forecasted interest rates and a forward-looking market risk premium. The Risk Premium approach calculates the risk premium as the spread between authorized ROEs for natural gas utilities and Treasury bond yields. The Expected Earnings approach is based on projected returns on book equity that investors expect to receive over the next three to five years. My ROE recommendation is ultimately based on the range of results produced by these four methodologies.

My recommendation also considers the general economic and capital market environment, and the influence capital market conditions exert over the results of the DCF, CAPM, and Risk Premium models. In addition, I consider the Company's business and regulatory risks in relation to a set of proxy companies to assist in the determination of the appropriate ROE and capital structure from within the range of my analytical results.

Q. HOW IS THE REMAINDER OF YOUR DIRECT TESTIMONY ORGANIZED?

A. The remainder of my Direct Testimony is organized as follows:

- Section III provides background on the regulatory principles that guide the determination of ROE.
- Section IV presents a review of current and prospective economic and capital market conditions and the implications on the cost of capital for utilities.
- Section V describes the criteria and approach for the selection of a proxy group of comparable companies.
- Section VI provides a description of the data and methodologies used to estimate the cost of equity, as well as the results of the various ROE estimation models and concludes with my recommendation and an assessment of its reasonableness under the *Hope* test.
- Section VII discusses Duke Energy Kentucky's regulatory risks, relative to the proxy group.
- Section VIII reviews Duke Energy Kentucky's capital structure in the context of the proxy group.
- Finally, Section IX summarizes my results, conclusions, and recommendation.

III. REGULATORY PRINCIPLES

Q. PLEASE DESCRIBE THE GUIDING PRINCIPLES USED IN ESTABLISHING THE COST OF CAPITAL FOR A REGULATED UTILITY.

A. The foundations of public utility regulation require that utilities receive a fair rate of return sufficient to attract needed capital to maintain important infrastructure for customers at reasonable rates. The basic tenets of this regulatory doctrine originate from several bellwether decisions by the United States Supreme Court, notably *Bluefield Waterworks and Improvement Company v. Public Service Commission of West Virginia*, 262 U.S. 679 (1923) (*Bluefield*), and *Federal Power Commission v. Hope Natural Gas Company*, 320 U.S. 591 (1944) (*Hope*). In *Bluefield*, the Court stated:

> A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties…
>
> The return should be reasonably sufficient to assure investor confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties.

Later, in *Hope*, the Court established a standard for the ROE that remains the guiding principle for ratemaking in regulatory proceedings to this day:

> [T]he return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of

the enterprise, so as to maintain its credit and to attract capital.

Q. PLEASE EXPLAIN HOW THESE PRINCIPLES APPLY IN THE CONTEXT OF THE REGULATED RATE OF RETURN.

A. Regulated utilities rely primarily on common stock and long-term debt to finance permanent property, plant, and equipment. The allowed rate of return for a regulated utility is based on its weighted average cost of capital, where the costs of the individual sources of capital (i.e., debt and equity) are weighted by their respective book values. The ROE represents the cost of raising and retaining equity capital and is estimated by using one or more analytical techniques that use market data to quantify investor requirements for equity returns. However, the ROE cannot be derived through quantitative metrics and models alone. To properly estimate the ROE, the financial, regulatory, and economic context must also be considered.

The DCF, CAPM, Risk Premium, and Expected Earnings approaches, while fundamental to the ROE determination, are still only models. The results of these models cannot be mechanistically applied without also using informed judgment to consider economic and capital market conditions and the relative risk of Duke Energy Kentucky compared to the proxy group companies.

Based on these widely recognized standards, the Commission's order in this case should provide Duke Energy Kentucky with the opportunity to earn a return on equity that is:

- Adequate to allow the Company to attract the capital that is necessary to provide safe and reliable service (the "capital attraction standard");

- Sufficient to ensure the Company's ability to maintain its financial integrity (the "financial integrity standard"); and
- At a level that is comparable to returns required on investments of similar risk (the "comparability standard").

Importantly, a fair return must satisfy all three of these standards. The allowed ROE should enable the Company to finance capital expenditures on reasonable terms and provide it with the ability to raise capital under a full range of capital market circumstances to serve its customers.

Q. IS DUKE ENERGY KENTUCKY'S ABILITY TO ATTRACT EQUITY CAPITAL AFFECTED BY ROES THAT ARE AUTHORIZED FOR OTHER UTILITIES?

A. Yes, it is. Duke Energy Kentucky competes with other investments of similar risk for equity capital from the market. In addition, Duke Energy Kentucky competes with other investments within Duke Energy Corporation for equity capital from its parent company. Therefore, the ROE awarded to a utility sends an important signal to investors regarding whether there is regulatory support for financial integrity, dividends, growth, and fair compensation for business and financial risk. A company's cost of equity is defined by, and equal to, the opportunity cost of investing in that company. In other words, if higher returns are available from other investments of comparable risk, investors have an incentive to direct their capital to those investments. This means that an authorized ROE for Duke Energy Kentucky that is below ROEs authorized for other utilities could inhibit its ability

to attract capital on reasonable terms for investments to be made on behalf of customers in Kentucky.

Q. WHAT ARE YOUR CONCLUSIONS REGARDING REGULATORY PRINCIPLES?

A. The ratemaking process is premised on the principle that, in order for investors and companies to commit the capital needed to provide safe and reliable utility services, the utility must have the opportunity to recover invested capital and the market-required return on that capital. Because utility operations are capital intensive, regulatory decisions should enable the utility to attract capital on favorable terms. The financial community carefully monitors the current and expected financial condition of utility companies as well as the regulatory environment in which they operate. In that respect, the regulatory environment is one of the most important factors considered by both debt and equity investors in their assessments of risk. It is therefore essential that the ROE authorized in this proceeding take into consideration the current and expected capital market conditions that Duke Energy Kentucky faces, as well as investors' expectations and requirements regarding both risks and returns. A reasonable ROE is required both for continued capital investment by the Company and to maintain confidence in Kentucky's regulatory environment among credit rating agencies and investors.

IV. ECONOMIC AND CAPITAL MARKET CONDITIONS

Q. WHY IS IT IMPORTANT TO CONSIDER THE EFFECTS OF CURRENT AND EXPECTED ECONOMIC AND FINANCIAL MARKET CONDITIONS WHEN SETTING THE APPROPRIATE ROE?

A. It is important to consider current and expected conditions in the general economy and financial markets because the authorized ROE for a public utility should allow the utility to attract investor capital at a reasonable cost under current and foreseeable economic and financial conditions as underscored by the *Hope* and *Bluefield* decisions discussed previously. The standard ROE estimation tools, such as the DCF, CAPM, Risk Premium, and Expected Earnings models, each reflect the state of the general economy and financial markets by incorporating specific economic and financial data. These inputs are, however, only samples of the various economic and market forces that determine a utility's required return. Consideration must also be given to whether the assumptions relied on in the current or projected market data are appropriate. If investors do not expect current market conditions to continue in the future, it is possible that the ROE estimation models will not provide an accurate estimate of investors' forward-looking required return. Therefore, an assessment of current and projected market conditions is integral to any ROE recommendation.

Q. WHAT ARE THE KEY FACTORS AFFECTING THE COST OF EQUITY FOR REGULATED UTILITIES IN THE CURRENT AND PROSPECTIVE CAPITAL MARKETS?

A. The cost of equity for regulated utility companies is being affected by several key

factors in the current and prospective capital markets including the uncertainty regarding the economy, the impacts of the Federal Reserve's approach to interest rates and inflation, concerns over the ongoing elevated interest rates, and the heightened uncertainty and volatility in equity markets and resulting utility performance, which has lagged the broader market. Collectively, these factors contribute to heightened market risk and an increase in investor-required returns, relative to capital markets circumstances in place during the Company's last rate case. In this section, I discuss these factors and how they affect the models used to estimate the cost of equity for regulated utilities.

A. Monetary Policy

Q. HOW DO THE NATION'S MONETARY POLICY ACTIONS IMPACT CAPITAL MARKETS AND THE U.S. ECONOMY?

A. The Federal Reserve is responsible for "conducting the nation's monetary policy by influencing money and credit conditions in the economy in pursuit of full employment and stable prices."[1] The Federal Reserve implements monetary policy through raising or lowering interest rates which impacts the demand for goods and services. This, in turn, impacts employment and inflation. Monetary policy has shifted dramatically over the past several years in response first to COVID-19, and then to record high inflation. The capital markets are significantly affected by the Federal Reserve's policy. While the primary monetary policy tool used by the Federal Reserve is the short-term interest rate for overnight interbank loans, it has

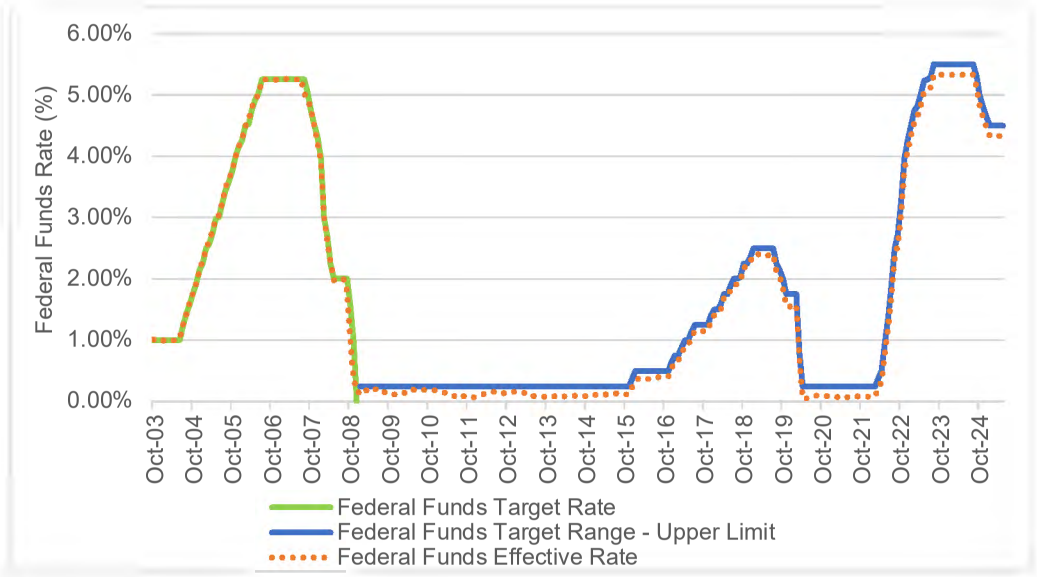
[1] Federal Reserve, "The Fed - What is the purpose of the Federal Reserve System?" available at https://www.federalreserve.gov/faqs/about_12594.htm.

far-reaching consequences for capital markets and significantly influences long-term interest rates and the cost of equity. As discussed in more detail below, current Federal Reserve policy continues to be focused on inflationary concerns, but it is important to note, even if inflation moderates, the current monetary policy stance is likely to have a long-lasting effect on capital market conditions.

Q. WHAT STEPS DID THE FEDERAL RESERVE TAKE TO STABILIZE FINANCIAL MARKETS AND SUPPORT THE ECONOMY IN RESPONSE TO COVID-19?

A. Beginning in 2022, inflation surged to levels not seen since the late-1970s and early-1980s, and the Federal Reserve had little choice but to aggressively battle inflation through raising interest rates. Previously, in response to the economic effects of COVID-19, the Federal Reserve decreased the federal funds rate in March 2020 to a target range of 0.00 percent to 0.25 percent (which remained in effect until March 2022) in addition to other stimulus measures that increased the supply of money in the economy. The Federal Reserve began unwinding its quantitative easing program in 2022 and has thus far increased the target rate 11 times to a target rate of 5.25 percent to 5.50 percent through August 2024 (the highest level in the last 20 years). As shown in Figure 2 below, the Federal Reserve only recently began reducing the federal funds rate by 50 basis points in September 2024 and then by 25 basis points in each of November 2024 and December 2024 to a target rate of 4.25 percent to 4.50 percent.

Figure 2: FOMC Federal Funds Rates



Despite the recent rate reduction, the Federal Reserve indicated that inflation remains a key consideration for the Committee. In its May 7, 2025 decision to not change the federal funds rate target, the Federal Open Market Committee (FOMC) noted that "[i]nflation remains somewhat elevated" and it "judges that the risks of higher unemployment and higher inflation have risen."[2] While inflation is still down from the high of 9.10 percent in June 2022, as measured by the Consumer Price Index (CPI), it recently ticked up in April, increasing 3.40 percent from April 2024 to April 2025, a one percent increase from the March 2024 to March 2025 2.40 percent increase.[3]

[2] FOMC Press Release (May 7, 2025). Available here: https://www.federalreserve.gov/newsevents/pressreleases/monetary20250507a.htm.

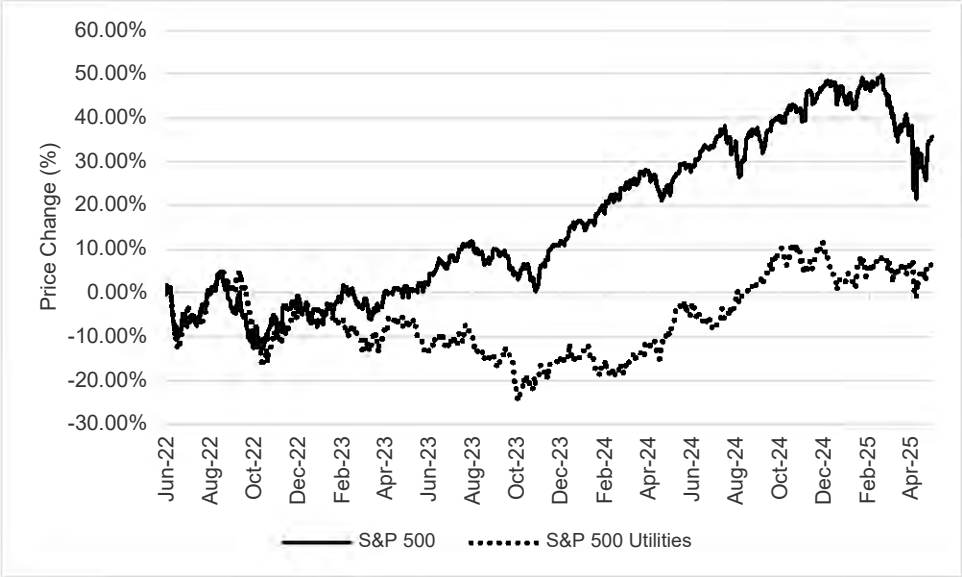
[3] Bureau of Labor Statistics, https://www.bls.gov/charts/consumer-price-index/consumer-price-index-by-category-line-chart.htm.

Q. HOW HAVE CAPITAL MARKETS RESPONDED?

A. In response to monetary policy, high inflation, and disappointing earnings reports, capital markets over the past several years have been volatile, and the stock market has lost substantial value. While the S&P 500 closed at record highs on the first trading day of 2022, by mid-June of that year, the S&P 500 was down more than 21 percent, at that time wiping out all of 2021's gains.

And although the S&P 500 has steadily gained ground since that time, the utility sector has fared far worse. From June 2022, at the peak of inflation, through October 2024, the S&P 500 Index increased nearly 40 percent, but the S&P Utilities Index increased by less than 7 percent on a price change basis, as shown in Figure 3.

Figure 3: S&P 500 and S&P 500 Utilities Indices Performance
(6/1/2022 to 4/30/2025)



Q. WAS THE FEDERAL RESERVE'S RECENT RATE CUT CONSISTENT WITH INVESTORS' EXPECTATIONS?

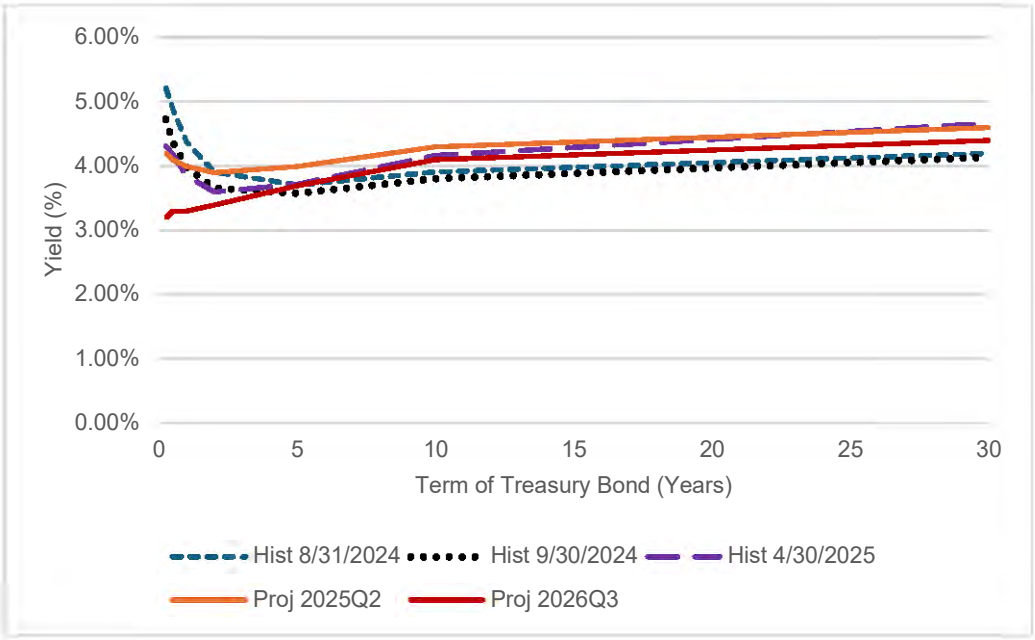
A. Yes, investors generally expected the Federal Reserve to reduce interest rates in September, November, and December 2024. For example, according to CME Group's FedWatch Tool, as of September 17, 2024 (the day before the Federal Reserve announced a 50-basis-point interest rate cut), there was a 64-percent probability that the target rate would be cut 50 basis points to 4.75-5.00 percent (and another 36-percent probability that the cut would be 25 basis points to 5.00-5.25 percent). On November 6, 2024, (the day before the Federal Reserve announced a 25-basis-point interest rate cut) there was a 98 percent probability that the target rate would be cut 25 basis points to 4.50-4.75 percent. Similarly, on December 17, 2024, (the day before the Federal Reserve announced a 25-basis-point interest rate cut) there was a 98 percent probability that the target rate would be cut 25 basis points to 4.25-4.50 percent. As such, the effect of the decrease in near-term interest rates have had little effect on investors' long-term expectations. However, uncertainty over the economy and potential for a recession continue to prevail.

Q. WHAT ARE EXPECTATIONS FOR LONG-TERM INTEREST RATES?

A. Despite the 100-basis-point reduction on the federal funds rate in recent months, long-term interest rates are not expected to change much in the coming years. That is, the change in the federal funds rate is primarily having an effect on short-term interest rates, as can be seen in Figure 4 below. Figure 4 includes the yield as of August 31, 2024, September 30, 2024, and April 2025, for 3-month, 6-month, 1-

year, 2-year, 5-year, 10-year, and 30-year Treasury securities. In addition, projections from Blue Chip Financial Forecasts demonstrate that the expectation for continued reductions in the federal funds rate will cause near-term yields to decline over the next year while long-term rates are expected to remain near current levels.

Figure 4: Current and Projected Interest Rates



Q. PLEASE EXPLAIN WHY THESE ELEVATED INTEREST RATES ARE IMPORTANT TO THE ROE ANALYSIS.

A. In general, as interest rates on government bonds increase, the cost of capital also must increase, as utilities—competing with interest rates on government bonds—must offer higher dividend yields to attract and retain investors. As dividend yields increase, however, the stock price declines (and, therefore, the cost of equity increases). The reason for this is that the stock price inherently reflects a company's future cash flows, thus, future dividends are factored into the share price. After an

ex-dividend date (i.e., the date on which a dividend is paid), the share price often declines to reflect the dividend paid (i.e., distributing a proportion of profits to shareholders). As interest rates remain elevated, utilities must continue to pay high dividends to keep investors, which suggests that the stock price of these companies would decline (and the cost of equity increase) in response to interest rates. To reflect this correlation in ROE models, all else equal, higher dividend yields produce higher ROE estimates in DCF models. Interest rates also are a direct input to both the CAPM and the Risk Premium models.

Q. HAVE YOU FACTORED THESE CIRCUMSTANCES INTO YOUR UPDATED COST OF EQUITY ESTIMATES FOR DUKE ENERGY KENTUCKY, AND, IF SO, WHAT CONCLUSIONS DO YOU DRAW?

A. Yes. I have relied on the most recent market data and forecasts available to me in my analysis and ROE recommendations. Long-term interest rates have increased substantially since the historical lows of 2020 and are expected to remain elevated as the Federal Reserve continues to focus on inflation and employment. As interest rates increase, the cost of capital generally increases. Interest rates are direct inputs to the CAPM and risk premium analyses and indirectly affect the DCF models, as increasing interest rates influence increases in dividend yields (and decreases in utility stock prices, which suggest an increase in the cost of equity).

Q. WHAT IS YOUR CONCLUSION REGARDING HOW MARKET CONDITIONS AFFECT THE COST OF EQUITY FOR UTILITIES SUCH AS DUKE ENERGY KENTUCKY?

A. While consensus expectations are for long-term inflation to continue to moderate

and near-term interest rates to decline, long-term interest rates are expected to remain at an elevated level, relative to rates seen in recent years. As such, there is no indication that the cost of equity for utility companies will decline as inflation moderates and near-term interest rates decline.

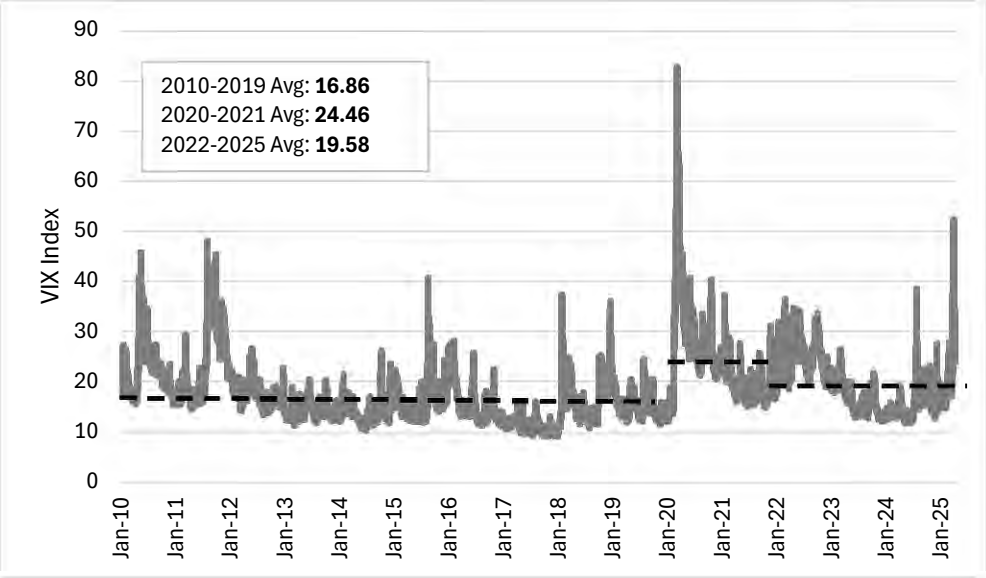
B. Ongoing Uncertainty and Volatility in Capital Markets

Q. TO WHAT EXTENT ARE CONDITIONS EXPECTED TO STABILIZE IN THE NEAR TERM?

A. The economy remains in a tenuous phase of the business cycle with concerns over a potential recession, uncertainly regarding U.S. foreign trade policy, persistent inflation, and persistently high interest rates. As such, capital market conditions continue to be unstable as interest rates remain elevated. The Chicago Board Options Exchange (CBOE) Volatility Index (VIX) has remained above long-term historical levels, indicating stock investors remain anxious about the economy and company earnings. The VIX, a measure of expected price fluctuations in the S&P 500, reached 82.7 on March 16, 2020, in response to the pandemic. As a point of comparison, the VIX last traded above 80 in November 2008 during the financial crisis and Great Recession of 2008/09. As shown in Figure 5, the average level in 2022-2025 has been 19.58 through April 30, 2025, compared to the average of 16.86 from 2010-2019. This indicates that equity market volatility levels have partially settled but continue to remain above the historical mean. Importantly, in April 2025, the VIX reached levels above 50, which had not seen since the COVID-19-related market selloff in 2020. This recent volatility affected the utilities sector as well as the general market. More volatile equity markets equate to a higher level

of risk, which consequently implies that investors require a higher return, hence increasing the cost of equity capital, all else equal.

Figure 5: CBOE VIX – January 1, 2010 – April 30, 2025[4]



Q. HOW HAVE RECENT CHANGES IN U.S. FOREIGN TRADE POLICY AFFECTED CAPITAL MARKETS?

A. On February 1, 2025, President Trump issued an executive order implementing a 25 percent additional tariff on imports from Canada and Mexico, and a 10 percent additional tariff on imports from China.[5] Further, on February 10, President Trump restored a 25 percent tariff on steel and increased the tariff on aluminum to 25 percent.[6] On April 3, President Trump further implemented a 25 percent tariff on

[4] Source: Bloomberg Professional.

[5] https://www.whitehouse.gov/fact-sheets/2025/02/fact-sheet-president-donald-j-trump-restores-section-232-tariffs/

[6] https://apnews.com/article/trump-auto-industry-tariffs-imports-prices-car-buyers-2315fed0a166d37b1a88c2d375d5553a

imported cars, light trucks, and auto parts.[7] On April 2, President Trump announced a 10 percent baseline tariff on all U.S. imports, and additional reciprocal tariffs for numerous countries.[8] On April 9, President Trump announced a 90-day pause on these reciprocal tariffs for all countries except China (while increasing the tariffs on China).[9]

Although the effect of these tariffs on the economy is uncertain, economists generally agree that higher tariffs increase inflation by increasing the cost of consumer goods. Higher inflation could complicate the Federal Reserve's unwinding of restrictive monetary policies, as well as increase long-term bond yields like the 30-year Treasury yield. Longer-term bonds are more sensitive to inflation expectations because their value is eroded more by inflation; thus, as the value (price) of bonds declines due to higher inflation expectations, the yield increases. Because utilities are capital intensive enterprises, higher inflation and interest rates tend to have a negative effect on utility stocks. If realized, all these factors would suggest that the cost of capital for utilities may increase in the future.

Q. HAS THE UNITED STATES SEEN EFFECTS FROM THE TARIFFS ALREADY?

A. Yes, it has. In addition to the upward pressure on inflation increase I noted earlier, in mid-April, in response to the tariffs, various international investors sold off U.S. Treasuries. This reduced the price of treasuries, which increased the yields; the 30-

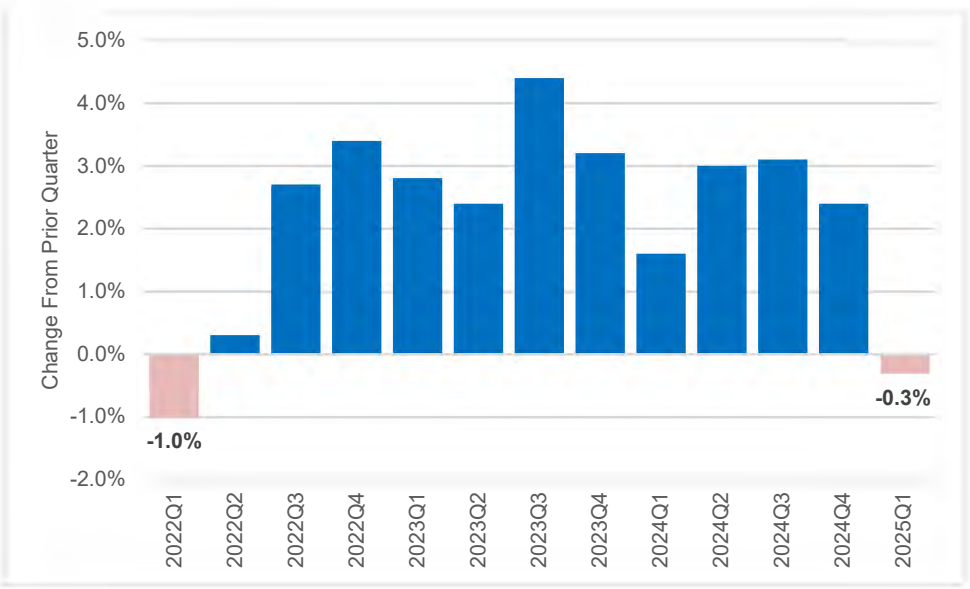
[7] https://www.usatoday.com/story/news/politics/2025/04/02/trump-tariff-announcement-april-2/82774378007/

[8] https://www.cbsnews.com/news/trump-reciprocal-tariffs-liberation-day-list/

[9] https://www.reuters.com/world/trump-announces-90-day-pause-tariffs-2025-04-09/

year Treasury yield climbed above 4.80 percent on April 10, an increase of over 40 basis points from just a week earlier, and has remained elevated, averaging 4.78 percent for April 11 through 30. In addition, the effects of these tariffs could be seen on the economy. "Fueled by a massive surge in imports,"[10] real gross domestic product (GDP) declined in the first quarter of 2025, the first quarter in three years to see a decline in real GDP, as can be seen in Figure 6 below.

Figure 6: Percent Change in Real GDP (From Previous Quarter)[11]



Further, the full impact of these tariffs is uncertain, with potential volatility still to come. Depending on the scope and magnitude of tariffs, there could be meaningful supply chain disruptions, the full effect of which could lag as the costs associated with tariffs are passed through the supply chain. Recently, investors have

[10] https://www.nbcnews.com/business/economy/gdp-q1-us-economy-contracts-rcna203608

[11] Source: U.S. Bureau of Economic Analysis.

been reducing exposure to the U.S. dollar by selling U.S. Treasuries, due to this volatility and uncertainty.[12]

Q. HAS THE COST OF EQUITY FOR UTILITY COMPANIES BEEN AFFECTED BY THESE CIRCUMSTANCES?

A. Yes, the cost of equity for regulated utility companies has been affected by the market conditions during this period. With interest rates at sustained, elevated levels, utility companies are no longer viewed as a safe haven. With Treasury yields in the range of 4.30 percent to 4.61 percent, utility dividend yields in a range near 3.50 percent to 3.70 (see Attachment JCN-4) fail to offer investors a sufficient risk premium relative to risk-free investments in Treasuries. Further, the utility industry is capital-intensive, requiring significant investments, meaning that utility companies will also have to bear the costs of higher interest rates to access capital markets. The Federal Reserve's expectation for sustained higher interest rates will continue to put upward pressure on the cost of capital causing investors to continue to require higher returns for investments in the utility industry.

Q. HOW HAS THE CURRENT ECONOMIC ENVIRONMENT AFFECTED THE CREDIT RATINGS FOR UTILITIES?

A. Consistent with the underperformance of the utility industry relative to the broader equity market demonstrating higher relative risk for utilities, credit ratings have also declined across the utility industry. According to a recent report by S&P Global Ratings (S&P) on utilities, "In 2024, downgrades among North America's investor-owned regulated utilities outpaced upgrades for the fifth consecutive year"

[12] https://apnews.com/article/treasurys-bond-market-yield-tariff-46b4818710f01b8cc93fd002081167b0

primarily due to rising wildfire risks, robust capital spending, and challenging regulatory constructs.[13] While the views of rating agencies represent an important consideration, they are not the only factor that equity investors consider. The important distinction is that credit rating agencies are primarily focused on the ability of a utility to pay its debts, while equity analysts and institutional investors are more concerned with profitability and value creation.

Q. WHAT ARE YOUR CONCLUSIONS REGARDING THE EFFECTS OF THE CURRENT MARKET ENVIRONMENT ON THE COST OF EQUITY FOR DUKE ENERGY KENTUCKY?

A. The current capital market conditions continue to be heavily influenced by monetary policy aimed at mitigating inflationary pressures. This has caused both short-term and long-term interest rates to remain high. As a practical matter, investors consider a range of opportunities, which include bonds. With the sustained elevated interest rates, utilities are less attractive absent a corresponding increase in returns. With the Federal Reserve's expectation for elevated interest rates for an extended period of time, this will continue to put upward pressure on the cost of capital for utilities. Further, the current U.S. foreign trade policy has introduced considerable volatility into capital markets. This volatility increases risk which, all else equal, puts upward pressure on the cost of capital for utilities, further

[13] S&P Global Ratings, North America Regulated Utilities Industry Credit Outlook 2025, January 14, 2025, at 4, https://www.spglobal.com/_assets/documents/ratings/research/101611573.pdf.

increasing the likelihood of sustained elevated interest rates. Therefore, it is important that these factors are accounted for in the cost of equity models.

C. Conclusions

Q. WHAT CONCLUSIONS DO YOU DRAW FROM YOUR ANALYSIS OF CAPITAL MARKET CONDITIONS?

A. Investors continue to face interest rate pressures and uncertainty, as the Federal Reserve continues its response to broad economic concerns. Long-term interest rates remain substantially higher than the historical lows of 2020 and are expected to remain elevated looking forward. Importantly, this requires the use of both current and forecast bond yields in the CAPM and Risk Premium models. Fluctuations in utility valuations impact the results of the DCF model. The dividend yield is calculated using historical average stock prices, which may not fully reflect forward market expectations. These circumstances collectively reinforce the importance of using multiple models, as I have with the CAPM, DCF, Risk Premium, and Expected Earnings approaches.

V. PROXY GROUP SELECTION

Q. WHY IS IT NECESSARY TO SELECT A PROXY GROUP TO ESTIMATE THE COST OF EQUITY FOR DUKE ENERGY KENTUCKY?

A. Since the ROE is a market-based concept and Duke Energy Kentucky is not publicly traded, it is necessary to establish a group of companies that is both publicly traded and comparable to Duke Energy Kentucky. Even if Duke Energy Kentucky were a publicly traded entity, it is possible that transitory events could bias the Company's market value in one way or another in a given period. A

significant benefit of using a proxy group is the ability to mitigate the effects of short-term events that may be associated with any one company. The proxy companies used in my ROE analyses possess a set of business and operating characteristics similar to the Company's natural gas utility operations, and thus provide a reasonable basis for estimating the Company's ROE.

Q. PLEASE PROVIDE A SUMMARY PROFILE OF DUKE ENERGY KENTUCKY.

A. Duke Energy Kentucky provides natural gas distribution service to more than 100,000 customers in Boone, Campbell, Grant, Kenton, Bracken, Gallatin, and Pendleton counties Kentucky. The Company has long-term issuer ratings from S&P of BBB+ (Outlook: Stable), and Moody's Investors Service (Moody's) of Baa1 (Outlook: Stable).[14]

Q. PLEASE DESCRIBE THE SPECIFIC SCREENING CRITERIA YOU HAVE UTILIZED TO SELECT A PROXY GROUP.

A. I began with the nine investor-owned domestic natural gas distribution companies covered by Value Line and then screened companies according to the following criteria:

1. Consistently pays quarterly cash dividends;
2. Maintains an investment grade long-term issuer rating (BBB- or higher) from S&P;
3. Is covered by more than one equity analyst;
4. Has positive earnings growth rates published by at least two of the following

[14] S&P Capital IQ Pro.

sources: Value Line, S&P Capital IQ, and Zacks Investment Research (Zacks);

5. Regulated net operating income makes up more than 50 percent of the consolidated company's net operating income (based on a 3-year average from 2021-2023);
6. Regulated net operating income from regulated natural gas distribution makes up more than 60 percent of the consolidated company's regulated net operating income (based on a 3-year average from 2021-2023); and
7. Is not involved in a merger or other transformative transaction.

Q. WHAT IS THE COMPOSITION OF YOUR RESULTING PROXY GROUP?

A. Based on the screening criteria discussed above, and financial information through fiscal year 2023, I arrived at a proxy group consisting of the 7 companies shown in Figure 7. The results of my screening process are shown in Attachment JCN-3.

Figure 7: Proxy Group

Company	Ticker
Atmos Energy Corporation	ATO
New Jersey Resources Corporation	NJR
NiSource Inc.	NI
Northwest Natural Gas Company	NWN
ONE Gas Inc.	OGS
Southwest Gas Holdings, Inc.	SWX
Spire, Inc.	SR

Q. DO YOUR SCREENING CRITERIA RESULT IN A GROUP OF COMPANIES THAT INVESTORS WOULD VIEW AS COMPARABLE TO DUKE ENERGY KENTUCKY'S NATURAL GAS OPERATIONS?

A. Yes. While no proxy group will be identical in risk as the Company, I believe this

group of natural gas utilities is reasonably comparable to the financial and operational characteristics of Duke Energy Kentucky. The proxy group screening criterion requiring an investment grade credit rating ensures that the proxy group companies, like Duke Energy Kentucky, are in sound financial condition. Because credit ratings take into account business and financial risks, the ratings provide a broad measure of investment risk for investors. Additionally, I have screened on the percent of net operating income from regulated operations to differentiate between utilities that are protected by regulation and those with substantial unregulated operations or market-related risks. Also, I have screened on the percentage contribution of the natural gas utility segment to regulated consolidated financial results to select companies that, since this proceeding is limited to determining the appropriate ROE for the stand-alone natural gas operations of Duke Energy Kentucky. These screens collectively reflect key risk factors that investors consider in making investments in natural gas utilities. The results of each screening criterion on each potential proxy company are presented in Attachment JCN-3.

Q. WHAT IS YOUR CONCLUSION WITH REGARD TO THE PROXY GROUP FOR DUKE ENERGY KENTUCKY?

A. I conclude that my group of seven natural gas utilities adequately reflects the broad set of risks that investors consider when investing in a natural gas distribution company such as Duke Energy Kentucky's natural gas utility operations.

VI. DETERMINATION OF THE APPROPRIATE COST OF EQUITY

Q. WHAT MODELS DID YOU USE IN YOUR ROE ANALYSES?

A. I have considered the results of several ROE estimation models, including the

Constant Growth DCF model, the CAPM, the Bond Yield Plus Risk Premium approach, and an Expected Earnings analysis. When faced with the task of estimating the cost of equity, analysts are inclined to gather and evaluate as much relevant data (both quantitative and qualitative) as can be reasonably obtained.

A. Constant Growth DCF Model

Q. PLEASE DESCRIBE THE DCF APPROACH.

A. The DCF approach is based on the theory that a stock's current price represents the present value of all expected future cash flows, which for purposes of the model, are assumed to be equal to all expected future dividends. Thus, the return required by investors is implied by the per share price of a company's common stock. In its most general form, the DCF model is expressed as follows:

$$P_0 = \frac{D_1}{(1+k)} + \frac{D_2}{(1+k)^2} + ... + \frac{D_\infty}{(1+k)^\infty} \quad [1]$$

Where P_0 represents the current stock price, $D_1 \ldots D_\infty$ are all expected future dividends, and k is the discount rate, or required ROE. Equation [1] is a standard present value calculation, which can be simplified and rearranged, to the Constant Growth form of the DCF model, expressed as the sum of the expected dividend yield and long-term growth rate:

$$k = \frac{D(1+g)}{P_0} + g \quad [2]$$

Where "k" equals the required return, "D" is the current dividend, "g" is the expected growth rate, and "P_0" represents the current stock price. Stated in this manner, the cost of common equity is equal to the expected dividend yield plus the dividend growth rate.

Q. WHAT ARE THE ASSUMPTIONS UNDERLYING THE CONSTANT GROWTH DCF MODEL?

A. The Constant Growth DCF model is based on the following assumptions: (1) a constant average growth rate for earnings and dividends; (2) a stable dividend payout ratio; (3) a constant price-to-earnings multiple; and (4) a discount rate greater than the expected growth rate.

Q. PLEASE SUMMARIZE YOUR APPLICATION OF THE CONSTANT GROWTH DCF MODEL.

A. I calculated DCF results for each of the proxy group companies using the following inputs:

- Average stock prices for the historical period, over 30, 90, and 180 trading days through March 31, 2025;
- Annualized dividend per share as of March 31, 2025; and
- Company-specific earnings growth forecasts for the term *g*.

My application of the Constant Growth DCF model is provided in Attachment JCN-4.

Q. WHY DID YOU USE AVERAGING PERIODS OF 30, 90, AND 180 TRADING DAYS?

A. It is important to use an average of recent trading days to calculate the term *P* in the DCF model to ensure that the calculated ROE is not skewed by anomalous events that may affect stock prices on any given trading day. At the same time, it is important to reflect the conditions that have defined the financial markets over the recent past. In my view, consideration of those three averaging periods reasonably

balances these interests.

Q. DID YOU ADJUST THE DIVIDEND YIELD TO ACCOUNT FOR PERIODIC GROWTH IN DIVIDENDS?

A. Yes, I did. Utility companies tend to increase their quarterly dividends at different times throughout the year, so it is reasonable to assume that such increases will be evenly distributed over calendar quarters. Given that assumption, it is reasonable to apply one-half of the expected annual dividend growth rate for the purposes of calculating this component of the DCF model. This adjustment ensures that the expected dividend yield is representative of the coming 12-month period. Accordingly, the DCF estimates reflect one-half of the expected growth in the dividend yield.[15]

Q. WHAT SOURCES OF GROWTH HAVE YOU USED IN YOUR DCF ANALYSIS?

A. I have used the consensus analyst five-year growth estimates in earnings per share (EPS) from S&P Capital IQ and Zacks, as well as EPS growth rate estimates published by Value Line.

Q. WHY DID YOU FOCUS ON EPS GROWTH?

A. The Constant Growth DCF model assumes that dividends grow at a constant rate in perpetuity. Accordingly, in order to reduce the long-term growth rate to a single measure, one must assume a constant payout ratio, and that earnings per share, dividends per share, and book value per share all grow at the same constant rate. Over the long term, however, dividend growth can only be sustained by earnings

[15] The expected dividend yield is calculated as $d_1 = d_0 (1 + ½ g)$.

growth. As noted by Brigham and Houston in their text, *Fundamentals of Financial Management*: "Growth in dividends occurs primarily as a result of growth in *earnings per share* (EPS)."[16] It is therefore important to focus on measures of long-term earnings growth from credible sources as an appropriate measure of long-term growth in the DCF model.

Q. ARE OTHER SOURCES OF DIVIDEND GROWTH AVAILABLE TO INVESTORS?

A. Yes, although that does not mean that investors incorporate such estimates into their investment decisions. Academic studies suggest that investors base their investment decisions on analysts' expectations of growth in earnings.[17] I am not aware of any similar findings regarding non-earnings-based growth estimates. In addition, the only forward-looking growth rates that are available on a consensus basis are analysts' EPS growth rates. The fact that earnings growth projections are the only widely accepted estimates of growth provides further support that earnings growth is the most meaningful measure of growth among the investment community.

[16] Eugene F. Brigham and Joel F. Houston, Fundamentals of Financial Management (Concise Fourth Edition, Thomson South-Western), at 317 (emphasis added).

[17] *See*, e.g., Harris and Marston, *Estimating Shareholder Risk Premia Using Analysts Growth Forecasts*, Financial Management, Summer 1992, at 65; and Vander Weide and Carleton, *Investor Growth Expectations: Analysts vs. History*, The Journal of Portfolio Management, Spring 1988, at 81. Please note that while the original study was published in 1988, it was updated in 2004 under the direction of Dr. Vander Weide. The results of that updated study are consistent with Vander Weide and Carleton's original conclusions.

Q. WHAT ARE THE RESULTS OF YOUR CONSTANT GROWTH DCF ANALYSIS?

A. The results of my Constant Growth DCF analysis are provided in Attachment JCN-4 and summarized in Figure 8.

Figure 8: Constant Growth DCF Results

	Mean Low	Mean	Mean High
30-day average	9.31%	10.34%	11.35%
90-day average	9.37%	10.41%	11.42%
180-day average	9.47%	10.51%	11.52%

Q. HOW DID YOU CALCULATE THE MEAN HIGH, MEAN LOW, AND OVERALL MEAN DCF RESULTS?

A. I calculated the Mean High DCF result using the maximum growth rate (i.e., the maximum of the S&P Capital IQ, Value Line, and Zacks EPS growth rates) in combination with the expected dividend yield for each of the proxy group companies. I used a similar method to calculate the Mean Low DCF results, using the minimum growth rate for each company. The Mean results reflect the average growth rate from each source for each company in combination with the expected dividend yield.

B. CAPM Analysis

Q. PLEASE BRIEFLY DESCRIBE THE GENERAL FORM OF THE CAPITAL ASSET PRICING MODEL.

A. The CAPM is a risk premium approach that estimates the cost of equity for a given security as a function of a risk-free return plus a risk premium (to compensate

investors for the non-diversifiable or "systematic" risk of that security).[18] As shown in Equation [3], the CAPM is defined by four components, each of which must theoretically be a forward-looking estimate:

$$K_e = r_f + \beta(r_m - r_f) \qquad [3]$$

Where:

K_e = the required ROE for a given security;

r_f = the risk-free rate of return;

β = the Beta of an individual security; and

r_m = the required return for the market as a whole.

The term $(r_m - r_f)$ represents the Market Risk Premium (MRP). According to the theory underlying the CAPM, since unsystematic risk can be diversified away, investors should be concerned only with systematic or non-diversifiable risk. Non-diversifiable risk is measured by Beta, which is defined as:

$$\beta = \frac{Covariance(r_e, r_m)}{Variance(r_m)} \qquad [4]$$

Where:

r_e = the rate of return for the individual security or portfolio.

The variance of the market return, noted in Equation [4], is a measure of the uncertainty of the general market, and the covariance between the return on a specific security and the market reflects the extent to which the return on that security will respond to a given change in the market return. Thus, Beta represents

[18] Systematic risks are fundamental market risks that reflect aggregate economic measures and therefore cannot be mitigated through diversification. Unsystematic risks reflect company-specific risks that can be mitigated and ultimately eliminated through investments in a portfolio of companies and/or market sectors.

the risk that the selected security will not be effective in diversifying systematic market risks.

Q. HAVE ECONOMIC AND FINANCIAL MARKET CONDITIONS ALSO AFFECTED THE CAPM?

A. Yes. As the Federal Reserve reduces federal funds rate, it is important to consider both current and projected bond yields. Using the 5-year forecast of bond yields helps alleviate short-term market factors affecting the risk-free rate, or "r_f" in the CAPM formula. As discussed in Section IV, interest rates continue to remain elevated. It is also important to recognize that Duke Energy Kentucky is financing long-lived assets, and the cost of capital should be forward looking to reflect that perspective.

Q. WHAT RISK-FREE RATE DID YOU USE IN YOUR CAPM ANALYSIS?

A. I considered three estimates of the expected risk-free rate: (1) the current 30-day average yield on 30-year U.S. Treasury bonds (i.e., 4.61 percent);[19] (2) the projected 30-year U.S. Treasury bond yield for Q3 2025 through Q3 2026 (i.e., 4.52 percent);[20] and (3) the projected 30-year U.S. Treasury bond yield for 2026 through 2030 (i.e., 4.30 percent).[21]

Q. WHAT MEASURES OF BETA DID YOU USE IN YOUR CAPM ANALYSIS?

A. As shown in Attachment JCN-6, I utilized two measures of Beta for the proxy group

[19] Bloomberg Professional, as of March 31, 2025.

[20] Blue Chip Financial Forecasts, Vol. 44, No. 4, April 1, 2025, at 2.

[21] Blue Chip Financial Forecasts, Vol. 43, No. 12, November 27, 2024, at 14.

companies: (1) the reported Beta coefficients from Bloomberg (which are calculated using ten years of weekly data against the S&P 500 Index); and (2) the reported Beta coefficients from Value Line (which are calculated using five years of weekly data against the New York Stock Exchange Composite Index).

Q. WHAT MARKET RISK PREMIUM DID YOU USE IN YOUR CAPM ANALYSIS?

A. Consistent with the approach adopted by FERC, I used the Constant Growth DCF model to estimate the market capitalization-weighted total market return for the S&P 500 Index, using projected earnings growth rates and dividend yields. As shown in Attachment JCN-5, to calculate the Constant Growth DCF estimate for each company in the S&P 500, I relied on dividend yields as of March 31, 2025, as reported by Bloomberg Professional, and projected EPS growth rates from Value Line. In my initial analysis, I included all companies in the S&P 500. When investors purchase the S&P 500 Index or a mutual fund or exchange traded fund that mirrors the S&P Index, their total return is based on the returns for all 500 companies in the S&P Index. As such, this methodology provides the best indication as to the expected return for the overall market using the S&P 500 as a proxy. Applying this methodology suggests an expected market return of 14.92 percent. However, I applied FERC's more conservative convention to consider only a subset of S&P 500 companies with growth rates that are between 0 percent and 20 percent. This methodology suggests an expected market return of 11.81 percent.

Q. WHAT ARE THE RESULTS OF YOUR CAPM ANALYSES?

A. The results of my CAPM analysis are provided in Attachment JCN-6 and

summarized in Figure 9.

Figure 9: Proxy Group Average CAPM Results[22]

	CAPM Result
Value Line Beta Coefficients	
Current Risk-Free Rate	12.67%
2025-26 Projected Risk-Free Rate	12.67%
2026-30 Projected Risk-Free Rate	12.65%
Bloomberg Beta Coefficients	
Current Risk-Free Rate	11.31%
2025-26 Projected Risk-Free Rate	11.29%
2026-30 Projected Risk-Free Rate	11.23%

C. Risk Premium Analysis

Q. PLEASE DESCRIBE THE RISK PREMIUM APPROACH THAT YOU USED.

A. In general terms, this approach recognizes that equity is riskier than debt because equity investors bear the residual risk associated with ownership. Equity investors, therefore, require a greater return (i.e., a premium) than would a bondholder. The Risk Premium approach estimates the cost of equity as the sum of the Equity Risk Premium and the yield on a particular class of bonds.

$$\text{ROE} = RP + Y \qquad [5]$$

Where:

RP = Risk Premium (difference between allowed ROE and the 30-Year Treasury Yield); and
Y = Applicable bond yield.

[22] Applying FERC's more conservative convention to consider only a subset of S&P 500 companies with growth rates that are between 0 percent and 20 percent.

Since the equity risk premium is not directly observable, it is typically estimated using a variety of approaches, some of which incorporate *ex-ante*, or forward-looking, estimates of the cost of equity and others that consider historical, or *ex-post*, estimates. For my Risk Premium analysis, I have relied on authorized returns from a large sample of natural gas utility companies.

Q. WHAT DID YOUR RISK PREMIUM ANALYSIS REVEAL?

A. To estimate the relationship between risk premia and interest rates, I conducted a regression analysis using the following equation:

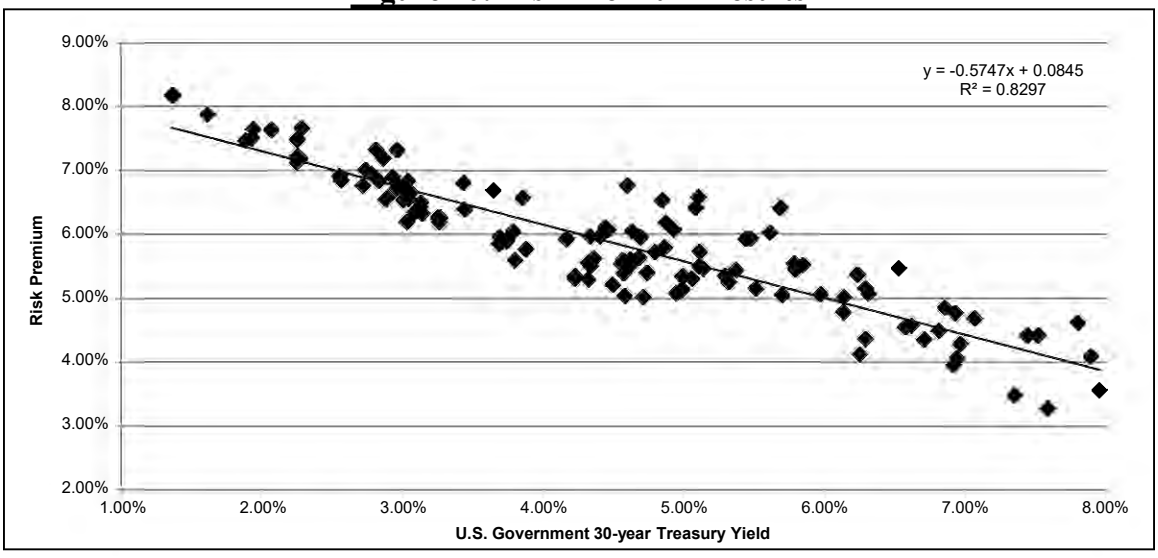
$$RP = a + (b \times Y) \qquad [6]$$

where:

RP = Risk Premium (difference between allowed ROEs and the 30-Year Treasury Yield);
a = Intercept ter*m;*
b = Slope term; and
Y = 30-Year Treasury Yield.

Data regarding allowed ROEs were derived from natural gas utility company rate cases from January 1, 1992, through March 31, 2025, as reported by Regulatory Research Associates.

Figure 10: Risk Premium Results



As illustrated by Figure 10 (above), the risk premium varies with the level of bond yield, and generally increases as the bond yields decrease, and vice versa. In order to apply this relationship to current and expected bond yields, I consider three estimates of the 30-year Treasury yield, including the current 30-day average, a near-term Blue Chip consensus forecast for Q3 2025 – Q3 2026, and a Blue Chip consensus forecast for 2026–2030. I find the projected five-year result to be most applicable for the following reasons: (1) investors are expecting increases in government bond yields; (2) investors typically have a multi-year view of their required returns on equity; and (3) Duke Energy Kentucky's capital expenditure plan requires that the Company continue to be able to attract capital on reasonable terms and conditions. Based on the regression coefficients in Attachment JCN-7, which allow for the estimation of the risk premium at varying bond yields, the results of my Risk Premium analysis are shown in Figure 11 below.

Figure 11: Risk Premium Results Using 30-Year Treasury Yield

	30-Day Average Yield on 30-Year Treasury Bond	Q3 2025–Q3 2026 Forecast for Yield on 30-Year Treasury Bond[23]	2026-2030 Forecast for Yield 30-Year Treasury Bond[24]
Yield	4.61%	4.52%	4.30%
Risk Premium	5.80%	5.85%	5.98%
Resulting ROE	10.41%	10.37%	10.28%

[23] Blue Chip Financial Forecasts, Vol. 44, No. 4, April 1, 2025, at 2.

[24] Blue Chip Financial Forecasts, Vol. 43, No. 12, November 27, 2024, at 14.

D. Expected Earning Analysis

Q. HAVE YOU CONDUCTED ANY OTHER ANALYSIS TO ESTIMATE THE COST OF EQUITY FOR DUKE ENERGY KENTUCKY?

A. Yes. I have also conducted an Expected Earnings analysis to estimate the cost of equity for Duke Energy Kentucky based on the projected ROEs for the proxy group companies.

Q. WHAT IS AN EXPECTED EARNINGS ANALYSIS?

A. The Expected Earnings methodology is a comparable earnings analysis that calculates the earnings that an investor expects to receive on the book value of a stock. The Expected Earnings analysis is a forward-looking estimate of investors' expected returns. The use of an Expected Earnings approach based on the proxy companies provides a range of the expected returns on a group of risk-comparable companies to the subject company. This range is useful in helping to determine the opportunity cost of investing in the subject company, which is relevant in determining a company's ROE.

The Expected Earnings approach relying on expected returns for like-risk companies is a core strength of the model and consistent with the basic tenets of *Hope*: "the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks." Since the Expected Earnings model provides an accounting-based approach that relies on investment analysts' projections of earnings on book equity, it affords the benefit of analyst insights, knowledge, and expertise in interpreting a given company's earnings prospects in the context of current market conditions.

Q. HOW IS THE EXPECTED EARNINGS APPROACH CALCULATED?

A. I relied on the projected ROE for the proxy companies as reported by Value Line for the period from 2027-2029. I then adjusted those projected ROEs to account for the fact that the ROEs reported by Value Line are calculated on the basis of common shares outstanding at the end of the period, as opposed to average shares outstanding over the entire period. As shown in Figure 12 below and Attachment JCN-8, the Expected Earnings analysis results in a mean of 9.79 percent and a median of 9.30 percent.

Figure 12: Expected Earnings Results

	ROE
Proxy Group Average	9.79%
Proxy Group Median	9.30%

Q. WHAT IS YOUR CONCLUSION REGARDING THE RESULTS OF THE EXPECTED EARNINGS MODEL?

A. The model captures investor expectations for ROEs for each company in the proxy group as estimated by impartial analysts. This is a valuable tool given the nature of the analysis here is designed to measure required returns for Duke Energy Kentucky. It is reasonable to assume that investors would require returns from investment in Duke Energy Kentucky similar to those they could earn in comparable investments, so these results are informative.

E. Evaluating Model Results

Q. PLEASE EXPLAIN HOW YOU CONSIDERED THE RESULTS OF THE DCF, CAPM, RISK PREMIUM, AND EXPECTED EARNINGS ANALYSIS TO ARRIVE AT YOUR ROE RECOMMENDATION.

A. As shown in Figure 13, I have considered the results of the DCF, CAPM, Risk Premium, and Expected Earnings analyses. For the DCF result, I included the average of the 30-day, 90-day, and 180-day analyses. For the CAPM result, I relied on the average of current and projected Treasury yields, the average of Value Line and Bloomberg Betas coefficients, and the MRP derived from a subset of the S&P 500 companies. For the Risk Premium analysis, I relied on the average of current and projected Treasury yields.

Figure 13: Base ROE Results

	Average	Median
Primary Analyses		
DCF Result	10.42%	10.85%
CAPM Result	11.97%	11.86%
Risk Premium	10.36%	10.36%
Average	**10.91%**	**11.02%**
Benchmark Analyses		
Expected Earnings	9.79%	9.30%

As discussed in the next Section of my testimony, these estimates serve as a base prior to consideration of the relative business and financial risks of Duke Energy Kentucky as compared to the proxy companies.

F. Consideration of Specific Risk Factors

Q. DOES YOUR RECOMMENDATION INCLUDE A DOWNWARD OR UPWARD ADJUSTMENT FOR DUKE ENERGY KENTUCKY SPECIFIC RISK FACTORS?

A. No, it does not. All the proxy group natural gas utilities face a challenging environment requiring continuous access to capital in order to meet public expectations of safe, reliable, and reasonably economic utility service. Duke Energy Kentucky's capital spending program will require the Company to maintain continuous access to capital markets on reasonable terms and conditions. For these reasons, it is important that the authorized ROE be set at a level that allows Duke Energy Kentucky to continue to attract both debt and equity under favorable terms under a variety of economic and financial market conditions, including the inflationary conditions we are facing today and in the foreseeable future. My recommendation, however, makes no adjustment, explicit or implicit, for the specific capital expenditure requirements or regulatory mechanisms of Duke Energy Kentucky.

Q. IS THERE ANY BASIS TO TREAT DUKE ENERGY KENTUCKY AS LESS RISKY THAN ITS PEER UTILITIES?

A. No, there is not. I have undertaken a review of regulatory mechanisms designed to mitigate certain business risks, and they support treating the results from the proxy

group I selected as representative of the business risk of a prudently managed natural gas utility like Duke Energy Kentucky. The results of my analysis are presented in Attachment JCN-9. Specifically, I examined the following factors that affect the regulatory risk of the Company and the proxy group companies: (1) test year convention; (2) rate base convention; (3) revenue decoupling; and (4) capital cost recovery.

46 percent of the operating companies in the proxy group provide service in jurisdictions that allow the use of a fully or partially forecasted test year, which is similar to Kentucky's permitted use of a forecasted test year forecasted test year. Approximately 58 percent of the operating companies in the proxy group use year-end rate base, which provides more timely cost recovery of capital investments, while 42 percent, like Kentucky, apply average rate base (in the context of a forecasted test year). Kentucky permits partial decoupling through riders to facilitate recovery of costs associated with gas energy efficiency programs, while approximately 88 percent of the operating companies held by the proxy group have either full or partial revenue decoupling mechanisms that protect against volumetric risk. Approximately 71 percent of the operating companies in the proxy group have capital cost tracking mechanisms that allow them to recover capital investments between base rate cases.

Typically, a regulatory mechanism outside of base rate cases is proposed to offset the effect of an incremental risk factor. In these circumstances, the effect of the regulatory mechanism merely restores a utility's risk profile to the position it was in prior to the incremental risk. As it relates to the determination of the cost of

equity, it is important to recognize an analysis of regulatory mechanisms is a comparative assessment. For any regulatory mechanism to have an effect on the cost of equity, it would require that the mechanism changes the risk relative to the proxy companies, and investors change their return requirements as a consequence of the mechanism. As discussed above and as shown in Attachment JCN-9, the regulatory mechanisms proposed by the Company and the regulatory mechanisms employed by the proxy companies indicate that Duke Energy Kentucky and the proxy group have comparable mechanisms, and therefore similar regulatory risk profiles. As such, no adjustment to the Company's ROE is required.

VII. CAPITAL STRUCTURE

Q. WHAT IS DUKE ENERGY KENTUCKY'S PROPOSED CAPITAL STRUCTURE?

A. Duke Energy Kentucky is proposing a financial capital structure targeting a mix of 52.649 percent equity and 47.351 percent debt (44.086 percent long-term debt and 3.265 percent short-term debt).

Q. HOW HAVE YOU ASSESSED THE REASONABLENESS OF DUKE ENERGY KENTUCKY'S PROPOSED CAPITAL STRUCTURE WITH RESPECT TO THE PROXY GROUP?

A. The proxy group has been selected to reflect comparable companies in terms of business and financial risks. Therefore, it is appropriate to compare the financial capital structures of the proxy group companies to the financial capital structure proposed by the Company in order to assess whether the Company's capital structure is reasonable and consistent with industry standards for companies with

commensurate risk. I calculated the weighted average capital structures for each of the proxy group operating companies for the period 2021 to 2023. Attachment JCN-10 shows that the Company's proposed common equity ratio of 52.649 percent is within the range of actual common equity ratios of 47.37 percent to 60.03 percent for the operating companies held by the proxy group over this period. Further, Duke Energy Kentucky's proposed common equity ratio is consistent, if not conservative, as compared with the proxy group average actual common equity ratio of 53.72 percent.

Q. WHAT IS YOUR CONCLUSION REGARDING THE APPROPRIATENESS OF DUKE ENERGY KENTUCKY'S PROPOSED CAPITAL STRUCTURE IN THIS PROCEEDING?

A. Based on the analysis presented in Attachment JCN-10, my conclusion is that Duke Energy Kentucky's proposed capital structure is reasonable. Sufficient equity in the capital structure is an important factor for maintaining Duke Energy Kentucky's financial integrity and investment grade credit rating and it is an essential component of Duke Energy Kentucky's financial policies enabling access to capital on favorable terms in a variety of market circumstances.

VIII. CONCLUSION

Q. WHAT IS YOUR CONCLUSION REGARDING A FAIR ROE FOR DUKE ENERGY KENTUCKY?

A. Based on the quantitative analyses provided in my Direct Testimony, I have established a range of ROE results shown previously in Figure 1 (also see Attachment JCN-2). The DCF, CAPM, and Bond Yield Risk Premium, analysis

produce a range of estimates of the Company's cost of equity of 10.34 percent to 12.67 percent. Based on these analyses, I consider an ROE range of 10.25 percent to 11.25 percent to be reasonable. From within that range, and considering the Company's risk profile, I recommend an ROE of 10.75 percent, which is the midpoint of my recommended range of reasonableness.

Q. WHAT IS YOUR RECOMMENDATION WITH REGARD TO THE CAPITAL STRUCTURE FOR DUKE ENERGY KENTUCKY IN THIS PROCEEDING?

A. I support Duke Energy Kentucky's actual capital structure of 52.649 percent equity and 47.351 percent debt (44.086 percent long-term debt and 3.265 percent short-term debt) as reasonable relative to the range of capital structures for the operating companies held by the proxy group companies.

Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?

A. Yes, it does.

VERIFICATION

COMMONWEALTH OF MASSACHUSETTS	)	
	)	**SS:**
COUNTY OF MIDDLESEX	)	

The undersigned, Joshua C. Nowak, Vice President, 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.

Joshua C. Nowak Affiant

Subscribed and sworn to before me by Joshua C. Nowak on this 27th day of May, 2025.

NOTARY PUBLIC

My Commission Expires:
April 13, 2029

JOSHUA C. NOWAK
VICE PRESIDENT

Mr. Nowak is a financial and economic consultant with more than fifteen years of experience in the energy industry. He has provided expert testimony on regulatory issues in several proceedings before the Federal Energy Regulatory Commission and regulatory commissions in Alaska, California, Connecticut, Kentucky, Minnesota, New Brunswick, New Hampshire, New York, North Dakota, Ohio, and Texas. Mr. Nowak specializes in providing rate case services on economic conditions and financial market matters related to the cost of capital. He is also experienced in providing strategic direction on financing activities including bond offerings, credit rating analysis, and investor relations. Previously, Josh was the Director of Regulatory Strategy & Integrated Analytics at National Grid where he was responsible for issues related to the cost of capital across its federal and state jurisdictional operating companies. He holds a Bachelor's Degree in Economics and History from Boston College.

REPRESENTATIVE EXPERIENCE

Expert Testimony and Litigation Support

Mr. Nowak's work includes regulatory project management, research, and analysis for expert witness testimony. His work has included:

- Expert testimony on cost of capital, financial markets, return on equity, capital structure, and debt financing issues
- Regulatory strategy in return on equity proceedings, including coordination across several utilities in joint-party proceedings
- Extensive support for expert testimony in cost of capital and return on equity proceedings through research, financial analysis, and testimony development
- Expert testimony, sponsoring lead-lag studies, in support of utility cash working capital requirements
- Project management of expert testimony assignments, including all phases of the regulatory schedule
- Performing analysis to support expert testimony regarding affiliate expenses and allocations

Policy Analysis

Mr. Nowak has contributed to projects related to policy review including:

- A review of natural gas capacity options and a cost-benefit analysis for state regulators seeking to reduce energy costs for ratepayers
- Analysis of the economic and environmental benefits of changes to natural gas ratemaking/expansion policy

Management and Operations Consulting

Mr. Nowak has taken a lead analytical role in developing benchmarking analyses and process reviews. Specifically, he has:

- Developed benchmarking analyses, in support of expert testimony, comparing electric and gas utilities' cost and operational efficiency, taking into account a situational assessment of exogenous factors
- Performed a process review of a gas utility's expansion projects, including an evaluation of policies, procedures, and financial models
- Supported analysis for a report of the reasonableness of a shared service company's administrative and general costs

Financial Analysis

Other financial analysis Mr. Nowak has conducted include:

- Extensive analysis on issues related to utilities' cost of capital
- Developing dispatch models to estimate revenues for merchant powerplants
- Estimating damages for breach of contract in fuel delivery commitment
- Researching strategic investment opportunities for merchant generators
- A report on the profitability of various generation technologies in a deregulated energy market
- Reviewing internal financial models used by utility clients
- Supporting utility asset appraisals, including research and analysis for income approach, cost approach, and sales comparison approach

Other Experience

In his previous work, Mr. Nowak contributed to the evaluation of regulatory policy for government clients. His experience included performing policy analysis, including economic impact assessments, for federal regulations.

PROFESSIONAL HISTORY

Concentric Energy Advisors, Inc. (2018 – Present)
Vice President
Assistant Vice President

National Grid USA (2017 – 2018)
Director, Regulatory Strategy & Integrated Analytics

ScottMadden, Inc. (formerly Sussex Economic Advisors, LLC) (2012 – 2016)
Director
Principal

Concentric Energy Advisors, Inc. (2007 – 2012)
Senior Consultant
Consultant
Assistant Consultant
Analyst

RTI International (2006 – 2007)
Economist

EDUCATION

Boston College
B.A., Economics and History, 2006

SPONSOR	DATE	CASE/APPLICANT	DOCKET	SUBJECT
Regulatory Commission of Alaska				
ENSTAR Natural Gas Company, a Division of Semco Energy, Inc.	06/16	ENSTAR Natural Gas Company, a Division of Semco Energy, Inc.	TA 285-4	Cash Working Capital
California Public Utilities Commission				
Pacific Gas and Electric Company, Southern California Edison Company, Southern California Gas Company, and San Diego Gas & Electric Company	02/24	Pacific Gas and Electric Company, Southern California Edison Company, Southern California Gas Company, and San Diego Gas & Electric Company	A.22-04-008 / A.22-04-009 / A.22-04-011 / A.22-04-012	Return on Equity Policy
Southern California Gas Company and San Diego Gas & Electric Company	01/24	Southern California Gas Company and San Diego Gas & Electric Company	A.22-04-011 / A.22-04-012	Return on Equity Policy
Connecticut Public Utilities Regulatory Authority				
Yankee Gas Services Company d/b/a Eversource Energy	11/24	Yankee Gas Services Company d/b/a Eversource Energy	Docket No. 24-12-01	Return on Equity
Aquarion Water Company of Connecticut	08/22	Aquarion Water Company of Connecticut	Docket No. 22-07-01	Return on Equity
Aquarion Water Company of Connecticut	01/22	Aquarion Water Company of Connecticut	Docket No. 13-02-20RE06	Return on Equity and Cost of Debt
Federal Energy Regulatory Commission				
San Diego Gas & Electric Company	10/24	San Diego Gas & Electric Company	ER25-270-000	Return on Equity
Power Authority of the State of New York	10/24	Power Authority of the State of New York	ER25-198-000	Return on Equity
Mid-Atlantic Offshore Development, LLC	07/24	Mid-Atlantic Offshore Development, LLC	ER24-2564-000	Return on Equity

SPONSOR	DATE	CASE/APPLICANT	DOCKET	SUBJECT
Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc., Niagara Mohawk Power Corporation d/b/a National Grid, New York State Electric & Gas Corporation, Orange and Rockland Utilities, Inc., and Rochester Gas and Electric Corporation	04/21	Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc., Niagara Mohawk Power Corporation d/b/a National Grid, New York State Electric & Gas Corporation, Orange and Rockland Utilities, Inc., and Rochester Gas and Electric Corporation	EL21-66-000, ER21-1647-000	Transmission Ownership Risk and Returns
Central Hudson Gas & Electric Corporation	12/19	Central Hudson Gas & Electric Corporation	ER20-715-000	Return on Equity
Kentucky Public Service Commission				
Duke Energy Kentucky, Inc.	12/22	Duke Energy Kentucky, Inc.	Case No. 2022-00372	Return on Equity
Minnesota Public Utilities Commission				
Northern States Power Company (Xcel Energy Inc.)	11/24	Northern States Power Company (Xcel Energy Inc.)	G-002/GR-24-320	Return on Equity
Northern States Power Company (Xcel Energy Inc.)	11/23	Northern States Power Company (Xcel Energy Inc.)	G-002/GR-23-413	Return on Equity
New Brunswick Energy and Utilities Board				
New Brunswick Power Corporation (NB Power)	11/22	New Brunswick Power Corporation (NB Power)	Matter 541	Macroeconomic Environment and Capital Market Conditions
Public Utilities Commission of New Hampshire				
Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities	04/16	Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities	Docket No. DE 16-383	Cash Working Capital

SPONSOR	DATE	CASE/APPLICANT	DOCKET	SUBJECT
New York Public Service Commission				
Central Hudson Gas & Electric Corporation	08/24	Central Hudson Gas & Electric Corporation	Case 24-E-0461/ Case 24-G-0462	Return on Equity
Niagara Mohawk Power Corporation d/b/a National Grid	05/24	Niagara Mohawk Power Corporation d/b/a National Grid	Case 24-E-0322/ Case 24-G- 0323	Return on Equity
National Fuel Gas Distribution Corporation	10/23	National Fuel Gas Distribution Corporation	Case 23-G-0627	Return on Equity
Central Hudson Gas & Electric Corporation	07/23	Central Hudson Gas & Electric Corporation	Case 23-E-0418/ Case 23-G-0419	Return on Equity
The Brooklyn Union Gas Company d/b/a National Grid NY ("KEDNY) and KeySpan Gas East Corporation d/b/a National Grid ("KEDLI")	04/23	The Brooklyn Union Gas Company d/b/a National Grid NY ("KEDNY) and KeySpan Gas East Corporation d/b/a National Grid ("KEDLI")	Case 23-G-0225/ Case 23-G-0226	Return on Equity
Niagara Mohawk Power Corporation d/b/a National Grid	07/20	Niagara Mohawk Power Corporation d/b/a National Grid	Case 20-E-0380/ Case 20-G- 0381	Return on Equity
Niagara Mohawk Power Corporation d/b/a National Grid	07/17	Niagara Mohawk Power Corporation d/b/a National Grid	Case 17-E-0238/ Case 17-G- 0239	Capital Structure and Overall Cost of Capital

SPONSOR	DATE	CASE/APPLICANT	DOCKET	SUBJECT
North Dakota Public Service Commission				
Northern States Power Company (Xcel Energy Inc.)	12/23	Northern States Power Company (Xcel Energy Inc.)	Docket No. PU-23-367	Return on Equity
Public Utilities Commission of Ohio				
Duke Energy Ohio, Inc.	01/23	Duke Energy Ohio, Inc.	Case No. 22-1153-EL-UNC	Return on Equity
Public Utility Commission of Texas				
Wind Energy Transmission Texas, LLC	05/15	Wind Energy Transmission Texas, LLC	Docket No. 44746	Cash Working Capital
Lone Star Transmission, LLC	05/14	Lone Star Transmission, LLC	Docket No. 42469	Cash Working Capital
Railroad Commission of Texas				
Texas Gas Service Company, a Division of One Gas, Inc.	06/16	Texas Gas Service Company, a Division of One Gas, Inc.	GUD No. 10526	Cash Working Capital
Texas Gas Service Company, a Division of One Gas, Inc.	03/16	Texas Gas Service Company, a Division of One Gas, Inc.	GUD No. 10506	Cash Working Capital
Texas Gas Service Company, a Division of One Gas, Inc.	12/15	Texas Gas Service Company, a Division of One Gas, Inc.	GUD No. 10488	Cash Working Capital
CenterPoint Energy Resources Corp., d/b/a CenterPoint Energy Entex and CenterPoint Energy Texas Gas	03/14	CenterPoint Energy Resources Corp., d/b/a CenterPoint Energy Entex and CenterPoint Energy Texas Gas	GUD No. 10432	Cash Working Capital

SUMMARY OF RESULTS

Company	Ticker	*Primary Analyses*															*Benchmark Analysis*		**Average of DCF, CAPM, and Risk Premium**
		CONSTANT GROWTH DCF				**CAPM**							**Risk Premium (Average)**						
						Value Line Beta			Bloomberg Beta										
		30-Day Average	90-Day Average	180-Day Average	***Average***	Current Yield	Near-Term Projected Yield	Long-Term Projected Yield	Current Yield	Near-Term Projected Yield	Long-Term Projected Yield	***Average***	Current Yield	Near-Term Projected Yield	Long-Term Projected Yield	***Average***	**Expected Earnings**		
Atmos Energy Corporation	ATO	9.20%	9.28%	9.38%	**9.29%**	12.49%	12.48%	12.46%	11.12%	11.10%	11.04%	**11.78%**	10.41%	10.37%	10.28%	**10.36%**	9.35%		**10.47%**
New Jersey Resources Corporation	NJR	10.26%	10.29%	10.35%	**10.30%**	13.36%	13.36%	13.36%	11.49%	11.47%	11.43%	**12.41%**	10.41%	10.37%	10.28%	**10.36%**	14.87%		**11.02%**
NiSource Inc.	NI	11.60%	11.56%	11.75%	**11.64%**	12.92%	12.92%	12.91%	11.48%	11.46%	11.41%	**12.18%**	10.41%	10.37%	10.28%	**10.36%**	10.25%		**11.39%**
Northwest Natural Gas Company	NWN	11.36%	11.43%	11.51%	**11.44%**	12.49%	12.48%	12.46%	10.67%	10.64%	10.58%	**11.55%**	10.41%	10.37%	10.28%	**10.36%**	8.36%		**11.11%**
ONE Gas Inc.	OGS	7.59%	7.62%	7.66%	**7.62%**	12.05%	12.04%	12.00%	11.24%	11.22%	11.17%	**11.62%**	10.41%	10.37%	10.28%	**10.36%**	7.73%		**9.87%**
Southwest Gas Holdings, Inc.	SWX	11.76%	11.78%	11.81%	**11.78%**	12.92%	12.92%	12.91%	11.86%	11.84%	11.80%	**12.38%**	10.41%	10.37%	10.28%	**10.36%**	8.65%		**11.51%**
Spire, Inc.	SR	10.61%	10.87%	11.08%	**10.85%**	12.49%	12.48%	12.46%	11.29%	11.27%	11.21%	**11.86%**	10.41%	10.37%	10.28%	**10.36%**	9.30%		**11.02%**
Low		7.59%	7.62%	7.66%	**7.62%**	12.05%	12.04%	12.00%	10.67%	10.64%	10.58%	**11.55%**					7.73%		**9.87%**
Median		10.61%	10.87%	11.08%	**10.85%**	12.49%	12.48%	12.46%	11.29%	11.27%	11.21%	**11.86%**	10.41%	10.37%	10.28%	**10.36%**	9.30%		**11.02%**
Mean		10.34%	10.41%	10.51%	**10.42%**	12.67%	12.67%	12.65%	11.31%	11.29%	11.23%	**11.97%**	10.41%	10.37%	10.28%	**10.36%**	9.79%		**10.91%**
High		11.76%	11.78%	11.81%	**11.78%**	13.36%	13.36%	13.36%	11.86%	11.84%	11.80%	**12.41%**					14.87%		**11.51%**

PROXY GROUP SCREENING DATA AND RESULTS - PROXY GROUP

Company	Ticker	[1] Dividends	[2] S&P Credit Rating Between BBB- and AAA	[3] Covered by More Than 1 Analyst	[4] Postive Growth Rates From At Least 2 Sources	[5] % Regulated Operating Income of Total Income > 50%	[6] Regulated Gas Income of Total Regulated Income > 60%	[7] Significant Merger or Transaction
Atmos Energy Corporation	ATO	Yes	A-	Yes	Yes	100.00%	66.30%	No
Chesapeake Utilities Corporation	CPK	Yes	NR	Yes	Yes	81.78%	44.92%	Yes
New Jersey Resources Corporation	NJR	Yes	A1	Yes	Yes	59.01%	90.21%	No
NiSource Inc.	NI	Yes	BBB+	Yes	Yes	99.56%	67.92%	No
Northwest Natural Gas Company	NWN	Yes	A-	Yes	Yes	100.00%	90.55%	No
ONE Gas, Inc.	OGS	Yes	A-	Yes	Yes	100.00%	100.00%	No
Southwest Gas Holdings, Inc.	SWX	Yes	BBB-	Yes	Yes	77.17%	100.00%	No
Spire, Inc.	SR	Yes	BBB+	Yes	Yes	83.38%	100.00%	No
UGI Corporation	UGI	Yes	A3	Yes	Yes	9.96%	100.00%	Yes

Notes:
[1] Source: Bloomberg Professional
[2] Source: S&P Capital IQ Pro
[3] Source: S&P Capital IQ and Zacks
[4] Source: S&P Capital IQ, Value Line Investment Survey, and Zacks
[5] - [6] Source: Form 10-Ks for 2023, 2022, & 2021, three-year average
[7] Source: S&P Capital IQ Pro

30-DAY CONSTANT GROWTH DCF

Company	Ticker	[1] Annualized Dividend	[2] Stock Price	[3] Dividend Yield	[4] Expected Dividend Yield	[5] Value Line Earnings Growth	[6] S&P Cap. IQ Earnings Growth	[7] Zacks Earnings Growth	[8] Average Growth Rate	[9] Low ROE	[10] Mean ROE	[11] High ROE
Atmos Energy Corporation	ATO	$3.48	$149.80	2.32%	2.40%	6.00%	7.30%	7.10%	6.80%	8.39%	9.20%	9.71%
New Jersey Resources Corporation	NJR	$1.80	$48.16	3.74%	3.86%	5.00%	7.80%	n/a	6.40%	8.83%	10.26%	11.68%
NiSource Inc.	NI	$1.12	$39.62	2.83%	2.95%	9.50%	8.26%	8.20%	8.65%	11.14%	11.60%	12.46%
Northwest Natural Gas Company	NWN	$1.96	$41.60	4.71%	4.86%	6.50%	6.50%	n/a	6.50%	11.36%	11.36%	11.36%
ONE Gas Inc.	OGS	$2.68	$73.97	3.62%	3.69%	4.00%	3.00%	4.70%	3.90%	6.68%	7.59%	8.41%
Southwest Gas Holdings, Inc.	SWX	$2.48	$74.65	3.32%	3.46%	10.00%	n/a	6.60%	8.30%	10.03%	11.76%	13.49%
Spire, Inc.	SR	$3.14	$76.28	4.12%	4.25%	4.50%	8.08%	6.50%	6.36%	8.71%	10.61%	12.36%
Median				3.62%	3.69%	6.00%	7.55%	6.60%	6.50%	8.83%	10.61%	11.68%
Mean				3.52%	3.64%	6.50%	6.82%	6.62%	6.70%	9.31%	10.34%	11.35%

Notes:
[1] Source: Bloomberg Professional
[2] Source: Bloomberg Professional, equals 30-day average as of March 31, 2025
[3] Equals [1] / [2]
[4] Equals [3] x (1 + 0.50 x [8])
[5] Source: Value Line
[6] Source: S&P Capital IQ
[7] Source: Zacks
[8] Equals Average ([5], [6], [7])
[9] Equals [3] x (1 + 0.50 x Minimum ([5], [6], [7]) + Minimum ([5], [6], [7])
[10] Equals [4] + [8]
[11] Equals [3] x (1 + 0.50 x Maximum ([5], [6], [7]) + Maximum ([5], [6], [7])

90-DAY CONSTANT GROWTH DCF

Company	Ticker	[1] Annualized Dividend	[2] Stock Price	[3] Dividend Yield	[4] Expected Dividend Yield	[5] Value Line Earnings Growth	[6] S&P Cap. IQ Earnings Growth	[7] Zacks Earnings Growth	[8] Average Growth Rate	[9] Low ROE	[10] Mean ROE	[11] High ROE
Atmos Energy Corporation	ATO	$3.48	$145.07	2.40%	2.48%	6.00%	7.30%	7.10%	6.80%	8.47%	9.28%	9.79%
New Jersey Resources Corporation	NJR	$1.80	$47.78	3.77%	3.89%	5.00%	7.80%	n/a	6.40%	8.86%	10.29%	11.71%
NiSource Inc.	NI	$1.06	$38.00	2.79%	2.91%	9.50%	8.26%	8.20%	8.65%	11.10%	11.56%	12.42%
Northwest Natural Gas Company	NWN	$1.96	$41.04	4.78%	4.93%	6.50%	6.50%	n/a	6.50%	11.43%	11.43%	11.43%
ONE Gas Inc.	OGS	$2.64	$72.36	3.65%	3.72%	4.00%	3.00%	4.70%	3.90%	6.70%	7.62%	8.43%
Southwest Gas Holdings, Inc.	SWX	$2.48	$74.14	3.34%	3.48%	10.00%	n/a	6.60%	8.30%	10.06%	11.78%	13.51%
Spire, Inc.	SR	$3.14	$71.84	4.37%	4.51%	4.50%	8.08%	6.50%	6.36%	8.97%	10.87%	12.63%
Median				3.65%	3.72%	6.00%	7.55%	6.60%	6.50%	8.97%	10.87%	11.71%
Mean				3.59%	3.70%	6.50%	6.82%	6.62%	6.70%	9.37%	10.41%	11.42%

Notes:
[1] Source: Bloomberg Professional
[2] Source: Bloomberg Professional, equals 90-day average as of March 31, 2025
[3] Equals [1] / [2]
[4] Equals [3] x (1 + 0.50 x [8])
[5] Source: Value Line
[6] Source: S&P Capital IQ
[7] Source: Zacks
[8] Equals Average ([5], [6], [7])
[9] Equals [3] x (1 + 0.50 x Minimum ([5], [6], [7]) + Minimum ([5], [6], [7])
[10] Equals [4] + [8]
[11] Equals [3] x (1 + 0.50 x Maximum ([5], [6], [7]) + Maximum ([5], [6], [7])

180-DAY CONSTANT GROWTH DCF

Company	Ticker	[1] Annualized Dividend	[2] Stock Price	[3] Dividend Yield	[4] Expected Dividend Yield	[5] Value Line Earnings Growth	[6] S&P Cap. IQ Earnings Growth	[7] Zacks Earnings Growth	[8] Average Growth Rate	[9] Low ROE	[10] Mean ROE	[11] High ROE
Atmos Energy Corporation	ATO	$3.48	$139.73	2.49%	2.58%	6.00%	7.30%	7.10%	6.80%	8.57%	9.38%	9.88%
New Jersey Resources Corporation	NJR	$1.80	$47.00	3.83%	3.95%	5.00%	7.80%	n/a	6.40%	8.93%	10.35%	11.78%
NiSource Inc.	NI	$1.06	$35.67	2.97%	3.10%	9.50%	8.26%	8.20%	8.65%	11.29%	11.75%	12.61%
Northwest Natural Gas Company	NWN	$1.96	$40.39	4.85%	5.01%	6.50%	6.50%	n/a	6.50%	11.51%	11.51%	11.51%
ONE Gas Inc.	OGS	$2.64	$71.61	3.69%	3.76%	4.00%	3.00%	4.70%	3.90%	6.74%	7.66%	8.47%
Southwest Gas Holdings, Inc.	SWX	$2.48	$73.65	3.37%	3.51%	10.00%	n/a	6.60%	8.30%	10.08%	11.81%	13.54%
Spire, Inc.	SR	$3.14	$68.62	4.58%	4.72%	4.50%	8.08%	6.50%	6.36%	9.18%	11.08%	12.84%
Median				3.69%	3.76%	6.00%	7.55%	6.60%	6.50%	9.18%	11.08%	11.78%
Mean				3.68%	3.80%	6.50%	6.82%	6.62%	6.70%	9.47%	10.51%	11.52%

Notes:
[1] Source: Bloomberg Professional
[2] Source: Bloomberg Professional, equals 180-day average as of March 31, 2025
[3] Equals [1] / [2]
[4] Equals [3] x (1 + 0.50 x [8])
[5] Source: Value Line
[6] Source: S&P Capital IQ
[7] Source: Zacks
[8] Equals Average ([5], [6], [7])
[9] Equals [3] x (1 + 0.50 x Minimum ([5], [6], [7]) + Minimum ([5], [6], [7])
[10] Equals [4] + [8]
[11] Equals [3] x (1 + 0.50 x Maximum ([5], [6], [7]) + Maximum ([5], [6], [7])

MARKET RISK PREMIUM DERIVED FROM S&P 500 - ALL COMPANIES

[1] Estimate of the S&P 500 Dividend Yield	1.40%
[2] Estimate of the S&P 500 Growth Rate	13.42%
[3] S&P 500 Estimated Required Market Return	14.92%

Notes:
[1] Sum of [9]
[2] Sum of [11]
[3] Equals ([1] x (1 + 0.5 x [2])) + [2]

STANDARD AND POOR'S 500 INDEX

		[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
Name	Ticker	Price	Shares Outstanding	Market Capitalization	Weight in Index	Current Dividend Yield	Cap-Weighted Dividend Yield	Value Line Long-Term Growth Est.	Cap-Weighted Long-Term Growth Est.
LyondellBasell Industries NV	LYB	70.40	323	22,771	0.05%	7.61%	0.00%	-1.50%	0.00%
American Express Co	AXP	269.05	701	188,634	0.40%	1.22%	0.00%	9.00%	0.04%
Verizon Communications Inc	VZ	45.36	4,210	190,952	0.41%	5.97%	0.02%	0.50%	0.00%
Texas Pacific Land Corp	TPL	1,324.99	23	30,455	0.06%	0.48%	0.00%	10.50%	0.01%
Broadcom Inc	AVGO	167.43	4,702	787,247	1.68%	1.41%	0.02%	22.00%	0.37%
Boeing Co/The	BA	170.55	752	Excl.	0.00%	n/a	n/a		n/a
Solventum Corp	SOLV	76.04	173	Excl.	0.00%	n/a	n/a		n/a
Caterpillar Inc	CAT	329.80	478	157,622	0.34%	1.71%	0.01%	10.50%	0.04%
JPMorgan Chase & Co	JPM	245.30	2,796	685,885	1.46%	2.28%	0.03%	8.00%	0.12%
Chevron Corp	CVX	167.29	1,750	292,710	0.62%	4.09%	0.03%	4.00%	0.02%
Coca-Cola Co/The	KO	71.62	4,304	308,221	0.66%	2.85%	0.02%	7.00%	0.05%
AbbVie Inc	ABBV	209.52	1,769	370,636	0.79%	3.13%	0.02%	7.00%	0.06%
Walt Disney Co/The	DIS	98.70	1,808	178,429	0.38%	1.01%	0.00%	31.00%	0.12%
Corpay Inc	CPAY	348.72	70	24,498	0.05%	n/a	n/a	15.50%	0.01%
Extra Space Storage Inc	EXR	148.49	212	31,480	0.07%	4.36%	0.00%	-0.50%	0.00%
Exxon Mobil Corp	XOM	118.93	4,339	516,054	1.10%	3.33%	0.04%	-2.50%	-0.03%
Phillips 66	PSX	123.48	408	50,343	0.11%	3.73%	0.00%	1.00%	0.00%
General Electric Co	GE	200.15	1,067	213,476	0.46%	0.72%	0.00%	21.00%	0.10%
HP Inc	HPQ	27.69	943	26,103	0.06%	4.18%	0.00%	5.50%	0.00%
Home Depot Inc/The	HD	366.49	994	364,303	0.78%	2.51%	0.02%	6.50%	0.05%
Monolithic Power Systems Inc	MPWR	579.98	48	27,761	0.06%	1.08%	0.00%	12.00%	0.01%
International Business Machines Corp	IBM	248.66	927	230,574	0.49%	2.69%	0.01%	3.00%	0.01%
Johnson & Johnson	JNJ	165.84	2,410	399,649	0.85%	2.99%	0.03%	4.50%	0.04%
Lululemon Athletica Inc	LULU	283.06	116	32,699	0.07%	n/a	n/a	13.00%	0.01%
McDonald's Corp	MCD	312.37	714	223,176	0.48%	2.27%	0.01%	8.50%	0.04%
Merck & Co Inc	MRK	89.76	2,526	226,737	0.48%	3.61%	0.02%	13.50%	0.07%
3M Co	MMM	146.86	539	79,204	0.17%	1.99%	0.00%	25.50%	0.04%
American Water Works Co Inc	AWK	147.52	195	28,768	0.06%	2.07%	0.00%	4.50%	0.00%
Bank of America Corp	BAC	41.73	7,603	317,265	0.68%	2.49%	0.02%	7.00%	0.05%
Pfizer Inc	PFE	25.34	5,671	143,715	0.31%	6.79%	0.02%	7.50%	0.02%
Procter & Gamble Co/The	PG	170.42	2,345	399,610	0.85%	2.36%	0.02%	5.00%	0.04%
AT&T Inc	T	28.28	7,178	202,999	0.43%	3.93%	0.02%	6.50%	0.03%
Travelers Cos Inc/The	TRV	264.46	227	59,960	0.13%	1.59%	0.00%	10.50%	0.01%
RTX Corp	RTX	132.46	1,335	176,846	0.38%	1.90%	0.01%	12.00%	0.05%
Analog Devices Inc	ADI	201.67	496	100,024	0.21%	1.96%	0.00%	9.00%	0.02%
Walmart Inc	WMT	87.79	8,017	703,799	1.50%	1.07%	0.02%	9.50%	0.14%
Cisco Systems Inc	CSCO	61.71	3,978	245,500	0.52%	2.66%	0.01%	5.50%	0.03%
Intel Corp	INTC	22.71	4,361	99,029	0.21%	n/a	n/a	-2.00%	0.00%
General Motors Co	GM	47.03	995	46,795	0.10%	1.02%	0.00%	7.50%	0.01%
Microsoft Corp	MSFT	375.39	7,434	2,790,643	5.95%	0.88%	0.05%	14.50%	0.86%
Dollar General Corp	DG	87.93	220	19,340	0.04%	2.68%	0.00%	-0.50%	0.00%
Cigna Group/The	CI	329.00	271	89,195	0.19%	1.84%	0.00%	11.00%	0.02%
Kinder Morgan Inc	KMI	28.53	2,222	63,393	0.14%	4.03%	0.01%	9.00%	0.01%
Citigroup Inc	C	70.99	1,882	133,615	0.28%	3.16%	0.01%	3.00%	0.01%
American International Group Inc	AIG	86.94	593	51,584	0.11%	1.84%	0.00%	12.50%	0.01%
Altria Group Inc	MO	60.02	1,691	101,474	0.22%	6.80%	0.01%	6.00%	0.01%
HCA Healthcare Inc	HCA	345.55	246	85,076	0.18%	0.83%	0.00%	10.00%	0.02%
International Paper Co	IP	53.35	526	28,069	0.06%	3.47%	0.00%	8.00%	0.00%
Hewlett Packard Enterprise Co	HPE	15.43	1,314	20,269	0.04%	3.37%	0.00%	5.50%	0.00%
Abbott Laboratories	ABT	132.65	1,734	230,058	0.49%	1.78%	0.01%	4.50%	0.02%
Aflac Inc	AFL	111.19	546	60,689	0.13%	2.09%	0.00%	8.50%	0.01%
Air Products and Chemicals Inc	APD	294.92	222	65,613	0.14%	2.43%	0.00%	10.50%	0.01%
Super Micro Computer Inc	SMCI	34.24	593	20,321	0.04%	n/a	n/a	39.00%	0.02%
Royal Caribbean Cruises Ltd	RCL	205.44	269	Excl.	0.00%	1.46%	0.00%		n/a
Hess Corp	HES	159.73	308	49,243	0.10%	1.25%	0.00%	7.50%	0.01%
Lennox International Inc	LII	560.83	36	19,954	0.04%	0.82%	0.00%	12.50%	0.01%
Archer-Daniels-Midland Co	ADM	48.01	480	23,052	0.05%	4.25%	0.00%	3.00%	0.00%
Automatic Data Processing Inc	ADP	305.53	407	124,311	0.26%	2.02%	0.01%	8.50%	0.02%
Verisk Analytics Inc	VRSK	297.62	140	41,749	0.09%	0.60%	0.00%	11.00%	0.01%
AutoZone Inc	AZO	3,812.78	17	63,783	0.14%	n/a	n/a	11.50%	0.02%
Linde PLC	LIN	465.64	473	220,207	0.47%	1.29%	0.01%	7.00%	0.03%
Avery Dennison Corp	AVY	177.97	79	14,054	0.03%	1.98%	0.00%	2.00%	0.00%

STANDARD AND POOR'S 500 INDEX

Name	Ticker	[4] Price	[5] Shares Outstanding	[6] Market Capitalization	[7] Weight in Index	[8] Current Dividend Yield	[9] Cap-Weighted Dividend Yield	[10] Value Line Long-Term Growth Est.	[11] Cap-Weighted Long-Term Growth Est.
Enphase Energy Inc	ENPH	62.05	132	8,220	0.02%	n/a	n/a	6.50%	0.00%
MSCI Inc	MSCI	565.50	78	43,884	0.09%	1.27%	0.00%	9.50%	0.01%
Ball Corp	BALL	52.07	282	14,703	0.03%	1.54%	0.00%	10.50%	0.00%
Axon Enterprise Inc	AXON	525.95	77	40,300	0.09%	n/a	n/a	26.00%	0.02%
Dayforce Inc	DAY	58.33	158	Excl.	0.00%	n/a	n/a		n/a
Carrier Global Corp	CARR	63.40	864	54,777	0.12%	1.42%	0.00%	13.00%	0.02%
Bank of New York Mellon Corp/The	BK	83.87	718	60,216	0.13%	2.24%	0.00%	10.50%	0.01%
Otis Worldwide Corp	OTIS	103.20	397	40,921	0.09%	1.51%	0.00%	10.00%	0.01%
Baxter International Inc	BAX	34.23	513	17,557	0.04%	1.99%	0.00%	3.50%	0.00%
Becton Dickinson & Co	BDX	229.06	287	65,771	0.14%	1.82%	0.00%	7.00%	0.01%
Berkshire Hathaway Inc	BRK/B	532.58	1,340	713,607	1.52%	n/a	n/a	9.00%	0.14%
Best Buy Co Inc	BBY	73.61	211	15,559	0.03%	5.16%	0.00%	1.00%	0.00%
Boston Scientific Corp	BSX	100.88	1,479	149,209	0.32%	n/a	n/a	12.50%	0.04%
Bristol-Myers Squibb Co	BMY	60.99	2,035	124,100	0.26%	4.07%	0.01%	2.50%	0.01%
Brown-Forman Corp	BF/B	33.94	304	10,302	0.02%	2.67%	0.00%	14.00%	0.00%
Coterra Energy Inc	CTRA	28.90	764	22,082	0.05%	3.04%	0.00%	7.00%	0.00%
Hilton Worldwide Holdings Inc	HLT	227.55	240	Excl.	0.00%	0.26%	0.00%		n/a
Carnival Corp	CCL	19.53	1,167	Excl.	0.00%	n/a	n/a		n/a
Builders FirstSource Inc	BLDR	124.94	114	14,196	0.03%	n/a	n/a	4.50%	0.00%
UDR Inc	UDR	45.17	331	14,957	0.03%	3.81%	0.00%	7.50%	0.00%
Clorox Co/The	CLX	147.25	123	18,140	0.04%	3.31%	0.00%	10.00%	0.00%
Paycom Software Inc	PAYC	218.48	57	12,511	0.03%	0.69%	0.00%	12.50%	0.00%
CMS Energy Corp	CMS	75.11	299	22,467	0.05%	2.89%	0.00%	6.00%	0.00%
Colgate-Palmolive Co	CL	93.70	811	75,999	0.16%	2.22%	0.00%	10.00%	0.02%
EPAM Systems Inc	EPAM	168.84	57	9,605	0.02%	n/a	n/a	20.50%	0.00%
Conagra Brands Inc	CAG	26.67	477	12,730	0.03%	5.25%	0.00%	2.00%	0.00%
Airbnb Inc	ABNB	119.46	440	52,563	0.11%	n/a	n/a	23.00%	0.03%
Consolidated Edison Inc	ED	110.59	353	39,046	0.08%	3.07%	0.00%	6.00%	0.00%
Corning Inc	GLW	45.78	857	39,223	0.08%	2.45%	0.00%	23.00%	0.02%
GoDaddy Inc	GDDY	180.14	141	25,464	0.05%	n/a	n/a	12.50%	0.01%
Cummins Inc	CMI	313.44	137	43,092	0.09%	2.32%	0.00%	8.50%	0.01%
Caesars Entertainment Inc	CZR	25.00	212	Excl.	0.00%	n/a	n/a		n/a
Danaher Corp	DHR	205.00	715	146,667	0.31%	0.62%	0.00%	2.00%	0.01%
Target Corp	TGT	104.36	456	47,544	0.10%	4.29%	0.00%	8.00%	0.01%
Williams-Sonoma Inc	WSM	158.10	124	19,527	0.04%	1.67%	0.00%	5.00%	0.00%
Deere & Co	DE	469.35	271	127,388	0.27%	1.38%	0.00%	3.00%	0.01%
Dominion Energy Inc	D	56.07	852	47,784	0.10%	4.76%	0.00%	3.50%	0.00%
Dover Corp	DOV	175.68	137	24,079	0.05%	1.17%	0.00%	5.00%	0.00%
Alliant Energy Corp	LNT	64.35	257	16,518	0.04%	3.15%	0.00%	6.00%	0.00%
Steel Dynamics Inc	STLD	125.08	150	18,749	0.04%	1.60%	0.00%	0.50%	0.00%
Duke Energy Corp	DUK	121.97	777	94,773	0.20%	3.43%	0.01%	6.00%	0.01%
Regency Centers Corp	REG	73.76	182	13,389	0.03%	3.82%	0.00%	10.00%	0.00%
Eaton Corp PLC	ETN	271.83	392	106,495	0.23%	1.53%	0.00%	11.00%	0.02%
Ecolab Inc	ECL	253.52	284	71,907	0.15%	1.03%	0.00%	10.50%	0.02%
Revvity Inc	RVTY	105.80	120	12,712	0.03%	0.26%	0.00%	-1.50%	0.00%
Dell Technologies Inc	DELL	91.15	359	32,696	0.07%	2.30%	0.00%	2.50%	0.00%
Emerson Electric Co	EMR	109.64	564	61,826	0.13%	1.92%	0.00%	11.00%	0.01%
EOG Resources Inc	EOG	128.24	552	70,730	0.15%	3.04%	0.00%	7.00%	0.01%
Aon PLC	AON	399.09	216	86,204	0.18%	0.68%	0.00%	12.50%	0.02%
Entergy Corp	ETR	85.49	446	38,158	0.08%	2.81%	0.00%	3.00%	0.00%
Equifax Inc	EFX	243.56	125	30,396	0.06%	0.64%	0.00%	7.00%	0.00%
EQT Corp	EQT	53.43	597	Excl.	0.00%	1.18%	0.00%		n/a
IQVIA Holdings Inc	IQV	176.30	176	31,084	0.07%	n/a	n/a	9.00%	0.01%
Gartner Inc	IT	419.74	77	32,244	0.07%	n/a	n/a	8.00%	0.01%
FedEx Corp	FDX	243.78	240	58,409	0.12%	2.26%	0.00%	9.00%	0.01%
Brown & Brown Inc	BRO	124.40	287	35,656	0.08%	0.48%	0.00%	12.50%	0.01%
Ford Motor Co	F	10.03	3,906	39,174	0.08%	1.50%	0.00%	17.00%	0.01%
NextEra Energy Inc	NEE	70.89	2,057	145,823	0.31%	3.20%	0.01%	8.50%	0.03%
Franklin Resources Inc	BEN	19.25	525	10,114	0.02%	6.65%	0.00%	4.00%	0.00%
Garmin Ltd	GRMN	217.13	192	41,777	0.09%	1.66%	0.00%	7.00%	0.01%
Freeport-McMoRan Inc	FCX	37.86	1,437	54,408	0.12%	1.58%	0.00%	17.50%	0.02%
Expand Energy Corp	EXE	111.32	233	Excl.	0.00%	2.07%	0.00%		n/a
Dexcom Inc	DXCM	68.29	392	Excl.	0.00%	n/a	n/a		n/a
General Dynamics Corp	GD	272.58	268	73,156	0.16%	2.20%	0.00%	9.50%	0.01%
General Mills Inc	GIS	59.79	548	32,741	0.07%	4.01%	0.00%	4.50%	0.00%
Genuine Parts Co	GPC	119.14	139	16,534	0.04%	3.46%	0.00%	3.50%	0.00%
Atmos Energy Corp	ATO	154.58	159	24,536	0.05%	2.25%	0.00%	6.00%	0.00%
WW Grainger Inc	GWW	987.83	48	47,585	0.10%	0.83%	0.00%	5.00%	0.01%
Halliburton Co	HAL	25.37	868	22,023	0.05%	2.68%	0.00%	16.00%	0.01%
L3Harris Technologies Inc	LHX	209.31	188	39,291	0.08%	2.29%	0.00%	9.00%	0.01%
Healthpeak Properties Inc	DOC	20.22	699	14,126	0.03%	6.03%	0.00%	6.00%	0.00%
Insulet Corp	PODD	262.61	70	Excl.	0.00%	n/a	n/a		n/a
Fortive Corp	FTV	73.18	340	24,902	0.05%	0.44%	0.00%	10.50%	0.01%
Hershey Co/The	HSY	171.03	148	25,304	0.05%	3.20%	0.00%	7.00%	0.00%
Synchrony Financial	SYF	52.94	389	20,580	0.04%	1.89%	0.00%	47.00%	0.02%
Hormel Foods Corp	HRL	30.94	550	17,014	0.04%	3.75%	0.00%	6.00%	0.00%
Arthur J Gallagher & Co	AJG	345.24	256	88,290	0.19%	0.75%	0.00%	16.50%	0.03%

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Mondelez International Inc	MDLZ	67.85	1,294	87,766	0.19%	2.77%	0.01%	7.50%	0.01%
CenterPoint Energy Inc	CNP	36.23	653	23,648	0.05%	2.43%	0.00%	6.50%	0.00%
Humana Inc	HUM	264.60	121	31,935	0.07%	1.34%	0.00%	2.00%	0.00%
Willis Towers Watson PLC	WTW	337.95	99	33,586	0.07%	1.09%	0.00%	9.50%	0.01%
Illinois Tool Works Inc	ITW	248.01	293	72,758	0.16%	2.42%	0.00%	9.00%	0.01%
CDW Corp/DE	CDW	160.26	132	21,233	0.05%	1.56%	0.00%	7.00%	0.00%
Trane Technologies PLC	TT	336.92	224	75,568	0.16%	1.12%	0.00%	14.00%	0.02%
Interpublic Group of Cos Inc/The	IPG	27.16	373	10,121	0.02%	4.86%	0.00%	8.50%	0.00%
International Flavors & Fragrances Inc	IFF	77.61	256	19,848	0.04%	2.06%	0.00%	0.50%	0.00%
Generac Holdings Inc	GNRC	126.65	60	7,550	0.02%	n/a	n/a	18.00%	0.00%
NXP Semiconductors NV	NXPI	190.06	254	48,203	0.10%	2.13%	0.00%	6.50%	0.01%
Kellanova	K	82.49	345	28,477	0.06%	2.76%	0.00%	2.50%	0.00%
Broadridge Financial Solutions Inc	BR	242.46	117	28,372	0.06%	1.45%	0.00%	9.50%	0.01%
Kimberly-Clark Corp	KMB	142.22	332	47,168	0.10%	3.54%	0.00%	6.50%	0.01%
Kimco Realty Corp	KIM	21.24	679	14,433	0.03%	4.71%	0.00%	27.50%	0.01%
Oracle Corp	ORCL	139.81	2,804	392,060	0.84%	1.43%	0.01%	10.00%	0.08%
Kroger Co/The	KR	67.69	724	48,981	0.10%	1.89%	0.00%	5.00%	0.01%
Lennar Corp	LEN	114.78	233	26,708	0.06%	1.74%	0.00%	4.00%	0.00%
Eli Lilly & Co	LLY	825.91	948	782,954	1.67%	0.73%	0.01%	26.50%	0.44%
Charter Communications Inc	CHTR	368.53	142	52,336	0.11%	n/a	n/a	9.00%	0.01%
Loews Corp	L	91.91	213	19,564	0.04%	0.27%	0.00%	15.50%	0.01%
Lowe's Cos Inc	LOW	233.23	560	130,540	0.28%	1.97%	0.01%	6.50%	0.02%
Hubbell Inc	HUBB	330.91	54	17,728	0.04%	1.60%	0.00%	6.00%	0.00%
IDEX Corp	IEX	180.97	76	13,671	0.03%	1.53%	0.00%	5.50%	0.00%
Marsh & McLennan Cos Inc	MMC	244.03	493	120,283	0.26%	1.34%	0.00%	12.50%	0.03%
Masco Corp	MAS	69.54	212	14,718	0.03%	1.78%	0.00%	10.00%	0.00%
S&P Global Inc	SPGI	508.10	314	159,462	0.34%	0.76%	0.00%	8.50%	0.03%
Medtronic PLC	MDT	89.86	1,283	115,249	0.25%	3.12%	0.01%	6.00%	0.01%
Viatris Inc	VTRS	8.71	1,194	10,397	0.02%	5.51%	0.00%	-2.00%	0.00%
CVS Health Corp	CVS	67.75	1,261	85,419	0.18%	3.93%	0.01%	0.50%	0.00%
DuPont de Nemours Inc	DD	74.68	418	31,220	0.07%	2.20%	0.00%	10.50%	0.01%
Micron Technology Inc	MU	86.89	1,118	97,106	0.21%	0.53%	0.00%	39.00%	0.08%
Motorola Solutions Inc	MSI	437.81	167	73,098	0.16%	1.00%	0.00%	10.00%	0.02%
Cboe Global Markets Inc	CBOE	226.29	105	23,693	0.05%	1.11%	0.00%	12.50%	0.01%
Newmont Corp	NEM	48.28	1,127	54,424	0.12%	2.07%	0.00%	12.50%	0.01%
NIKE Inc	NKE	63.48	1,181	74,985	0.16%	2.52%	0.00%	10.50%	0.02%
NiSource Inc	NI	40.09	471	18,867	0.04%	2.79%	0.00%	8.00%	0.00%
Norfolk Southern Corp	NSC	236.85	247	58,397	0.12%	2.28%	0.00%	12.00%	0.01%
Principal Financial Group Inc	PFG	84.37	226	19,031	0.04%	3.56%	0.00%	4.00%	0.00%
Eversource Energy	ES	62.11	367	22,799	0.05%	4.85%	0.00%	5.50%	0.00%
Northrop Grumman Corp	NOC	512.01	145	74,116	0.16%	1.61%	0.00%	7.50%	0.01%
Wells Fargo & Co	WFC	71.79	3,265	234,406	0.50%	2.23%	0.01%	9.50%	0.05%
Nucor Corp	NUE	120.34	231	Excl.	0.00%	1.83%	0.00%		n/a
Occidental Petroleum Corp	OXY	49.36	940	46,388	0.10%	1.94%	0.00%	6.00%	0.01%
Omnicom Group Inc	OMC	82.91	197	16,296	0.03%	3.38%	0.00%	7.00%	0.00%
ONEOK Inc	OKE	99.22	624	61,947	0.13%	4.15%	0.01%	14.50%	0.02%
Raymond James Financial Inc	RJF	138.91	205	28,464	0.06%	1.44%	0.00%	10.00%	0.01%
PG&E Corp	PCG	17.18	2,194	37,686	0.08%	0.58%	0.00%	9.00%	0.01%
Parker-Hannifin Corp	PH	607.85	129	78,270	0.17%	1.07%	0.00%	10.00%	0.02%
Rollins Inc	ROL	54.03	485	26,209	0.06%	1.22%	0.00%	9.50%	0.01%
PPL Corp	PPL	36.11	738	26,660	0.06%	3.02%	0.00%	7.50%	0.00%
Aptiv PLC	APTV	59.50	229	Excl.	0.00%	n/a	n/a		n/a
ConocoPhillips	COP	105.02	1,264	132,763	0.28%	2.97%	0.01%	4.00%	0.01%
PulteGroup Inc	PHM	102.80	202	20,723	0.04%	0.86%	0.00%	8.50%	0.00%
Pinnacle West Capital Corp	PNW	95.25	119	11,358	0.02%	3.76%	0.00%	4.00%	0.00%
PNC Financial Services Group Inc/The	PNC	175.77	396	69,561	0.15%	3.64%	0.01%	7.00%	0.01%
PPG Industries Inc	PPG	109.35	227	24,820	0.05%	2.49%	0.00%	5.00%	0.00%
DoorDash Inc	DASH	182.77	394	Excl.	0.00%	n/a	n/a		n/a
Progressive Corp/The	PGR	283.01	586	165,911	0.35%	0.14%	0.00%	23.50%	0.08%
Veralto Corp	VLTO	97.45	248	24,173	0.05%	0.45%	0.00%	6.00%	0.00%
Public Service Enterprise Group Inc	PEG	82.30	499	41,032	0.09%	3.06%	0.00%	6.00%	0.01%
Cooper Cos Inc/The	COO	84.35	200	16,868	0.04%	n/a	n/a	8.50%	0.00%
Edison International	EIX	58.92	385	22,686	0.05%	5.62%	0.00%	6.50%	0.00%
Schlumberger NV	SLB	41.80	1,360	56,842	0.12%	2.73%	0.00%	18.00%	0.02%
Charles Schwab Corp/The	SCHW	78.28	1,814	141,966	0.30%	1.38%	0.00%	10.00%	0.03%
Sherwin-Williams Co/The	SHW	349.19	252	87,825	0.19%	0.90%	0.00%	12.00%	0.02%
West Pharmaceutical Services Inc	WST	223.88	72	16,185	0.03%	0.38%	0.00%	7.50%	0.00%
J M Smucker Co/The	SJM	118.41	106	12,601	0.03%	3.65%	0.00%	6.50%	0.00%
Snap-on Inc	SNA	337.01	52	17,665	0.04%	2.54%	0.00%	4.50%	0.00%
AMETEK Inc	AME	172.14	231	39,721	0.08%	0.72%	0.00%	10.00%	0.01%
Uber Technologies Inc	UBER	72.86	2,091	Excl.	0.00%	n/a	n/a		n/a
Southern Co/The	SO	91.95	1,095	100,652	0.21%	3.13%	0.01%	6.50%	0.01%
Truist Financial Corp	TFC	41.15	1,305	53,717	0.11%	5.05%	0.01%	2.00%	0.00%
Southwest Airlines Co	LUV	33.58	593	Excl.	0.00%	2.14%	0.00%		n/a
W R Berkley Corp	WRB	71.16	379	26,986	0.06%	0.45%	0.00%	14.50%	0.01%
Stanley Black & Decker Inc	SWK	76.88	155	11,881	0.03%	4.27%	0.00%	9.50%	0.00%
Public Storage	PSA	299.29	175	52,500	0.11%	4.01%	0.00%	7.00%	0.01%

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Arista Networks Inc	ANET	77.48	1,261	97,712	0.21%	n/a	n/a	16.00%	0.03%
Sysco Corp	SYY	75.04	489	36,712	0.08%	2.72%	0.00%	9.50%	0.01%
Corteva Inc	CTVA	62.93	683	42,982	0.09%	1.08%	0.00%	9.50%	0.01%
Texas Instruments Inc	TXN	179.70	910	163,512	0.35%	3.03%	0.01%	6.50%	0.02%
Textron Inc	TXT	72.25	182	13,122	0.03%	0.11%	0.00%	12.00%	0.00%
Thermo Fisher Scientific Inc	TMO	497.60	377	187,725	0.40%	0.35%	0.00%	6.00%	0.02%
TJX Cos Inc/The	TJX	121.80	1,124	136,922	0.29%	1.40%	0.00%	12.50%	0.04%
Globe Life Inc	GL	131.72	83	10,965	0.02%	0.82%	0.00%	9.00%	0.00%
Johnson Controls International plc	JCI	80.11	660	52,884	0.11%	1.85%	0.00%	11.50%	0.01%
Ulta Beauty Inc	ULTA	366.54	45	16,608	0.04%	n/a	n/a	6.00%	0.00%
Union Pacific Corp	UNP	236.24	599	141,583	0.30%	2.27%	0.01%	8.00%	0.02%
Keysight Technologies Inc	KEYS	149.77	173	25,882	0.06%	n/a	n/a	5.50%	0.00%
UnitedHealth Group Inc	UNH	523.75	915	479,081	1.02%	1.60%	0.02%	11.00%	0.11%
Blackstone Inc	BX	139.78	729	101,958	0.22%	4.12%	0.01%	16.00%	0.03%
Ventas Inc	VTR	68.76	438	30,091	0.06%	2.79%	0.00%	23.00%	0.01%
Labcorp Holdings Inc	LH	232.74	84	19,480	0.04%	1.24%	0.00%	1.50%	0.00%
Vulcan Materials Co	VMC	233.30	132	30,819	0.07%	0.84%	0.00%	7.50%	0.00%
Weyerhaeuser Co	WY	29.28	726	21,253	0.05%	2.87%	0.00%	-2.00%	0.00%
Williams Cos Inc/The	WMB	59.76	1,221	72,948	0.16%	3.35%	0.01%	9.50%	0.01%
Constellation Energy Corp	CEG	201.63	315	63,538	0.14%	0.77%	0.00%	17.50%	0.02%
WEC Energy Group Inc	WEC	108.98	316	34,418	0.07%	3.28%	0.00%	6.00%	0.00%
Adobe Inc	ADBE	383.53	426	163,460	0.35%	n/a	n/a	13.50%	0.05%
Vistra Corp	VST	117.44	340	Excl.	0.00%	0.76%	0.00%		n/a
AES Corp/The	AES	12.42	712	8,842	0.02%	5.67%	0.00%	14.00%	0.00%
Expeditors International of Washington Inc	EXPD	120.25	138	16,565	0.04%	1.21%	0.00%	-1.50%	0.00%
Amgen Inc	AMGN	311.55	537	167,366	0.36%	3.06%	0.01%	5.50%	0.02%
Apple Inc	AAPL	222.13	15,022	3,336,853	7.11%	0.45%	0.03%	11.00%	0.78%
Autodesk Inc	ADSK	261.80	213	55,763	0.12%	n/a	n/a	14.00%	0.02%
Cintas Corp	CTAS	205.53	404	82,940	0.18%	0.76%	0.00%	14.00%	0.02%
Comcast Corp	CMCSA	36.90	3,772	139,171	0.30%	3.58%	0.01%	7.50%	0.02%
Molson Coors Beverage Co	TAP	60.87	190	11,575	0.02%	3.09%	0.00%	11.50%	0.00%
KLA Corp	KLAC	679.80	133	90,336	0.19%	1.00%	0.00%	12.50%	0.02%
Marriott International Inc/MD	MAR	238.20	275	65,594	0.14%	1.06%	0.00%	11.00%	0.02%
Fiserv Inc	FI	220.83	561	123,949	0.26%	n/a	n/a	9.50%	0.03%
McCormick & Co Inc/MD	MKC	82.31	253	20,798	0.04%	2.19%	0.00%	4.50%	0.00%
PACCAR Inc	PCAR	97.37	525	51,113	0.11%	1.36%	0.00%	14.50%	0.02%
Costco Wholesale Corp	COST	945.78	444	419,627	0.89%	0.49%	0.00%	11.50%	0.10%
Stryker Corp	SYK	372.25	382	142,084	0.30%	0.90%	0.00%	9.50%	0.03%
Tyson Foods Inc	TSN	63.81	286	18,261	0.04%	3.13%	0.00%	6.00%	0.00%
Lamb Weston Holdings Inc	LW	53.30	143	7,603	0.02%	2.78%	0.00%	10.50%	0.00%
Applied Materials Inc	AMAT	145.12	812	117,901	0.25%	1.27%	0.00%	8.00%	0.02%
Cardinal Health Inc	CAH	137.77	242	33,281	0.07%	1.47%	0.00%	6.50%	0.00%
Cincinnati Financial Corp	CINF	147.72	157	23,128	0.05%	2.36%	0.00%	14.00%	0.01%
Paramount Global	PARA	11.96	630	7,535	0.02%	1.67%	0.00%	3.00%	0.00%
DR Horton Inc	DHI	127.13	315	40,062	0.09%	1.26%	0.00%	3.50%	0.00%
Electronic Arts Inc	EA	144.52	261	37,664	0.08%	0.53%	0.00%	14.00%	0.01%
Erie Indemnity Co	ERIE	419.05	46	19,356	0.04%	1.30%	0.00%	18.00%	0.01%
Fair Isaac Corp	FICO	1,844.16	24	45,031	0.10%	n/a	n/a	20.50%	0.02%
Fastenal Co	FAST	77.55	573	44,471	0.09%	2.22%	0.00%	8.00%	0.01%
M&T Bank Corp	MTB	178.75	164	29,367	0.06%	3.02%	0.00%	5.50%	0.00%
Xcel Energy Inc	XEL	70.79	575	40,673	0.09%	3.22%	0.00%	6.50%	0.01%
Fifth Third Bancorp	FITB	39.20	668	26,189	0.06%	3.78%	0.00%	5.00%	0.00%
Gilead Sciences Inc	GILD	112.05	1,245	139,520	0.30%	2.82%	0.01%	2.50%	0.01%
Hasbro Inc	HAS	61.49	140	8,580	0.02%	4.55%	0.00%	8.50%	0.00%
Huntington Bancshares Inc/OH	HBAN	15.01	1,461	21,926	0.05%	4.13%	0.00%	7.00%	0.00%
Welltower Inc	WELL	153.21	641	98,255	0.21%	1.75%	0.00%	22.00%	0.05%
Biogen Inc	BIIB	136.84	146	20,030	0.04%	n/a	n/a	1.00%	0.00%
Northern Trust Corp	NTRS	98.65	195	19,234	0.04%	3.04%	0.00%	5.00%	0.00%
Packaging Corp of America	PKG	198.02	90	17,808	0.04%	2.52%	0.00%	9.00%	0.00%
Paychex Inc	PAYX	154.28	360	55,570	0.12%	2.54%	0.00%	8.00%	0.01%
QUALCOMM Inc	QCOM	153.61	1,106	169,893	0.36%	2.21%	0.01%	5.50%	0.02%
Ross Stores Inc	ROST	127.79	330	42,162	0.09%	1.27%	0.00%	9.50%	0.01%
IDEXX Laboratories Inc	IDXX	419.95	81	34,032	0.07%	n/a	n/a	10.50%	0.01%
Starbucks Corp	SBUX	98.09	1,136	111,420	0.24%	2.49%	0.01%	7.00%	0.02%
KeyCorp	KEY	15.99	1,096	17,521	0.04%	5.13%	0.00%	-1.50%	0.00%
Fox Corp	FOXA	56.60	218	12,330	0.03%	0.95%	0.00%	8.50%	0.00%
Fox Corp	FOX	52.71	236	Excl.	0.00%	1.02%	0.00%		n/a
State Street Corp	STT	89.53	288	25,827	0.06%	3.40%	0.00%	7.50%	0.00%
Norwegian Cruise Line Holdings Ltd	NCLH	18.96	440	Excl.	0.00%	n/a	n/a		n/a
US Bancorp	USB	42.22	1,558	65,779	0.14%	4.74%	0.01%	4.00%	0.01%
A O Smith Corp	AOS	65.36	118	7,690	0.02%	2.08%	0.00%	9.00%	0.00%
Gen Digital Inc	GEN	26.54	616	16,357	0.03%	1.88%	0.00%	10.50%	0.00%
T Rowe Price Group Inc	TROW	91.87	222	20,417	0.04%	5.53%	0.00%	5.50%	0.00%
Waste Management Inc	WM	231.51	402	93,094	0.20%	1.43%	0.00%	8.50%	0.02%
Constellation Brands Inc	STZ	183.52	181	33,163	0.07%	2.20%	0.00%	7.50%	0.01%
Invesco Ltd	IVZ	15.17	447	6,787	0.01%	5.41%	0.00%	10.50%	0.00%
Intuit Inc	INTU	613.99	280	171,648	0.37%	0.68%	0.00%	13.50%	0.05%

STANDARD AND POOR'S 500 INDEX

Name	Ticker	[4] Price	[5] Shares Outstanding	[6] Market Capitalization	[7] Weight in Index	[8] Current Dividend Yield	[9] Cap-Weighted Dividend Yield	[10] Value Line Long-Term Growth Est.	[11] Cap-Weighted Long-Term Growth Est.
Morgan Stanley	MS	116.67	1,613	188,172	0.40%	3.17%	0.01%	13.50%	0.05%
Microchip Technology Inc	MCHP	48.41	538	26,036	0.06%	3.76%	0.00%	-0.50%	0.00%
Crowdstrike Holdings Inc	CRWD	352.58	248	Excl.	0.00%	n/a	n/a		n/a
Chubb Ltd	CB	301.99	400	120,920	0.26%	1.21%	0.00%	11.00%	0.03%
Hologic Inc	HOLX	61.77	226	13,943	0.03%	n/a	n/a	2.00%	0.00%
Citizens Financial Group Inc	CFG	40.97	437	17,909	0.04%	4.10%	0.00%	5.50%	0.00%
Jabil Inc	JBL	136.07	109	14,856	0.03%	0.24%	0.00%	11.50%	0.00%
O'Reilly Automotive Inc	ORLY	1,432.58	57	82,002	0.17%	n/a	n/a	10.50%	0.02%
Allstate Corp/The	ALL	207.07	265	54,879	0.12%	1.93%	0.00%	29.00%	0.03%
Equity Residential	EQR	71.58	380	27,179	0.06%	3.87%	0.00%	-3.50%	0.00%
Keurig Dr Pepper Inc	KDP	34.22	1,357	46,428	0.10%	2.69%	0.00%	9.50%	0.01%
Host Hotels & Resorts Inc	HST	14.21	699	9,934	0.02%	5.63%	0.00%	11.50%	0.00%
Incyte Corp	INCY	60.55	194	11,718	0.02%	n/a	n/a	33.50%	0.01%
Simon Property Group Inc	SPG	166.08	326	54,183	0.12%	5.06%	0.01%	3.50%	0.00%
Eastman Chemical Co	EMN	88.11	115	10,173	0.02%	3.77%	0.00%	3.50%	0.00%
AvalonBay Communities Inc	AVB	214.62	142	30,531	0.07%	3.26%	0.00%	6.00%	0.00%
Prudential Financial Inc	PRU	111.68	354	39,582	0.08%	4.84%	0.00%	4.00%	0.00%
United Parcel Service Inc	UPS	109.99	733	80,676	0.17%	5.96%	0.01%	2.50%	0.00%
Walgreens Boots Alliance Inc	WBA	11.17	865	9,659	0.02%	n/a	n/a	-11.00%	0.00%
STERIS PLC	STE	226.65	98	22,269	0.05%	1.01%	0.00%	8.00%	0.00%
McKesson Corp	MCK	672.99	125	84,343	0.18%	0.42%	0.00%	10.00%	0.02%
Lockheed Martin Corp	LMT	446.71	235	104,786	0.22%	2.95%	0.01%	12.00%	0.03%
Cencora Inc	COR	278.09	194	53,870	0.11%	0.79%	0.00%	6.50%	0.01%
Capital One Financial Corp	COF	179.30	381	68,399	0.15%	1.34%	0.00%	2.50%	0.00%
The Campbell's Company	CPB	39.92	298	11,903	0.03%	3.91%	0.00%	7.00%	0.00%
Waters Corp	WAT	368.57	59	21,897	0.05%	n/a	n/a	6.50%	0.00%
Nordson Corp	NDSN	201.72	57	11,480	0.02%	1.55%	0.00%	8.50%	0.00%
Dollar Tree Inc	DLTR	75.07	215	16,146	0.03%	n/a	n/a	20.00%	0.01%
Darden Restaurants Inc	DRI	207.76	117	24,338	0.05%	2.70%	0.00%	10.50%	0.01%
Evergy Inc	EVRG	68.95	230	15,841	0.03%	3.87%	0.00%	7.50%	0.00%
Match Group Inc	MTCH	31.20	250	7,813	0.02%	2.44%	0.00%	11.00%	0.00%
NVR Inc	NVR	7,244.39	3	21,509	0.05%	n/a	n/a	1.50%	0.00%
NetApp Inc	NTAP	87.84	203	17,868	0.04%	2.37%	0.00%	9.00%	0.00%
Old Dominion Freight Line Inc	ODFL	165.45	213	35,166	0.07%	0.68%	0.00%	7.00%	0.01%
DaVita Inc	DVA	152.97	80	12,238	0.03%	n/a	n/a	10.50%	0.00%
Hartford Insurance Group Inc/The	HIG	123.73	285	35,311	0.08%	1.68%	0.00%	7.00%	0.01%
Iron Mountain Inc	IRM	86.04	294	25,273	0.05%	3.65%	0.00%	3.50%	0.00%
Estee Lauder Cos Inc/The	EL	66.00	234	15,455	0.03%	2.12%	0.00%	3.50%	0.00%
Cadence Design Systems Inc	CDNS	254.33	274	69,766	0.15%	n/a	n/a	12.00%	0.02%
Tyler Technologies Inc	TYL	581.39	43	25,061	0.05%	n/a	n/a	8.00%	0.00%
Universal Health Services Inc	UHS	187.90	58	10,851	0.02%	0.43%	0.00%	13.00%	0.00%
Skyworks Solutions Inc	SWKS	64.63	154	Excl.	0.00%	4.33%	0.00%		n/a
Quest Diagnostics Inc	DGX	169.20	111	18,777	0.04%	1.89%	0.00%	3.50%	0.00%
Rockwell Automation Inc	ROK	258.38	113	29,216	0.06%	2.03%	0.00%	8.00%	0.00%
Kraft Heinz Co/The	KHC	30.43	1,193	36,315	0.08%	5.26%	0.00%	4.50%	0.00%
American Tower Corp	AMT	217.60	467	101,719	0.22%	3.13%	0.01%	11.00%	0.02%
Regeneron Pharmaceuticals Inc	REGN	634.23	108	68,185	0.15%	0.56%	0.00%	2.00%	0.00%
Amazon.com Inc	AMZN	190.26	10,598	2,016,324	4.30%	n/a	n/a	24.50%	1.05%
Jack Henry & Associates Inc	JKHY	182.60	73	13,311	0.03%	1.27%	0.00%	6.50%	0.00%
Ralph Lauren Corp	RL	220.74	40	8,804	0.02%	1.49%	0.00%	12.00%	0.00%
BXP Inc	BXP	67.19	158	10,630	0.02%	5.83%	0.00%	1.50%	0.00%
Amphenol Corp	APH	65.59	1,212	79,481	0.17%	1.01%	0.00%	14.00%	0.02%
Howmet Aerospace Inc	HWM	129.73	405	52,544	0.11%	0.31%	0.00%	12.00%	0.01%
Valero Energy Corp	VLO	132.07	314	41,531	0.09%	3.42%	0.00%	-5.00%	0.00%
Synopsys Inc	SNPS	428.85	155	66,309	0.14%	n/a	n/a	12.00%	0.02%
CH Robinson Worldwide Inc	CHRW	102.40	118	12,110	0.03%	2.42%	0.00%	5.00%	0.00%
Accenture PLC	ACN	312.04	625	195,175	0.42%	1.90%	0.01%	12.50%	0.05%
TransDigm Group Inc	TDG	1,383.29	56	77,581	0.17%	n/a	n/a	19.00%	0.03%
Yum! Brands Inc	YUM	157.36	279	43,919	0.09%	1.80%	0.00%	10.00%	0.01%
Prologis Inc	PLD	111.79	926	103,537	0.22%	3.61%	0.01%	2.50%	0.01%
FirstEnergy Corp	FE	40.42	577	23,310	0.05%	4.40%	0.00%	5.50%	0.00%
VeriSign Inc	VRSN	253.87	95	24,016	0.05%	n/a	n/a	10.50%	0.01%
Quanta Services Inc	PWR	254.18	148	37,669	0.08%	0.16%	0.00%	17.50%	0.01%
Henry Schein Inc	HSIC	68.49	124	8,505	0.02%	n/a	n/a	8.00%	0.00%
Ameren Corp	AEE	100.40	270	27,124	0.06%	2.83%	0.00%	6.50%	0.00%
ANSYS Inc	ANSS	316.56	88	27,747	0.06%	n/a	n/a	9.50%	0.01%
FactSet Research Systems Inc	FDS	454.64	38	17,290	0.04%	0.92%	0.00%	9.00%	0.00%
NVIDIA Corp	NVDA	108.38	24,400	2,644,472	5.64%	0.04%	0.00%	41.00%	2.31%
Cognizant Technology Solutions Corp	CTSH	76.50	495	37,838	0.08%	1.62%	0.00%	9.00%	0.01%
Intuitive Surgical Inc	ISRG	495.27	358	177,443	0.38%	n/a	n/a	14.00%	0.05%
Take-Two Interactive Software Inc	TTWO	207.25	176	Excl.	0.00%	n/a	n/a		n/a
Republic Services Inc	RSG	242.16	312	75,623	0.16%	0.96%	0.00%	11.00%	0.02%
eBay Inc	EBAY	67.73	466	31,562	0.07%	1.71%	0.00%	11.50%	0.01%
Goldman Sachs Group Inc/The	GS	546.29	311	169,782	0.36%	2.20%	0.01%	11.50%	0.04%
SBA Communications Corp	SBAC	220.01	108	23,676	0.05%	2.02%	0.00%	19.00%	0.01%
Sempra	SRE	71.36	652	46,521	0.10%	3.62%	0.00%	6.00%	0.01%
Moody's Corp	MCO	465.69	180	83,773	0.18%	0.81%	0.00%	8.50%	0.02%

STANDARD AND POOR'S 500 INDEX

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ON Semiconductor Corp	ON	40.69	421	17,148	0.04%	n/a	n/a	4.50%	0.00%
Booking Holdings Inc	BKNG	4,606.91	33	151,177	0.32%	0.83%	0.00%	22.00%	0.07%
F5 Inc	FFIV	266.27	58	15,351	0.03%	n/a	n/a	10.00%	0.00%
Akamai Technologies Inc	AKAM	80.50	150	12,106	0.03%	n/a	n/a	8.00%	0.00%
Charles River Laboratories International Inc	CRL	150.52	51	7,698	0.02%	n/a	n/a	4.50%	0.00%
MarketAxess Holdings Inc	MKTX	216.35	38	8,155	0.02%	1.41%	0.00%	10.00%	0.00%
Devon Energy Corp	DVN	37.40	649	24,273	0.05%	2.57%	0.00%	1.50%	0.00%
Bio-Techne Corp	TECH	58.63	158	9,269	0.02%	0.55%	0.00%	11.00%	0.00%
Alphabet Inc	GOOGL	154.64	5,833	Excl.	0.00%	0.52%	0.00%		n/a
Allegion plc	ALLE	130.46	86	11,257	0.02%	1.56%	0.00%	7.50%	0.00%
Netflix Inc	NFLX	932.53	428	398,896	0.85%	n/a	n/a	16.50%	0.14%
Agilent Technologies Inc	A	116.98	285	33,351	0.07%	0.85%	0.00%	6.50%	0.00%
Warner Bros Discovery Inc	WBD	10.73	2,455	Excl.	0.00%	n/a	n/a		n/a
Trimble Inc	TRMB	65.65	246	16,136	0.03%	n/a	n/a	5.50%	0.00%
Elevance Health Inc	ELV	434.96	226	98,469	0.21%	1.57%	0.00%	9.50%	0.02%
CME Group Inc	CME	265.29	360	95,605	0.20%	1.88%	0.00%	5.50%	0.01%
Juniper Networks Inc	JNPR	36.19	333	12,058	0.03%	2.43%	0.00%	7.00%	0.00%
DTE Energy Co	DTE	138.27	208	28,693	0.06%	3.15%	0.00%	8.50%	0.01%
Nasdaq Inc	NDAQ	75.86	575	43,631	0.09%	1.27%	0.00%	4.50%	0.00%
Philip Morris International Inc	PM	158.73	1,556	247,061	0.53%	3.40%	0.02%	5.00%	0.03%
Ingersoll Rand Inc	IR	80.03	403	32,259	0.07%	0.10%	0.00%	10.50%	0.01%
Salesforce Inc	CRM	268.36	961	257,894	0.55%	0.62%	0.00%	24.50%	0.13%
Roper Technologies Inc	ROP	589.58	107	63,312	0.13%	0.56%	0.00%	9.00%	0.01%
Huntington Ingalls Industries Inc	HII	204.04	39	8,006	0.02%	2.65%	0.00%	10.00%	0.00%
MetLife Inc	MET	80.29	681	54,696	0.12%	2.72%	0.00%	7.50%	0.01%
Tapestry Inc	TPR	70.41	207	14,576	0.03%	1.99%	0.00%	9.00%	0.00%
CSX Corp	CSX	29.43	1,885	55,468	0.12%	1.77%	0.00%	10.00%	0.01%
Edwards Lifesciences Corp	EW	72.48	588	42,608	0.09%	n/a	n/a	6.50%	0.01%
Ameriprise Financial Inc	AMP	484.11	96	46,384	0.10%	1.22%	0.00%	10.00%	0.01%
Zebra Technologies Corp	ZBRA	282.56	51	14,451	0.03%	n/a	n/a	5.50%	0.00%
Zimmer Biomet Holdings Inc	ZBH	113.18	199	22,530	0.05%	0.85%	0.00%	6.50%	0.00%
Camden Property Trust	CPT	122.30	109	13,306	0.03%	3.43%	0.00%	-6.50%	0.00%
CBRE Group Inc	CBRE	130.78	300	39,239	0.08%	n/a	n/a	6.00%	0.01%
Mastercard Inc	MA	548.12	905	495,988	1.06%	0.55%	0.01%	14.50%	0.15%
CarMax Inc	KMX	77.92	154	11,984	0.03%	n/a	n/a	3.00%	0.00%
Intercontinental Exchange Inc	ICE	172.50	575	99,112	0.21%	1.11%	0.00%	6.50%	0.01%
Fidelity National Information Services Inc	FIS	74.68	530	39,557	0.08%	2.14%	0.00%	4.50%	0.00%
Smurfit WestRock PLC	SW	45.06	522	Excl.	0.00%	3.82%	0.00%		n/a
Chipotle Mexican Grill Inc	CMG	50.21	1,355	68,051	0.15%	n/a	n/a	20.50%	0.03%
Wynn Resorts Ltd	WYNN	83.50	106	8,865	0.02%	1.20%	0.00%	27.00%	0.01%
Live Nation Entertainment Inc	LYV	130.58	233	Excl.	0.00%	n/a	n/a		n/a
Assurant Inc	AIZ	209.75	51	10,654	0.02%	1.53%	0.00%	9.50%	0.00%
NRG Energy Inc	NRG	95.46	204	19,442	0.04%	1.84%	0.00%	18.50%	0.01%
Monster Beverage Corp	MNST	58.52	973	56,949	0.12%	n/a	n/a	11.50%	0.01%
Regions Financial Corp	RF	21.73	905	19,676	0.04%	4.60%	0.00%	5.00%	0.00%
Baker Hughes Co	BKR	43.95	990	43,526	0.09%	2.09%	0.00%	30.00%	0.03%
Mosaic Co/The	MOS	27.01	317	8,561	0.02%	3.26%	0.00%	-9.00%	0.00%
Expedia Group Inc	EXPE	168.10	123	20,732	0.04%	0.95%	0.00%	39.00%	0.02%
CF Industries Holdings Inc	CF	78.15	166	Excl.	0.00%	2.56%	0.00%		n/a
APA Corp	APA	21.02	364	7,653	0.02%	4.76%	0.00%	6.00%	0.00%
Leidos Holdings Inc	LDOS	134.94	128	17,301	0.04%	1.19%	0.00%	8.00%	0.00%
Alphabet Inc	GOOG	156.23	5,497	858,796	1.83%	0.51%	0.01%	13.50%	0.25%
TKO Group Holdings Inc	TKO	152.81	82	Excl.	0.00%	0.99%	0.00%		n/a
First Solar Inc	FSLR	126.43	107	13,536	0.03%	n/a	n/a	34.50%	0.01%
Discover Financial Services	DFS	170.70	252	42,949	0.09%	1.64%	0.00%	4.00%	0.00%
Visa Inc	V	350.46	1,723	603,970	1.29%	0.67%	0.01%	13.50%	0.17%
Mid-America Apartment Communities Inc	MAA	167.58	117	19,590	0.04%	3.62%	0.00%	-13.50%	-0.01%
Xylem Inc/NY	XYL	119.46	243	29,071	0.06%	1.34%	0.00%	11.00%	0.01%
Marathon Petroleum Corp	MPC	145.69	312	45,387	0.10%	2.50%	0.00%	-6.00%	-0.01%
Tractor Supply Co	TSCO	55.10	532	29,292	0.06%	1.67%	0.00%	10.00%	0.01%
Advanced Micro Devices Inc	AMD	102.74	1,616	166,058	0.35%	n/a	n/a	17.00%	0.06%
ResMed Inc	RMD	223.85	147	32,876	0.07%	0.95%	0.00%	11.00%	0.01%
Mettler-Toledo International Inc	MTD	1,180.91	21	24,611	0.05%	n/a	n/a	9.50%	0.00%
VICI Properties Inc	VICI	32.62	1,057	34,470	0.07%	5.30%	0.00%	9.50%	0.01%
Copart Inc	CPRT	56.59	966	54,671	0.12%	n/a	n/a	9.00%	0.01%
Jacobs Solutions Inc	J	120.89	123	14,814	0.03%	1.06%	0.00%	11.00%	0.00%
Albemarle Corp	ALB	72.02	118	8,473	0.02%	2.25%	0.00%	-3.50%	0.00%
Fortinet Inc	FTNT	96.26	769	74,021	0.16%	n/a	n/a	18.00%	0.03%
Moderna Inc	MRNA	28.35	387	10,961	0.02%	n/a	n/a	-16.00%	0.00%
Essex Property Trust Inc	ESS	306.57	64	19,720	0.04%	3.35%	0.00%	3.00%	0.00%
CoStar Group Inc	CSGP	79.23	422	33,416	0.07%	n/a	n/a	11.50%	0.01%
Realty Income Corp	O	58.01	892	51,732	0.11%	5.55%	0.01%	5.00%	0.01%
Westinghouse Air Brake Technologies Corp	WAB	181.35	171	30,983	0.07%	0.55%	0.00%	16.00%	0.01%
Palantir Technologies Inc	PLTR	84.40	2,249	Excl.	0.00%	n/a	n/a		n/a
Pool Corp	POOL	318.35	38	12,008	0.03%	1.51%	0.00%	2.50%	0.00%
Western Digital Corp	WDC	40.43	348	14,063	0.03%	n/a	n/a	13.50%	0.00%
PepsiCo Inc	PEP	149.94	1,371	205,614	0.44%	3.61%	0.02%	7.50%	0.03%

STANDARD AND POOR'S 500 INDEX

Name	Ticker	[4] Price	[5] Shares Outstanding	[6] Market Capitalization	[7] Weight in Index	[8] Current Dividend Yield	[9] Cap-Weighted Dividend Yield	[10] Value Line Long-Term Growth Est.	[11] Cap-Weighted Long-Term Growth Est.
TE Connectivity PLC	TEL	141.32	298	42,163	0.09%	2.01%	0.00%	10.50%	0.01%
Diamondback Energy Inc	FANG	159.88	289	46,276	0.10%	2.50%	0.00%	2.50%	0.00%
Palo Alto Networks Inc	PANW	170.64	662	Excl.	0.00%	n/a	n/a		n/a
ServiceNow Inc	NOW	796.14	207	164,960	0.35%	n/a	n/a	32.50%	0.11%
Church & Dwight Co Inc	CHD	110.09	246	27,094	0.06%	1.07%	0.00%	6.00%	0.00%
Federal Realty Investment Trust	FRT	97.82	86	8,391	0.02%	4.50%	0.00%	2.50%	0.00%
MGM Resorts International	MGM	29.64	283	8,387	0.02%	n/a	n/a	25.00%	0.00%
American Electric Power Co Inc	AEP	109.27	534	58,349	0.12%	3.40%	0.00%	6.50%	0.01%
Invitation Homes Inc	INVH	34.85	613	21,352	0.05%	3.33%	0.00%	7.00%	0.00%
PTC Inc	PTC	154.95	120	18,644	0.04%	n/a	n/a	29.00%	0.01%
JB Hunt Transport Services Inc	JBHT	147.95	100	14,796	0.03%	1.19%	0.00%	6.00%	0.00%
Lam Research Corp	LRCX	72.70	1,284	93,322	0.20%	1.27%	0.00%	11.00%	0.02%
Mohawk Industries Inc	MHK	114.18	63	7,146	0.02%	n/a	n/a	2.00%	0.00%
GE HealthCare Technologies Inc	GEHC	80.71	457	Excl.	0.00%	0.17%	0.00%		n/a
Pentair PLC	PNR	87.48	165	14,432	0.03%	1.14%	0.00%	12.00%	0.00%
Vertex Pharmaceuticals Inc	VRTX	484.82	257	124,497	0.27%	n/a	n/a	10.00%	0.03%
Amcor PLC	AMCR	9.70	1,445	14,020	0.03%	5.26%	0.00%	11.50%	0.00%
Meta Platforms Inc	META	576.36	2,190	1,262,170	2.69%	0.36%	0.01%	19.00%	0.51%
T-Mobile US Inc	TMUS	266.71	1,142	304,515	0.65%	1.32%	0.01%	18.00%	0.12%
United Rentals Inc	URI	626.70	65	40,944	0.09%	1.14%	0.00%	9.50%	0.01%
Alexandria Real Estate Equities Inc	ARE	92.51	173	16,013	0.03%	5.71%	0.00%	8.50%	0.00%
Honeywell International Inc	HON	211.75	649	137,377	0.29%	2.13%	0.01%	9.50%	0.03%
Delta Air Lines Inc	DAL	43.60	646	28,164	0.06%	1.38%	0.00%	28.00%	0.02%
United Airlines Holdings Inc	UAL	69.05	329	Excl.	0.00%	n/a	n/a		n/a
Seagate Technology Holdings PLC	STX	84.95	212	17,985	0.04%	3.39%	0.00%	22.50%	0.01%
News Corp	NWS	30.37	189	Excl.	0.00%	0.66%	0.00%		n/a
Centene Corp	CNC	60.71	496	30,116	0.06%	n/a	n/a	9.50%	0.01%
Apollo Global Management Inc	APO	136.94	570	78,122	0.17%	1.35%	0.00%	23.50%	0.04%
Martin Marietta Materials Inc	MLM	478.13	61	29,154	0.06%	0.66%	0.00%	10.50%	0.01%
Teradyne Inc	TER	82.60	162	13,343	0.03%	0.58%	0.00%	15.00%	0.00%
PayPal Holdings Inc	PYPL	65.25	989	64,548	0.14%	n/a	n/a	11.50%	0.02%
Tesla Inc	TSLA	259.16	3,217	833,593	1.78%	n/a	n/a	16.50%	0.29%
Blackrock Inc	BLK	946.48	155	146,944	0.31%	2.20%	0.01%	9.50%	0.03%
KKR & Co Inc	KKR	115.61	888	102,691	0.22%	0.61%	0.00%	5.00%	0.01%
Arch Capital Group Ltd	ACGL	96.18	376	36,136	0.08%	n/a	n/a	15.00%	0.01%
Dow Inc	DOW	34.92	706	24,645	0.05%	8.02%	0.00%	6.50%	0.00%
Everest Group Ltd	EG	363.33	43	15,599	0.03%	2.20%	0.00%	14.50%	0.00%
Teledyne Technologies Inc	TDY	497.71	47	23,311	0.05%	n/a	n/a	8.00%	0.00%
Domino's Pizza Inc	DPZ	459.45	34	15,758	0.03%	1.51%	0.00%	12.50%	0.00%
GE Vernova Inc	GEV	305.28	273	Excl.	0.00%	0.33%	0.00%		n/a
News Corp	NWSA	27.22	378	10,291	0.02%	0.73%	0.00%	14.50%	0.00%
Exelon Corp	EXC	46.08	1,010	Excl.	0.00%	3.47%	0.00%		n/a
Global Payments Inc	GPN	97.92	246	24,076	0.05%	1.02%	0.00%	13.50%	0.01%
Crown Castle Inc	CCI	104.23	435	Excl.	0.00%	6.01%	0.00%		n/a
Align Technology Inc	ALGN	158.86	73	11,630	0.02%	n/a	n/a	17.00%	0.00%
Kenvue Inc	KVUE	23.98	1,911	Excl.	0.00%	3.42%	0.00%		n/a
Targa Resources Corp	TRGP	200.47	218	43,619	0.09%	1.50%	0.00%	22.00%	0.02%
Bunge Global SA	BG	76.42	134	10,238	0.02%	3.56%	0.00%	0.00%	0.00%
LKQ Corp	LKQ	42.54	259	10,999	0.02%	2.82%	0.00%	7.00%	0.00%
Deckers Outdoor Corp	DECK	111.81	152	16,970	0.04%	n/a	n/a	16.00%	0.01%
Workday Inc	WDAY	233.53	215	50,209	0.11%	n/a	n/a	12.00%	0.01%
Zoetis Inc	ZTS	164.65	448	73,729	0.16%	1.21%	0.00%	7.50%	0.01%
Equinix Inc	EQIX	815.35	97	79,360	0.17%	2.30%	0.00%	15.00%	0.03%
Digital Realty Trust Inc	DLR	143.29	337	48,238	0.10%	3.41%	0.00%	8.00%	0.01%
Molina Healthcare Inc	MOH	329.39	55	18,018	0.04%	n/a	n/a	10.50%	0.00%
Las Vegas Sands Corp	LVS	38.63	716	Excl.	0.00%	2.59%	0.00%		n/a

Notes:
[4] Source: Bloomberg Professional
[5] Source: Bloomberg Professional
[6] Equals [4] x [5]
[7] Equals [6] / Sum of Column [6]
[8] Source: Bloomberg Professional
[9] Equals [7] x [8]
[10] Source: Value Line, as of March 31, 2025
[11] Equals [7] x [10]

MARKET RISK PREMIUM DERIVED FROM S&P 500 - FERC METHODOLOGY

[1] Estimate of the S&P 500 Dividend Yield	1.57%
[2] Estimate of the S&P 500 Growth Rate	10.15%
[3] S&P 500 Estimated Required Market Return	11.81%

Notes:
[1] Sum of [9]
[2] Sum of [11]
[3] Equals ([1] x (1 + 0.5 x [2])) + [2]

STANDARD AND POOR'S 500 INDEX

		[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
Name	Ticker	Price	Shares Outstanding	Market Capitalization	Weight in Index	Current Dividend Yield	Cap-Weighted Dividend Yield	Value Line Long-Term Growth Est.	Cap-Weighted Long-Term Growth Est.
LyondellBasell Industries NV	LYB	70.40	323	Excl.	Excl.	7.61%	n/a	-1.50%	n/a
American Express Co	AXP	269.05	701	188,634	0.50%	1.22%	0.01%	9.00%	0.05%
Verizon Communications Inc	VZ	45.36	4,210	190,952	0.51%	5.97%	0.03%	0.50%	0.00%
Texas Pacific Land Corp	TPL	1,324.99	23	30,455	0.08%	0.48%	0.00%	10.50%	0.01%
Broadcom Inc	AVGO	167.43	4,702	Excl.	Excl.	1.41%	n/a	22.00%	n/a
Boeing Co/The	BA	170.55	752	Excl.	Excl.	n/a	n/a		n/a
Solventum Corp	SOLV	76.04	173	Excl.	Excl.	n/a	n/a		n/a
Caterpillar Inc	CAT	329.80	478	157,622	0.42%	1.71%	0.01%	10.50%	0.04%
JPMorgan Chase & Co	JPM	245.30	2,796	685,885	1.82%	2.28%	0.04%	8.00%	0.15%
Chevron Corp	CVX	167.29	1,750	292,710	0.78%	4.09%	0.03%	4.00%	0.03%
Coca-Cola Co/The	KO	71.62	4,304	308,221	0.82%	2.85%	0.02%	7.00%	0.06%
AbbVie Inc	ABBV	209.52	1,769	370,636	0.99%	3.13%	0.03%	7.00%	0.07%
Walt Disney Co/The	DIS	98.70	1,808	Excl.	Excl.	1.01%	n/a	31.00%	n/a
Corpay Inc	CPAY	348.72	70	24,498	0.07%	n/a	n/a	15.50%	0.01%
Extra Space Storage Inc	EXR	148.49	212	Excl.	Excl.	4.36%	n/a	-0.50%	n/a
Exxon Mobil Corp	XOM	118.93	4,339	Excl.	Excl.	3.33%	n/a	-2.50%	n/a
Phillips 66	PSX	123.48	408	50,343	0.13%	3.73%	0.00%	1.00%	0.00%
General Electric Co	GE	200.15	1,067	Excl.	Excl.	0.72%	n/a	21.00%	n/a
HP Inc	HPQ	27.69	943	26,103	0.07%	4.18%	0.00%	5.50%	0.00%
Home Depot Inc/The	HD	366.49	994	364,303	0.97%	2.51%	0.02%	6.50%	0.06%
Monolithic Power Systems Inc	MPWR	579.98	48	27,761	0.07%	1.08%	0.00%	12.00%	0.01%
International Business Machines Corp	IBM	248.66	927	230,574	0.61%	2.69%	0.02%	3.00%	0.02%
Johnson & Johnson	JNJ	165.84	2,410	399,649	1.06%	2.99%	0.03%	4.50%	0.05%
Lululemon Athletica Inc	LULU	283.06	116	32,699	0.09%	n/a	n/a	13.00%	0.01%
McDonald's Corp	MCD	312.37	714	223,176	0.59%	2.27%	0.01%	8.50%	0.05%
Merck & Co Inc	MRK	89.76	2,526	226,737	0.60%	3.61%	0.02%	13.50%	0.08%
3M Co	MMM	146.86	539	Excl.	Excl.	1.99%	n/a	25.50%	n/a
American Water Works Co Inc	AWK	147.52	195	28,768	0.08%	2.07%	0.00%	4.50%	0.00%
Bank of America Corp	BAC	41.73	7,603	317,265	0.84%	2.49%	0.02%	7.00%	0.06%
Pfizer Inc	PFE	25.34	5,671	143,715	0.38%	6.79%	0.03%	7.50%	0.03%
Procter & Gamble Co/The	PG	170.42	2,345	399,610	1.06%	2.36%	0.03%	5.00%	0.05%
AT&T Inc	T	28.28	7,178	202,999	0.54%	3.93%	0.02%	6.50%	0.04%
Travelers Cos Inc/The	TRV	264.46	227	59,960	0.16%	1.59%	0.00%	10.50%	0.02%
RTX Corp	RTX	132.46	1,335	176,846	0.47%	1.90%	0.01%	12.00%	0.06%
Analog Devices Inc	ADI	201.67	496	100,024	0.27%	1.96%	0.01%	9.00%	0.02%
Walmart Inc	WMT	87.79	8,017	703,799	1.87%	1.07%	0.02%	9.50%	0.18%
Cisco Systems Inc	CSCO	61.71	3,978	245,500	0.65%	2.66%	0.02%	5.50%	0.04%
Intel Corp	INTC	22.71	4,361	Excl.	Excl.	n/a	n/a	-2.00%	n/a
General Motors Co	GM	47.03	995	46,795	0.12%	1.02%	0.00%	7.50%	0.01%
Microsoft Corp	MSFT	375.39	7,434	2,790,643	7.42%	0.88%	0.07%	14.50%	1.08%
Dollar General Corp	DG	87.93	220	Excl.	Excl.	2.68%	n/a	-0.50%	n/a
Cigna Group/The	CI	329.00	271	89,195	0.24%	1.84%	0.00%	11.00%	0.03%
Kinder Morgan Inc	KMI	28.53	2,222	63,393	0.17%	4.03%	0.01%	9.00%	0.02%
Citigroup Inc	C	70.99	1,882	133,615	0.36%	3.16%	0.01%	3.00%	0.01%
American International Group Inc	AIG	86.94	593	51,584	0.14%	1.84%	0.00%	12.50%	0.02%
Altria Group Inc	MO	60.02	1,691	101,474	0.27%	6.80%	0.02%	6.00%	0.02%
HCA Healthcare Inc	HCA	345.55	246	85,076	0.23%	0.83%	0.00%	10.00%	0.02%
International Paper Co	IP	53.35	526	28,069	0.07%	3.47%	0.00%	8.00%	0.01%
Hewlett Packard Enterprise Co	HPE	15.43	1,314	20,269	0.05%	3.37%	0.00%	5.50%	0.00%
Abbott Laboratories	ABT	132.65	1,734	230,058	0.61%	1.78%	0.01%	4.50%	0.03%
Aflac Inc	AFL	111.19	546	60,689	0.16%	2.09%	0.00%	8.50%	0.01%
Air Products and Chemicals Inc	APD	294.92	222	65,613	0.17%	2.43%	0.00%	10.50%	0.02%
Super Micro Computer Inc	SMCI	34.24	593	Excl.	Excl.	n/a	n/a	39.00%	n/a
Royal Caribbean Cruises Ltd	RCL	205.44	269	Excl.	Excl.	1.46%	n/a		n/a
Hess Corp	HES	159.73	308	49,243	0.13%	1.25%	0.00%	7.50%	0.01%
Lennox International Inc	LII	560.83	36	19,954	0.05%	0.82%	0.00%	12.50%	0.01%
Archer-Daniels-Midland Co	ADM	48.01	480	23,052	0.06%	4.25%	0.00%	3.00%	0.00%
Automatic Data Processing Inc	ADP	305.53	407	124,311	0.33%	2.02%	0.01%	8.50%	0.03%
Verisk Analytics Inc	VRSK	297.62	140	41,749	0.11%	0.60%	0.00%	11.00%	0.01%
AutoZone Inc	AZO	3,812.78	17	63,783	0.17%	n/a	n/a	11.50%	0.02%
Linde PLC	LIN	465.64	473	220,207	0.59%	1.29%	0.01%	7.00%	0.04%
Avery Dennison Corp	AVY	177.97	79	14,054	0.04%	1.98%	0.00%	2.00%	0.00%

STANDARD AND POOR'S 500 INDEX

Name	Ticker	[4] Price	[5] Shares Outstanding	[6] Market Capitalization	[7] Weight in Index	[8] Current Dividend Yield	[9] Cap-Weighted Dividend Yield	[10] Value Line Long-Term Growth Est.	[11] Cap-Weighted Long-Term Growth Est.
Enphase Energy Inc	ENPH	62.05	132	8,220	0.02%	n/a	n/a	6.50%	0.00%
MSCI Inc	MSCI	565.50	78	43,884	0.12%	1.27%	0.00%	9.50%	0.01%
Ball Corp	BALL	52.07	282	14,703	0.04%	1.54%	0.00%	10.50%	0.00%
Axon Enterprise Inc	AXON	525.95	77	Excl.	Excl.	n/a	n/a	26.00%	n/a
Dayforce Inc	DAY	58.33	158	Excl.	Excl.	n/a	n/a		n/a
Carrier Global Corp	CARR	63.40	864	54,777	0.15%	1.42%	0.00%	13.00%	0.02%
Bank of New York Mellon Corp/The	BK	83.87	718	60,216	0.16%	2.24%	0.00%	10.50%	0.02%
Otis Worldwide Corp	OTIS	103.20	397	40,921	0.11%	1.51%	0.00%	10.00%	0.01%
Baxter International Inc	BAX	34.23	513	17,557	0.05%	1.99%	0.00%	3.50%	0.00%
Becton Dickinson & Co	BDX	229.06	287	65,771	0.17%	1.82%	0.00%	7.00%	0.01%
Berkshire Hathaway Inc	BRK/B	532.58	1,340	713,607	1.90%	n/a	n/a	9.00%	0.17%
Best Buy Co Inc	BBY	73.61	211	15,559	0.04%	5.16%	0.00%	1.00%	0.00%
Boston Scientific Corp	BSX	100.88	1,479	149,209	0.40%	n/a	n/a	12.50%	0.05%
Bristol-Myers Squibb Co	BMY	60.99	2,035	124,100	0.33%	4.07%	0.01%	2.50%	0.01%
Brown-Forman Corp	BF/B	33.94	304	10,302	0.03%	2.67%	0.00%	14.00%	0.00%
Coterra Energy Inc	CTRA	28.90	764	22,082	0.06%	3.04%	0.00%	7.00%	0.00%
Hilton Worldwide Holdings Inc	HLT	227.55	240	Excl.	Excl.	0.26%	n/a		n/a
Carnival Corp	CCL	19.53	1,167	Excl.	Excl.	n/a	n/a		n/a
Builders FirstSource Inc	BLDR	124.94	114	14,196	0.04%	n/a	n/a	4.50%	0.00%
UDR Inc	UDR	45.17	331	14,957	0.04%	3.81%	0.00%	7.50%	0.00%
Clorox Co/The	CLX	147.25	123	18,140	0.05%	3.31%	0.00%	10.00%	0.00%
Paycom Software Inc	PAYC	218.48	57	12,511	0.03%	0.69%	0.00%	12.50%	0.00%
CMS Energy Corp	CMS	75.11	299	22,467	0.06%	2.89%	0.00%	6.00%	0.00%
Colgate-Palmolive Co	CL	93.70	811	75,999	0.20%	2.22%	0.00%	10.00%	0.02%
EPAM Systems Inc	EPAM	168.84	57	Excl.	Excl.	n/a	n/a	20.50%	n/a
Conagra Brands Inc	CAG	26.67	477	12,730	0.03%	5.25%	0.00%	2.00%	0.00%
Airbnb Inc	ABNB	119.46	440	Excl.	Excl.	n/a	n/a	23.00%	n/a
Consolidated Edison Inc	ED	110.59	353	39,046	0.10%	3.07%	0.00%	6.00%	0.01%
Corning Inc	GLW	45.78	857	Excl.	Excl.	2.45%	n/a	23.00%	n/a
GoDaddy Inc	GDDY	180.14	141	25,464	0.07%	n/a	n/a	12.50%	0.01%
Cummins Inc	CMI	313.44	137	43,092	0.11%	2.32%	0.00%	8.50%	0.01%
Caesars Entertainment Inc	CZR	25.00	212	Excl.	Excl.	n/a	n/a		n/a
Danaher Corp	DHR	205.00	715	146,667	0.39%	0.62%	0.00%	2.00%	0.01%
Target Corp	TGT	104.36	456	47,544	0.13%	4.29%	0.01%	8.00%	0.01%
Williams-Sonoma Inc	WSM	158.10	124	19,527	0.05%	1.67%	0.00%	5.00%	0.00%
Deere & Co	DE	469.35	271	127,388	0.34%	1.38%	0.00%	3.00%	0.01%
Dominion Energy Inc	D	56.07	852	47,784	0.13%	4.76%	0.01%	3.50%	0.00%
Dover Corp	DOV	175.68	137	24,079	0.06%	1.17%	0.00%	5.00%	0.00%
Alliant Energy Corp	LNT	64.35	257	16,518	0.04%	3.15%	0.00%	6.00%	0.00%
Steel Dynamics Inc	STLD	125.08	150	18,749	0.05%	1.60%	0.00%	0.50%	0.00%
Duke Energy Corp	DUK	121.97	777	94,773	0.25%	3.43%	0.01%	6.00%	0.02%
Regency Centers Corp	REG	73.76	182	13,389	0.04%	3.82%	0.00%	10.00%	0.00%
Eaton Corp PLC	ETN	271.83	392	106,495	0.28%	1.53%	0.00%	11.00%	0.03%
Ecolab Inc	ECL	253.52	284	71,907	0.19%	1.03%	0.00%	10.50%	0.02%
Revvity Inc	RVTY	105.80	120	Excl.	Excl.	0.26%	n/a	-1.50%	n/a
Dell Technologies Inc	DELL	91.15	359	32,696	0.09%	2.30%	0.00%	2.50%	0.00%
Emerson Electric Co	EMR	109.64	564	61,826	0.16%	1.92%	0.00%	11.00%	0.02%
EOG Resources Inc	EOG	128.24	552	70,730	0.19%	3.04%	0.01%	7.00%	0.01%
Aon PLC	AON	399.09	216	86,204	0.23%	0.68%	0.00%	12.50%	0.03%
Entergy Corp	ETR	85.49	446	38,158	0.10%	2.81%	0.00%	3.00%	0.00%
Equifax Inc	EFX	243.56	125	30,396	0.08%	0.64%	0.00%	7.00%	0.01%
EQT Corp	EQT	53.43	597	Excl.	Excl.	1.18%	n/a		n/a
IQVIA Holdings Inc	IQV	176.30	176	31,084	0.08%	n/a	n/a	9.00%	0.01%
Gartner Inc	IT	419.74	77	32,244	0.09%	n/a	n/a	8.00%	0.01%
FedEx Corp	FDX	243.78	240	58,409	0.16%	2.26%	0.00%	9.00%	0.01%
Brown & Brown Inc	BRO	124.40	287	35,656	0.09%	0.48%	0.00%	12.50%	0.01%
Ford Motor Co	F	10.03	3,906	39,174	0.10%	1.50%	0.00%	17.00%	0.02%
NextEra Energy Inc	NEE	70.89	2,057	145,823	0.39%	3.20%	0.01%	8.50%	0.03%
Franklin Resources Inc	BEN	19.25	525	10,114	0.03%	6.65%	0.00%	4.00%	0.00%
Garmin Ltd	GRMN	217.13	192	41,777	0.11%	1.66%	0.00%	7.00%	0.01%
Freeport-McMoRan Inc	FCX	37.86	1,437	54,408	0.14%	1.58%	0.00%	17.50%	0.03%
Expand Energy Corp	EXE	111.32	233	Excl.	Excl.	2.07%	n/a		n/a
Dexcom Inc	DXCM	68.29	392	Excl.	Excl.	n/a	n/a		n/a
General Dynamics Corp	GD	272.58	268	73,156	0.19%	2.20%	0.00%	9.50%	0.02%
General Mills Inc	GIS	59.79	548	32,741	0.09%	4.01%	0.00%	4.50%	0.00%
Genuine Parts Co	GPC	119.14	139	16,534	0.04%	3.46%	0.00%	3.50%	0.00%
Atmos Energy Corp	ATO	154.58	159	24,536	0.07%	2.25%	0.00%	6.00%	0.00%
WW Grainger Inc	GWW	987.83	48	47,585	0.13%	0.83%	0.00%	5.00%	0.01%
Halliburton Co	HAL	25.37	868	22,023	0.06%	2.68%	0.00%	16.00%	0.01%
L3Harris Technologies Inc	LHX	209.31	188	39,291	0.10%	2.29%	0.00%	9.00%	0.01%
Healthpeak Properties Inc	DOC	20.22	699	14,126	0.04%	6.03%	0.00%	6.00%	0.00%
Insulet Corp	PODD	262.61	70	Excl.	Excl.	n/a	n/a		n/a
Fortive Corp	FTV	73.18	340	24,902	0.07%	0.44%	0.00%	10.50%	0.01%
Hershey Co/The	HSY	171.03	148	25,304	0.07%	3.20%	0.00%	7.00%	0.00%
Synchrony Financial	SYF	52.94	389	Excl.	Excl.	1.89%	n/a	47.00%	n/a
Hormel Foods Corp	HRL	30.94	550	17,014	0.05%	3.75%	0.00%	6.00%	0.00%
Arthur J Gallagher & Co	AJG	345.24	256	88,290	0.23%	0.75%	0.00%	16.50%	0.04%

STANDARD AND POOR'S 500 INDEX

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Mondelez International Inc	MDLZ	67.85	1,294	87,766	0.23%	2.77%	0.01%	7.50%	0.02%
CenterPoint Energy Inc	CNP	36.23	653	23,648	0.06%	2.43%	0.00%	6.50%	0.00%
Humana Inc	HUM	264.60	121	31,935	0.08%	1.34%	0.00%	2.00%	0.00%
Willis Towers Watson PLC	WTW	337.95	99	33,586	0.09%	1.09%	0.00%	9.50%	0.01%
Illinois Tool Works Inc	ITW	248.01	293	72,758	0.19%	2.42%	0.00%	9.00%	0.02%
CDW Corp/DE	CDW	160.26	132	21,233	0.06%	1.56%	0.00%	7.00%	0.00%
Trane Technologies PLC	TT	336.92	224	75,568	0.20%	1.12%	0.00%	14.00%	0.03%
Interpublic Group of Cos Inc/The	IPG	27.16	373	10,121	0.03%	4.86%	0.00%	8.50%	0.00%
International Flavors & Fragrances Inc	IFF	77.61	256	19,848	0.05%	2.06%	0.00%	0.50%	0.00%
Generac Holdings Inc	GNRC	126.65	60	7,550	0.02%	n/a	n/a	18.00%	0.00%
NXP Semiconductors NV	NXPI	190.06	254	48,203	0.13%	2.13%	0.00%	6.50%	0.01%
Kellanova	K	82.49	345	28,477	0.08%	2.76%	0.00%	2.50%	0.00%
Broadridge Financial Solutions Inc	BR	242.46	117	28,372	0.08%	1.45%	0.00%	9.50%	0.01%
Kimberly-Clark Corp	KMB	142.22	332	47,168	0.13%	3.54%	0.00%	6.50%	0.01%
Kimco Realty Corp	KIM	21.24	679	Excl.	Excl.	4.71%	n/a	27.50%	n/a
Oracle Corp	ORCL	139.81	2,804	392,060	1.04%	1.43%	0.01%	10.00%	0.10%
Kroger Co/The	KR	67.69	724	48,981	0.13%	1.89%	0.00%	5.00%	0.01%
Lennar Corp	LEN	114.78	233	26,708	0.07%	1.74%	0.00%	4.00%	0.00%
Eli Lilly & Co	LLY	825.91	948	Excl.	Excl.	0.73%	n/a	26.50%	n/a
Charter Communications Inc	CHTR	368.53	142	52,336	0.14%	n/a	n/a	9.00%	0.01%
Loews Corp	L	91.91	213	19,564	0.05%	0.27%	0.00%	15.50%	0.01%
Lowe's Cos Inc	LOW	233.23	560	130,540	0.35%	1.97%	0.01%	6.50%	0.02%
Hubbell Inc	HUBB	330.91	54	17,728	0.05%	1.60%	0.00%	6.00%	0.00%
IDEX Corp	IEX	180.97	76	13,671	0.04%	1.53%	0.00%	5.50%	0.00%
Marsh & McLennan Cos Inc	MMC	244.03	493	120,283	0.32%	1.34%	0.00%	12.50%	0.04%
Masco Corp	MAS	69.54	212	14,718	0.04%	1.78%	0.00%	10.00%	0.00%
S&P Global Inc	SPGI	508.10	314	159,462	0.42%	0.76%	0.00%	8.50%	0.04%
Medtronic PLC	MDT	89.86	1,283	115,249	0.31%	3.12%	0.01%	6.00%	0.02%
Viatris Inc	VTRS	8.71	1,194	Excl.	Excl.	5.51%	n/a	-2.00%	n/a
CVS Health Corp	CVS	67.75	1,261	85,419	0.23%	3.93%	0.01%	0.50%	0.00%
DuPont de Nemours Inc	DD	74.68	418	31,220	0.08%	2.20%	0.00%	10.50%	0.01%
Micron Technology Inc	MU	86.89	1,118	Excl.	Excl.	0.53%	n/a	39.00%	n/a
Motorola Solutions Inc	MSI	437.81	167	73,098	0.19%	1.00%	0.00%	10.00%	0.02%
Cboe Global Markets Inc	CBOE	226.29	105	23,693	0.06%	1.11%	0.00%	12.50%	0.01%
Newmont Corp	NEM	48.28	1,127	54,424	0.14%	2.07%	0.00%	12.50%	0.02%
NIKE Inc	NKE	63.48	1,181	74,985	0.20%	2.52%	0.01%	10.50%	0.02%
NiSource Inc	NI	40.09	471	18,867	0.05%	2.79%	0.00%	8.00%	0.00%
Norfolk Southern Corp	NSC	236.85	247	58,397	0.16%	2.28%	0.00%	12.00%	0.02%
Principal Financial Group Inc	PFG	84.37	226	19,031	0.05%	3.56%	0.00%	4.00%	0.00%
Eversource Energy	ES	62.11	367	22,799	0.06%	4.85%	0.00%	5.50%	0.00%
Northrop Grumman Corp	NOC	512.01	145	74,116	0.20%	1.61%	0.00%	7.50%	0.01%
Wells Fargo & Co	WFC	71.79	3,265	234,406	0.62%	2.23%	0.01%	9.50%	0.06%
Nucor Corp	NUE	120.34	231	Excl.	Excl.	1.83%	n/a		n/a
Occidental Petroleum Corp	OXY	49.36	940	46,388	0.12%	1.94%	0.00%	6.00%	0.01%
Omnicom Group Inc	OMC	82.91	197	16,296	0.04%	3.38%	0.00%	7.00%	0.00%
ONEOK Inc	OKE	99.22	624	61,947	0.16%	4.15%	0.01%	14.50%	0.02%
Raymond James Financial Inc	RJF	138.91	205	28,464	0.08%	1.44%	0.00%	10.00%	0.01%
PG&E Corp	PCG	17.18	2,194	37,686	0.10%	0.58%	0.00%	9.00%	0.01%
Parker-Hannifin Corp	PH	607.85	129	78,270	0.21%	1.07%	0.00%	10.00%	0.02%
Rollins Inc	ROL	54.03	485	26,209	0.07%	1.22%	0.00%	9.50%	0.01%
PPL Corp	PPL	36.11	738	26,660	0.07%	3.02%	0.00%	7.50%	0.01%
Aptiv PLC	APTV	59.50	229	Excl.	Excl.	n/a	n/a		n/a
ConocoPhillips	COP	105.02	1,264	132,763	0.35%	2.97%	0.01%	4.00%	0.01%
PulteGroup Inc	PHM	102.80	202	20,723	0.06%	0.86%	0.00%	8.50%	0.00%
Pinnacle West Capital Corp	PNW	95.25	119	11,358	0.03%	3.76%	0.00%	4.00%	0.00%
PNC Financial Services Group Inc/The	PNC	175.77	396	69,561	0.18%	3.64%	0.01%	7.00%	0.01%
PPG Industries Inc	PPG	109.35	227	24,820	0.07%	2.49%	0.00%	5.00%	0.00%
DoorDash Inc	DASH	182.77	394	Excl.	Excl.	n/a	n/a		n/a
Progressive Corp/The	PGR	283.01	586	Excl.	Excl.	0.14%	n/a	23.50%	n/a
Veralto Corp	VLTO	97.45	248	24,173	0.06%	0.45%	0.00%	6.00%	0.00%
Public Service Enterprise Group Inc	PEG	82.30	499	41,032	0.11%	3.06%	0.00%	6.00%	0.01%
Cooper Cos Inc/The	COO	84.35	200	16,868	0.04%	n/a	n/a	8.50%	0.00%
Edison International	EIX	58.92	385	22,686	0.06%	5.62%	0.00%	6.50%	0.00%
Schlumberger NV	SLB	41.80	1,360	56,842	0.15%	2.73%	0.00%	18.00%	0.03%
Charles Schwab Corp/The	SCHW	78.28	1,814	141,966	0.38%	1.38%	0.01%	10.00%	0.04%
Sherwin-Williams Co/The	SHW	349.19	252	87,825	0.23%	0.90%	0.00%	12.00%	0.03%
West Pharmaceutical Services Inc	WST	223.88	72	16,185	0.04%	0.38%	0.00%	7.50%	0.00%
J M Smucker Co/The	SJM	118.41	106	12,601	0.03%	3.65%	0.00%	6.50%	0.00%
Snap-on Inc	SNA	337.01	52	17,665	0.05%	2.54%	0.00%	4.50%	0.00%
AMETEK Inc	AME	172.14	231	39,721	0.11%	0.72%	0.00%	10.00%	0.01%
Uber Technologies Inc	UBER	72.86	2,091	Excl.	Excl.	n/a	n/a		n/a
Southern Co/The	SO	91.95	1,095	100,652	0.27%	3.13%	0.01%	6.50%	0.02%
Truist Financial Corp	TFC	41.15	1,305	53,717	0.14%	5.05%	0.01%	2.00%	0.00%
Southwest Airlines Co	LUV	33.58	593	Excl.	Excl.	2.14%	n/a		n/a
W R Berkley Corp	WRB	71.16	379	26,986	0.07%	0.45%	0.00%	14.50%	0.01%
Stanley Black & Decker Inc	SWK	76.88	155	11,881	0.03%	4.27%	0.00%	9.50%	0.00%
Public Storage	PSA	299.29	175	52,500	0.14%	4.01%	0.01%	7.00%	0.01%

STANDARD AND POOR'S 500 INDEX

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Arista Networks Inc	ANET	77.48	1,261	97,712	0.26%	n/a	n/a	16.00%	0.04%
Sysco Corp	SYY	75.04	489	36,712	0.10%	2.72%	0.00%	9.50%	0.01%
Corteva Inc	CTVA	62.93	683	42,982	0.11%	1.08%	0.00%	9.50%	0.01%
Texas Instruments Inc	TXN	179.70	910	163,512	0.43%	3.03%	0.01%	6.50%	0.03%
Textron Inc	TXT	72.25	182	13,122	0.03%	0.11%	0.00%	12.00%	0.00%
Thermo Fisher Scientific Inc	TMO	497.60	377	187,725	0.50%	0.35%	0.00%	6.00%	0.03%
TJX Cos Inc/The	TJX	121.80	1,124	136,922	0.36%	1.40%	0.01%	12.50%	0.05%
Globe Life Inc	GL	131.72	83	10,965	0.03%	0.82%	0.00%	9.00%	0.00%
Johnson Controls International plc	JCI	80.11	660	52,884	0.14%	1.85%	0.00%	11.50%	0.02%
Ulta Beauty Inc	ULTA	366.54	45	16,608	0.04%	n/a	n/a	6.00%	0.00%
Union Pacific Corp	UNP	236.24	599	141,583	0.38%	2.27%	0.01%	8.00%	0.03%
Keysight Technologies Inc	KEYS	149.77	173	25,882	0.07%	n/a	n/a	5.50%	0.00%
UnitedHealth Group Inc	UNH	523.75	915	479,081	1.27%	1.60%	0.02%	11.00%	0.14%
Blackstone Inc	BX	139.78	729	101,958	0.27%	4.12%	0.01%	16.00%	0.04%
Ventas Inc	VTR	68.76	438	Excl.	Excl.	2.79%	n/a	23.00%	n/a
Labcorp Holdings Inc	LH	232.74	84	19,480	0.05%	1.24%	0.00%	1.50%	0.00%
Vulcan Materials Co	VMC	233.30	132	30,819	0.08%	0.84%	0.00%	7.50%	0.01%
Weyerhaeuser Co	WY	29.28	726	Excl.	Excl.	2.87%	n/a	-2.00%	n/a
Williams Cos Inc/The	WMB	59.76	1,221	72,948	0.19%	3.35%	0.01%	9.50%	0.02%
Constellation Energy Corp	CEG	201.63	315	63,538	0.17%	0.77%	0.00%	17.50%	0.03%
WEC Energy Group Inc	WEC	108.98	316	34,418	0.09%	3.28%	0.00%	6.00%	0.01%
Adobe Inc	ADBE	383.53	426	163,460	0.43%	n/a	n/a	13.50%	0.06%
Vistra Corp	VST	117.44	340	Excl.	Excl.	0.76%	n/a		n/a
AES Corp/The	AES	12.42	712	8,842	0.02%	5.67%	0.00%	14.00%	0.00%
Expeditors International of Washington Inc	EXPD	120.25	138	Excl.	Excl.	1.21%	n/a	-1.50%	n/a
Amgen Inc	AMGN	311.55	537	167,366	0.45%	3.06%	0.01%	5.50%	0.02%
Apple Inc	AAPL	222.13	15,022	3,336,853	8.87%	0.45%	0.04%	11.00%	0.98%
Autodesk Inc	ADSK	261.80	213	55,763	0.15%	n/a	n/a	14.00%	0.02%
Cintas Corp	CTAS	205.53	404	82,940	0.22%	0.76%	0.00%	14.00%	0.03%
Comcast Corp	CMCSA	36.90	3,772	139,171	0.37%	3.58%	0.01%	7.50%	0.03%
Molson Coors Beverage Co	TAP	60.87	190	11,575	0.03%	3.09%	0.00%	11.50%	0.00%
KLA Corp	KLAC	679.80	133	90,336	0.24%	1.00%	0.00%	12.50%	0.03%
Marriott International Inc/MD	MAR	238.20	275	65,594	0.17%	1.06%	0.00%	11.00%	0.02%
Fiserv Inc	FI	220.83	561	123,949	0.33%	n/a	n/a	9.50%	0.03%
McCormick & Co Inc/MD	MKC	82.31	253	20,798	0.06%	2.19%	0.00%	4.50%	0.00%
PACCAR Inc	PCAR	97.37	525	51,113	0.14%	1.36%	0.00%	14.50%	0.02%
Costco Wholesale Corp	COST	945.78	444	419,627	1.12%	0.49%	0.01%	11.50%	0.13%
Stryker Corp	SYK	372.25	382	142,084	0.38%	0.90%	0.00%	9.50%	0.04%
Tyson Foods Inc	TSN	63.81	286	18,261	0.05%	3.13%	0.00%	6.00%	0.00%
Lamb Weston Holdings Inc	LW	53.30	143	7,603	0.02%	2.78%	0.00%	10.50%	0.00%
Applied Materials Inc	AMAT	145.12	812	117,901	0.31%	1.27%	0.00%	8.00%	0.03%
Cardinal Health Inc	CAH	137.77	242	33,281	0.09%	1.47%	0.00%	6.50%	0.01%
Cincinnati Financial Corp	CINF	147.72	157	23,128	0.06%	2.36%	0.00%	14.00%	0.01%
Paramount Global	PARA	11.96	630	7,535	0.02%	1.67%	0.00%	3.00%	0.00%
DR Horton Inc	DHI	127.13	315	40,062	0.11%	1.26%	0.00%	3.50%	0.00%
Electronic Arts Inc	EA	144.52	261	37,664	0.10%	0.53%	0.00%	14.00%	0.01%
Erie Indemnity Co	ERIE	419.05	46	19,356	0.05%	1.30%	0.00%	18.00%	0.01%
Fair Isaac Corp	FICO	1,844.16	24	Excl.	Excl.	n/a	n/a	20.50%	n/a
Fastenal Co	FAST	77.55	573	44,471	0.12%	2.22%	0.00%	8.00%	0.01%
M&T Bank Corp	MTB	178.75	164	29,367	0.08%	3.02%	0.00%	5.50%	0.00%
Xcel Energy Inc	XEL	70.79	575	40,673	0.11%	3.22%	0.00%	6.50%	0.01%
Fifth Third Bancorp	FITB	39.20	668	26,189	0.07%	3.78%	0.00%	5.00%	0.00%
Gilead Sciences Inc	GILD	112.05	1,245	139,520	0.37%	2.82%	0.01%	2.50%	0.01%
Hasbro Inc	HAS	61.49	140	8,580	0.02%	4.55%	0.00%	8.50%	0.00%
Huntington Bancshares Inc/OH	HBAN	15.01	1,461	21,926	0.06%	4.13%	0.00%	7.00%	0.00%
Welltower Inc	WELL	153.21	641	Excl.	Excl.	1.75%	n/a	22.00%	n/a
Biogen Inc	BIIB	136.84	146	20,030	0.05%	n/a	n/a	1.00%	0.00%
Northern Trust Corp	NTRS	98.65	195	19,234	0.05%	3.04%	0.00%	5.00%	0.00%
Packaging Corp of America	PKG	198.02	90	17,808	0.05%	2.52%	0.00%	9.00%	0.00%
Paychex Inc	PAYX	154.28	360	55,570	0.15%	2.54%	0.00%	8.00%	0.01%
QUALCOMM Inc	QCOM	153.61	1,106	169,893	0.45%	2.21%	0.01%	5.50%	0.02%
Ross Stores Inc	ROST	127.79	330	42,162	0.11%	1.27%	0.00%	9.50%	0.01%
IDEXX Laboratories Inc	IDXX	419.95	81	34,032	0.09%	n/a	n/a	10.50%	0.01%
Starbucks Corp	SBUX	98.09	1,136	111,420	0.30%	2.49%	0.01%	7.00%	0.02%
KeyCorp	KEY	15.99	1,096	Excl.	Excl.	5.13%	n/a	-1.50%	n/a
Fox Corp	FOXA	56.60	218	12,330	0.03%	0.95%	0.00%	8.50%	0.00%
Fox Corp	FOX	52.71	236	Excl.	Excl.	1.02%	n/a		n/a
State Street Corp	STT	89.53	288	25,827	0.07%	3.40%	0.00%	7.50%	0.01%
Norwegian Cruise Line Holdings Ltd	NCLH	18.96	440	Excl.	Excl.	n/a	n/a		n/a
US Bancorp	USB	42.22	1,558	65,779	0.17%	4.74%	0.01%	4.00%	0.01%
A O Smith Corp	AOS	65.36	118	7,690	0.02%	2.08%	0.00%	9.00%	0.00%
Gen Digital Inc	GEN	26.54	616	16,357	0.04%	1.88%	0.00%	10.50%	0.00%
T Rowe Price Group Inc	TROW	91.87	222	20,417	0.05%	5.53%	0.00%	5.50%	0.00%
Waste Management Inc	WM	231.51	402	93,094	0.25%	1.43%	0.00%	8.50%	0.02%
Constellation Brands Inc	STZ	183.52	181	33,163	0.09%	2.20%	0.00%	7.50%	0.01%
Invesco Ltd	IVZ	15.17	447	6,787	0.02%	5.41%	0.00%	10.50%	0.00%
Intuit Inc	INTU	613.99	280	171,648	0.46%	0.68%	0.00%	13.50%	0.06%

STANDARD AND POOR'S 500 INDEX

Name	Ticker	[4] Price	[5] Shares Outstanding	[6] Market Capitalization	[7] Weight in Index	[8] Current Dividend Yield	[9] Cap-Weighted Dividend Yield	[10] Value Line Long-Term Growth Est.	[11] Cap-Weighted Long-Term Growth Est.
Morgan Stanley	MS	116.67	1,613	188,172	0.50%	3.17%	0.02%	13.50%	0.07%
Microchip Technology Inc	MCHP	48.41	538	Excl.	Excl.	3.76%	n/a	-0.50%	n/a
Crowdstrike Holdings Inc	CRWD	352.58	248	Excl.	Excl.	n/a	n/a		n/a
Chubb Ltd	CB	301.99	400	120,920	0.32%	1.21%	0.00%	11.00%	0.04%
Hologic Inc	HOLX	61.77	226	13,943	0.04%	n/a	n/a	2.00%	0.00%
Citizens Financial Group Inc	CFG	40.97	437	17,909	0.05%	4.10%	0.00%	5.50%	0.00%
Jabil Inc	JBL	136.07	109	14,856	0.04%	0.24%	0.00%	11.50%	0.00%
O'Reilly Automotive Inc	ORLY	1,432.58	57	82,002	0.22%	n/a	n/a	10.50%	0.02%
Allstate Corp/The	ALL	207.07	265	Excl.	Excl.	1.93%	n/a	29.00%	n/a
Equity Residential	EQR	71.58	380	Excl.	Excl.	3.87%	n/a	-3.50%	n/a
Keurig Dr Pepper Inc	KDP	34.22	1,357	46,428	0.12%	2.69%	0.00%	9.50%	0.01%
Host Hotels & Resorts Inc	HST	14.21	699	9,934	0.03%	5.63%	0.00%	11.50%	0.00%
Incyte Corp	INCY	60.55	194	Excl.	Excl.	n/a	n/a	33.50%	n/a
Simon Property Group Inc	SPG	166.08	326	54,183	0.14%	5.06%	0.01%	3.50%	0.01%
Eastman Chemical Co	EMN	88.11	115	10,173	0.03%	3.77%	0.00%	3.50%	0.00%
AvalonBay Communities Inc	AVB	214.62	142	30,531	0.08%	3.26%	0.00%	6.00%	0.00%
Prudential Financial Inc	PRU	111.68	354	39,582	0.11%	4.84%	0.01%	4.00%	0.00%
United Parcel Service Inc	UPS	109.99	733	80,676	0.21%	5.96%	0.01%	2.50%	0.01%
Walgreens Boots Alliance Inc	WBA	11.17	865	Excl.	Excl.	n/a	n/a	-11.00%	n/a
STERIS PLC	STE	226.65	98	22,269	0.06%	1.01%	0.00%	8.00%	0.00%
McKesson Corp	MCK	672.99	125	84,343	0.22%	0.42%	0.00%	10.00%	0.02%
Lockheed Martin Corp	LMT	446.71	235	104,786	0.28%	2.95%	0.01%	12.00%	0.03%
Cencora Inc	COR	278.09	194	53,870	0.14%	0.79%	0.00%	6.50%	0.01%
Capital One Financial Corp	COF	179.30	381	68,399	0.18%	1.34%	0.00%	2.50%	0.00%
The Campbell's Company	CPB	39.92	298	11,903	0.03%	3.91%	0.00%	7.00%	0.00%
Waters Corp	WAT	368.57	59	21,897	0.06%	n/a	n/a	6.50%	0.00%
Nordson Corp	NDSN	201.72	57	11,480	0.03%	1.55%	0.00%	8.50%	0.00%
Dollar Tree Inc	DLTR	75.07	215	16,146	0.04%	n/a	n/a	20.00%	0.01%
Darden Restaurants Inc	DRI	207.76	117	24,338	0.06%	2.70%	0.00%	10.50%	0.01%
Evergy Inc	EVRG	68.95	230	15,841	0.04%	3.87%	0.00%	7.50%	0.00%
Match Group Inc	MTCH	31.20	250	7,813	0.02%	2.44%	0.00%	11.00%	0.00%
NVR Inc	NVR	7,244.39	3	21,509	0.06%	n/a	n/a	1.50%	0.00%
NetApp Inc	NTAP	87.84	203	17,868	0.05%	2.37%	0.00%	9.00%	0.00%
Old Dominion Freight Line Inc	ODFL	165.45	213	35,166	0.09%	0.68%	0.00%	7.00%	0.01%
DaVita Inc	DVA	152.97	80	12,238	0.03%	n/a	n/a	10.50%	0.00%
Hartford Insurance Group Inc/The	HIG	123.73	285	35,311	0.09%	1.68%	0.00%	7.00%	0.01%
Iron Mountain Inc	IRM	86.04	294	25,273	0.07%	3.65%	0.00%	3.50%	0.00%
Estee Lauder Cos Inc/The	EL	66.00	234	15,455	0.04%	2.12%	0.00%	3.50%	0.00%
Cadence Design Systems Inc	CDNS	254.33	274	69,766	0.19%	n/a	n/a	12.00%	0.02%
Tyler Technologies Inc	TYL	581.39	43	25,061	0.07%	n/a	n/a	8.00%	0.01%
Universal Health Services Inc	UHS	187.90	58	10,851	0.03%	0.43%	0.00%	13.00%	0.00%
Skyworks Solutions Inc	SWKS	64.63	154	Excl.	Excl.	4.33%	n/a		n/a
Quest Diagnostics Inc	DGX	169.20	111	18,777	0.05%	1.89%	0.00%	3.50%	0.00%
Rockwell Automation Inc	ROK	258.38	113	29,216	0.08%	2.03%	0.00%	8.00%	0.01%
Kraft Heinz Co/The	KHC	30.43	1,193	36,315	0.10%	5.26%	0.01%	4.50%	0.00%
American Tower Corp	AMT	217.60	467	101,719	0.27%	3.13%	0.01%	11.00%	0.03%
Regeneron Pharmaceuticals Inc	REGN	634.23	108	68,185	0.18%	0.56%	0.00%	2.00%	0.00%
Amazon.com Inc	AMZN	190.26	10,598	Excl.	Excl.	n/a	n/a	24.50%	n/a
Jack Henry & Associates Inc	JKHY	182.60	73	13,311	0.04%	1.27%	0.00%	6.50%	0.00%
Ralph Lauren Corp	RL	220.74	40	8,804	0.02%	1.49%	0.00%	12.00%	0.00%
BXP Inc	BXP	67.19	158	10,630	0.03%	5.83%	0.00%	1.50%	0.00%
Amphenol Corp	APH	65.59	1,212	79,481	0.21%	1.01%	0.00%	14.00%	0.03%
Howmet Aerospace Inc	HWM	129.73	405	52,544	0.14%	0.31%	0.00%	12.00%	0.02%
Valero Energy Corp	VLO	132.07	314	Excl.	Excl.	3.42%	n/a	-5.00%	n/a
Synopsys Inc	SNPS	428.85	155	66,309	0.18%	n/a	n/a	12.00%	0.02%
CH Robinson Worldwide Inc	CHRW	102.40	118	12,110	0.03%	2.42%	0.00%	5.00%	0.00%
Accenture PLC	ACN	312.04	625	195,175	0.52%	1.90%	0.01%	12.50%	0.06%
TransDigm Group Inc	TDG	1,383.29	56	77,581	0.21%	n/a	n/a	19.00%	0.04%
Yum! Brands Inc	YUM	157.36	279	43,919	0.12%	1.80%	0.00%	10.00%	0.01%
Prologis Inc	PLD	111.79	926	103,537	0.28%	3.61%	0.01%	2.50%	0.01%
FirstEnergy Corp	FE	40.42	577	23,310	0.06%	4.40%	0.00%	5.50%	0.00%
VeriSign Inc	VRSN	253.87	95	24,016	0.06%	n/a	n/a	10.50%	0.01%
Quanta Services Inc	PWR	254.18	148	37,669	0.10%	0.16%	0.00%	17.50%	0.02%
Henry Schein Inc	HSIC	68.49	124	8,505	0.02%	n/a	n/a	8.00%	0.00%
Ameren Corp	AEE	100.40	270	27,124	0.07%	2.83%	0.00%	6.50%	0.00%
ANSYS Inc	ANSS	316.56	88	27,747	0.07%	n/a	n/a	9.50%	0.01%
FactSet Research Systems Inc	FDS	454.64	38	17,290	0.05%	0.92%	0.00%	9.00%	0.00%
NVIDIA Corp	NVDA	108.38	24,400	Excl.	Excl.	0.04%	n/a	41.00%	n/a
Cognizant Technology Solutions Corp	CTSH	76.50	495	37,838	0.10%	1.62%	0.00%	9.00%	0.01%
Intuitive Surgical Inc	ISRG	495.27	358	177,443	0.47%	n/a	n/a	14.00%	0.07%
Take-Two Interactive Software Inc	TTWO	207.25	176	Excl.	Excl.	n/a	n/a		n/a
Republic Services Inc	RSG	242.16	312	75,623	0.20%	0.96%	0.00%	11.00%	0.02%
eBay Inc	EBAY	67.73	466	31,562	0.08%	1.71%	0.00%	11.50%	0.01%
Goldman Sachs Group Inc/The	GS	546.29	311	169,782	0.45%	2.20%	0.01%	11.50%	0.05%
SBA Communications Corp	SBAC	220.01	108	23,676	0.06%	2.02%	0.00%	19.00%	0.01%
Sempra	SRE	71.36	652	46,521	0.12%	3.62%	0.00%	6.00%	0.01%
Moody's Corp	MCO	465.69	180	83,773	0.22%	0.81%	0.00%	8.50%	0.02%

STANDARD AND POOR'S 500 INDEX

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ON Semiconductor Corp	ON	40.69	421	17,148	0.05%	n/a	n/a	4.50%	0.00%
Booking Holdings Inc	BKNG	4,606.91	33	Excl.	Excl.	0.83%	n/a	22.00%	n/a
F5 Inc	FFIV	266.27	58	15,351	0.04%	n/a	n/a	10.00%	0.00%
Akamai Technologies Inc	AKAM	80.50	150	12,106	0.03%	n/a	n/a	8.00%	0.00%
Charles River Laboratories International Inc	CRL	150.52	51	7,698	0.02%	n/a	n/a	4.50%	0.00%
MarketAxess Holdings Inc	MKTX	216.35	38	8,155	0.02%	1.41%	0.00%	10.00%	0.00%
Devon Energy Corp	DVN	37.40	649	24,273	0.06%	2.57%	0.00%	1.50%	0.00%
Bio-Techne Corp	TECH	58.63	158	9,269	0.02%	0.55%	0.00%	11.00%	0.00%
Alphabet Inc	GOOGL	154.64	5,833	Excl.	Excl.	0.52%	n/a		n/a
Allegion plc	ALLE	130.46	86	11,257	0.03%	1.56%	0.00%	7.50%	0.00%
Netflix Inc	NFLX	932.53	428	398,896	1.06%	n/a	n/a	16.50%	0.18%
Agilent Technologies Inc	A	116.98	285	33,351	0.09%	0.85%	0.00%	6.50%	0.01%
Warner Bros Discovery Inc	WBD	10.73	2,455	Excl.	Excl.	n/a	n/a		n/a
Trimble Inc	TRMB	65.65	246	16,136	0.04%	n/a	n/a	5.50%	0.00%
Elevance Health Inc	ELV	434.96	226	98,469	0.26%	1.57%	0.00%	9.50%	0.02%
CME Group Inc	CME	265.29	360	95,605	0.25%	1.88%	0.00%	5.50%	0.01%
Juniper Networks Inc	JNPR	36.19	333	12,058	0.03%	2.43%	0.00%	7.00%	0.00%
DTE Energy Co	DTE	138.27	208	28,693	0.08%	3.15%	0.00%	8.50%	0.01%
Nasdaq Inc	NDAQ	75.86	575	43,631	0.12%	1.27%	0.00%	4.50%	0.01%
Philip Morris International Inc	PM	158.73	1,556	247,061	0.66%	3.40%	0.02%	5.00%	0.03%
Ingersoll Rand Inc	IR	80.03	403	32,259	0.09%	0.10%	0.00%	10.50%	0.01%
Salesforce Inc	CRM	268.36	961	Excl.	Excl.	0.62%	n/a	24.50%	n/a
Roper Technologies Inc	ROP	589.58	107	63,312	0.17%	0.56%	0.00%	9.00%	0.02%
Huntington Ingalls Industries Inc	HII	204.04	39	8,006	0.02%	2.65%	0.00%	10.00%	0.00%
MetLife Inc	MET	80.29	681	54,696	0.15%	2.72%	0.00%	7.50%	0.01%
Tapestry Inc	TPR	70.41	207	14,576	0.04%	1.99%	0.00%	9.00%	0.00%
CSX Corp	CSX	29.43	1,885	55,468	0.15%	1.77%	0.00%	10.00%	0.01%
Edwards Lifesciences Corp	EW	72.48	588	42,608	0.11%	n/a	n/a	6.50%	0.01%
Ameriprise Financial Inc	AMP	484.11	96	46,384	0.12%	1.22%	0.00%	10.00%	0.01%
Zebra Technologies Corp	ZBRA	282.56	51	14,451	0.04%	n/a	n/a	5.50%	0.00%
Zimmer Biomet Holdings Inc	ZBH	113.18	199	22,530	0.06%	0.85%	0.00%	6.50%	0.00%
Camden Property Trust	CPT	122.30	109	Excl.	Excl.	3.43%	n/a	-6.50%	n/a
CBRE Group Inc	CBRE	130.78	300	39,239	0.10%	n/a	n/a	6.00%	0.01%
Mastercard Inc	MA	548.12	905	495,988	1.32%	0.55%	0.01%	14.50%	0.19%
CarMax Inc	KMX	77.92	154	11,984	0.03%	n/a	n/a	3.00%	0.00%
Intercontinental Exchange Inc	ICE	172.50	575	99,112	0.26%	1.11%	0.00%	6.50%	0.02%
Fidelity National Information Services Inc	FIS	74.68	530	39,557	0.11%	2.14%	0.00%	4.50%	0.00%
Smurfit WestRock PLC	SW	45.06	522	Excl.	Excl.	3.82%	n/a		n/a
Chipotle Mexican Grill Inc	CMG	50.21	1,355	Excl.	Excl.	n/a	n/a	20.50%	n/a
Wynn Resorts Ltd	WYNN	83.50	106	Excl.	Excl.	1.20%	n/a	27.00%	n/a
Live Nation Entertainment Inc	LYV	130.58	233	Excl.	Excl.	n/a	n/a		n/a
Assurant Inc	AIZ	209.75	51	10,654	0.03%	1.53%	0.00%	9.50%	0.00%
NRG Energy Inc	NRG	95.46	204	19,442	0.05%	1.84%	0.00%	18.50%	0.01%
Monster Beverage Corp	MNST	58.52	973	56,949	0.15%	n/a	n/a	11.50%	0.02%
Regions Financial Corp	RF	21.73	905	19,676	0.05%	4.60%	0.00%	5.00%	0.00%
Baker Hughes Co	BKR	43.95	990	Excl.	Excl.	2.09%	n/a	30.00%	n/a
Mosaic Co/The	MOS	27.01	317	Excl.	Excl.	3.26%	n/a	-9.00%	n/a
Expedia Group Inc	EXPE	168.10	123	Excl.	Excl.	0.95%	n/a	39.00%	n/a
CF Industries Holdings Inc	CF	78.15	166	Excl.	Excl.	2.56%	n/a		n/a
APA Corp	APA	21.02	364	7,653	0.02%	4.76%	0.00%	6.00%	0.00%
Leidos Holdings Inc	LDOS	134.94	128	17,301	0.05%	1.19%	0.00%	8.00%	0.00%
Alphabet Inc	GOOG	156.23	5,497	858,796	2.28%	0.51%	0.01%	13.50%	0.31%
TKO Group Holdings Inc	TKO	152.81	82	Excl.	Excl.	0.99%	n/a		n/a
First Solar Inc	FSLR	126.43	107	Excl.	Excl.	n/a	n/a	34.50%	n/a
Discover Financial Services	DFS	170.70	252	42,949	0.11%	1.64%	0.00%	4.00%	0.00%
Visa Inc	V	350.46	1,723	603,970	1.61%	0.67%	0.01%	13.50%	0.22%
Mid-America Apartment Communities Inc	MAA	167.58	117	Excl.	Excl.	3.62%	n/a	-13.50%	n/a
Xylem Inc/NY	XYL	119.46	243	29,071	0.08%	1.34%	0.00%	11.00%	0.01%
Marathon Petroleum Corp	MPC	145.69	312	Excl.	Excl.	2.50%	n/a	-6.00%	n/a
Tractor Supply Co	TSCO	55.10	532	29,292	0.08%	1.67%	0.00%	10.00%	0.01%
Advanced Micro Devices Inc	AMD	102.74	1,616	166,058	0.44%	n/a	n/a	17.00%	0.08%
ResMed Inc	RMD	223.85	147	32,876	0.09%	0.95%	0.00%	11.00%	0.01%
Mettler-Toledo International Inc	MTD	1,180.91	21	24,611	0.07%	n/a	n/a	9.50%	0.01%
VICI Properties Inc	VICI	32.62	1,057	34,470	0.09%	5.30%	0.00%	9.50%	0.01%
Copart Inc	CPRT	56.59	966	54,671	0.15%	n/a	n/a	9.00%	0.01%
Jacobs Solutions Inc	J	120.89	123	14,814	0.04%	1.06%	0.00%	11.00%	0.00%
Albemarle Corp	ALB	72.02	118	Excl.	Excl.	2.25%	n/a	-3.50%	n/a
Fortinet Inc	FTNT	96.26	769	74,021	0.20%	n/a	n/a	18.00%	0.04%
Moderna Inc	MRNA	28.35	387	Excl.	Excl.	n/a	n/a	-16.00%	n/a
Essex Property Trust Inc	ESS	306.57	64	19,720	0.05%	3.35%	0.00%	3.00%	0.00%
CoStar Group Inc	CSGP	79.23	422	33,416	0.09%	n/a	n/a	11.50%	0.01%
Realty Income Corp	O	58.01	892	51,732	0.14%	5.55%	0.01%	5.00%	0.01%
Westinghouse Air Brake Technologies Corp	WAB	181.35	171	30,983	0.08%	0.55%	0.00%	16.00%	0.01%
Palantir Technologies Inc	PLTR	84.40	2,249	Excl.	Excl.	n/a	n/a		n/a
Pool Corp	POOL	318.35	38	12,008	0.03%	1.51%	0.00%	2.50%	0.00%
Western Digital Corp	WDC	40.43	348	14,063	0.04%	n/a	n/a	13.50%	0.01%
PepsiCo Inc	PEP	149.94	1,371	205,614	0.55%	3.61%	0.02%	7.50%	0.04%

STANDARD AND POOR'S 500 INDEX

Name	Ticker	[4] Price	[5] Shares Outstanding	[6] Market Capitalization	[7] Weight in Index	[8] Current Dividend Yield	[9] Cap-Weighted Dividend Yield	[10] Value Line Long-Term Growth Est.	[11] Cap-Weighted Long-Term Growth Est.
TE Connectivity PLC	TEL	141.32	298	42,163	0.11%	2.01%	0.00%	10.50%	0.01%
Diamondback Energy Inc	FANG	159.88	289	46,276	0.12%	2.50%	0.00%	2.50%	0.00%
Palo Alto Networks Inc	PANW	170.64	662	Excl.	Excl.	n/a	n/a		n/a
ServiceNow Inc	NOW	796.14	207	Excl.	Excl.	n/a	n/a	32.50%	n/a
Church & Dwight Co Inc	CHD	110.09	246	27,094	0.07%	1.07%	0.00%	6.00%	0.00%
Federal Realty Investment Trust	FRT	97.82	86	8,391	0.02%	4.50%	0.00%	2.50%	0.00%
MGM Resorts International	MGM	29.64	283	Excl.	Excl.	n/a	n/a	25.00%	n/a
American Electric Power Co Inc	AEP	109.27	534	58,349	0.16%	3.40%	0.01%	6.50%	0.01%
Invitation Homes Inc	INVH	34.85	613	21,352	0.06%	3.33%	0.00%	7.00%	0.00%
PTC Inc	PTC	154.95	120	Excl.	Excl.	n/a	n/a	29.00%	n/a
JB Hunt Transport Services Inc	JBHT	147.95	100	14,796	0.04%	1.19%	0.00%	6.00%	0.00%
Lam Research Corp	LRCX	72.70	1,284	93,322	0.25%	1.27%	0.00%	11.00%	0.03%
Mohawk Industries Inc	MHK	114.18	63	7,146	0.02%	n/a	n/a	2.00%	0.00%
GE HealthCare Technologies Inc	GEHC	80.71	457	Excl.	Excl.	0.17%	n/a		n/a
Pentair PLC	PNR	87.48	165	14,432	0.04%	1.14%	0.00%	12.00%	0.00%
Vertex Pharmaceuticals Inc	VRTX	484.82	257	124,497	0.33%	n/a	n/a	10.00%	0.03%
Amcor PLC	AMCR	9.70	1,445	14,020	0.04%	5.26%	0.00%	11.50%	0.00%
Meta Platforms Inc	META	576.36	2,190	1,262,170	3.36%	0.36%	0.01%	19.00%	0.64%
T-Mobile US Inc	TMUS	266.71	1,142	304,515	0.81%	1.32%	0.01%	18.00%	0.15%
United Rentals Inc	URI	626.70	65	40,944	0.11%	1.14%	0.00%	9.50%	0.01%
Alexandria Real Estate Equities Inc	ARE	92.51	173	16,013	0.04%	5.71%	0.00%	8.50%	0.00%
Honeywell International Inc	HON	211.75	649	137,377	0.37%	2.13%	0.01%	9.50%	0.03%
Delta Air Lines Inc	DAL	43.60	646	Excl.	Excl.	1.38%	n/a	28.00%	n/a
United Airlines Holdings Inc	UAL	69.05	329	Excl.	Excl.	n/a	n/a		n/a
Seagate Technology Holdings PLC	STX	84.95	212	Excl.	Excl.	3.39%	n/a	22.50%	n/a
News Corp	NWS	30.37	189	Excl.	Excl.	0.66%	n/a		n/a
Centene Corp	CNC	60.71	496	30,116	0.08%	n/a	n/a	9.50%	0.01%
Apollo Global Management Inc	APO	136.94	570	Excl.	Excl.	1.35%	n/a	23.50%	n/a
Martin Marietta Materials Inc	MLM	478.13	61	29,154	0.08%	0.66%	0.00%	10.50%	0.01%
Teradyne Inc	TER	82.60	162	13,343	0.04%	0.58%	0.00%	15.00%	0.01%
PayPal Holdings Inc	PYPL	65.25	989	64,548	0.17%	n/a	n/a	11.50%	0.02%
Tesla Inc	TSLA	259.16	3,217	833,593	2.22%	n/a	n/a	16.50%	0.37%
Blackrock Inc	BLK	946.48	155	146,944	0.39%	2.20%	0.01%	9.50%	0.04%
KKR & Co Inc	KKR	115.61	888	102,691	0.27%	0.61%	0.00%	5.00%	0.01%
Arch Capital Group Ltd	ACGL	96.18	376	36,136	0.10%	n/a	n/a	15.00%	0.01%
Dow Inc	DOW	34.92	706	24,645	0.07%	8.02%	0.01%	6.50%	0.00%
Everest Group Ltd	EG	363.33	43	15,599	0.04%	2.20%	0.00%	14.50%	0.01%
Teledyne Technologies Inc	TDY	497.71	47	23,311	0.06%	n/a	n/a	8.00%	0.00%
Domino's Pizza Inc	DPZ	459.45	34	15,758	0.04%	1.51%	0.00%	12.50%	0.01%
GE Vernova Inc	GEV	305.28	273	Excl.	Excl.	0.33%	n/a		n/a
News Corp	NWSA	27.22	378	10,291	0.03%	0.73%	0.00%	14.50%	0.00%
Exelon Corp	EXC	46.08	1,010	Excl.	Excl.	3.47%	n/a		n/a
Global Payments Inc	GPN	97.92	246	24,076	0.06%	1.02%	0.00%	13.50%	0.01%
Crown Castle Inc	CCI	104.23	435	Excl.	Excl.	6.01%	n/a		n/a
Align Technology Inc	ALGN	158.86	73	11,630	0.03%	n/a	n/a	17.00%	0.01%
Kenvue Inc	KVUE	23.98	1,911	Excl.	Excl.	3.42%	n/a		n/a
Targa Resources Corp	TRGP	200.47	218	Excl.	Excl.	1.50%	n/a	22.00%	n/a
Bunge Global SA	BG	76.42	134	10,238	0.03%	3.56%	0.00%	0.00%	0.00%
LKQ Corp	LKQ	42.54	259	10,999	0.03%	2.82%	0.00%	7.00%	0.00%
Deckers Outdoor Corp	DECK	111.81	152	16,970	0.05%	n/a	n/a	16.00%	0.01%
Workday Inc	WDAY	233.53	215	50,209	0.13%	n/a	n/a	12.00%	0.02%
Zoetis Inc	ZTS	164.65	448	73,729	0.20%	1.21%	0.00%	7.50%	0.01%
Equinix Inc	EQIX	815.35	97	79,360	0.21%	2.30%	0.00%	15.00%	0.03%
Digital Realty Trust Inc	DLR	143.29	337	48,238	0.13%	3.41%	0.00%	8.00%	0.01%
Molina Healthcare Inc	MOH	329.39	55	18,018	0.05%	n/a	n/a	10.50%	0.01%
Las Vegas Sands Corp	LVS	38.63	716	Excl.	Excl.	2.59%	n/a		n/a

Notes:
[4] Source: Bloomberg Professional
[5] Source: Bloomberg Professional
[6] Equals [4] x [5], excluding companies with growth rates <0% or >20%
[7] Equals [6] / Sum of Column [6], excluding companies with growth rates <0% or >20%
[8] Source: Bloomberg Professional
[9] Equals [7] x [8]
[10] Source: Value Line, as of March 31, 2025
[11] Equals [7] x [10]

CAPITAL ASSET PRICING MODEL - CURRENT RISK-FREE RATE, VALUE LINE BETA, AND MARKET RISK PREMIUM DERIVED FROM S&P 500 - ALL COMPANIES
K = Rf + β (Rm − Rf)

Company	Ticker	[1] Current 30-day average of 30-year U.S. Treasury bond yield	[2] Beta (β)	[3] Market Return (Rm)	[4] Market Risk Premium (Rm − Rf)	[5] ROE (K)
Atmos Energy Corporation	ATO	4.61%	0.90	14.92%	10.31%	13.89%
New Jersey Resources Corporation	NJR	4.61%	1.00	14.92%	10.31%	14.92%
NiSource Inc.	NI	4.61%	0.95	14.92%	10.31%	14.40%
Northwest Natural Gas Company	NWN	4.61%	0.90	14.92%	10.31%	13.89%
ONE Gas Inc.	OGS	4.61%	0.85	14.92%	10.31%	13.37%
Southwest Gas Holdings, Inc.	SWX	4.61%	0.95	14.92%	10.31%	14.40%
Spire, Inc.	SR	4.61%	0.90	14.92%	10.31%	13.89%
Median			0.90			13.89%
Mean			0.92			14.11%

Notes:
[1] Source: Bloomberg Professional, 30-day average as of March 31, 2025
[2] Source: Value Line Reports
[3] Source: Exhibit JCN-5, page 1
[4] Equals [3] - [1]
[5] Equals [1] + [2] x [4]

CAPITAL ASSET PRICING MODEL -- NEAR-TERM PROJECTED RISK-FREE RATE, VALUE LINE BETA, AND MARKET RISK PREMIUM DERIVED FROM S&P 500 - ALL COMPANIES
K = Rf + β (Rm − Rf)

Company	Ticker	[1] Near-term projected 30-year U.S. Treasury bond yield (Q3 2025 - Q3 2026)	[2] Beta (β)	[3] Market Return (Rm)	[4] Market Risk Premium (Rm − Rf)	[5] ROE (K)
Atmos Energy Corporation	ATO	4.52%	0.90	14.92%	10.40%	13.88%
New Jersey Resources Corporation	NJR	4.52%	1.00	14.92%	10.40%	14.92%
NiSource Inc.	NI	4.52%	0.95	14.92%	10.40%	14.40%
Northwest Natural Gas Company	NWN	4.52%	0.90	14.92%	10.40%	13.88%
ONE Gas Inc.	OGS	4.52%	0.85	14.92%	10.40%	13.36%
Southwest Gas Holdings, Inc.	SWX	4.52%	0.95	14.92%	10.40%	14.40%
Spire, Inc.	SR	4.52%	0.90	14.92%	10.40%	13.88%
Median			0.90			13.88%
Mean			0.92			14.10%

Notes:
[1] Source: Blue Chip Financial Forecasts, Vol. 44, No. 4, April 1, 2025 at 2
[2] Source: Value Line Reports
[3] Source: Exhibit JCN-5, page 1
[4] Equals [3] - [1]
[5] Equals [1] + [2] x [4]

CAPITAL ASSET PRICING MODEL -- LONG-TERM PROJECTED RISK-FREE RATE, VALUE LINE BETA, AND MARKET RISK PREMIUM DERIVED FROM S&P 500 - ALL COMPANIES
K = Rf + β (Rm − Rf)

Company	Ticker	[1] Projected 30-year U.S. Treasury bond yield (2026 - 2030)	[2] Beta (β)	[3] Market Return (Rm)	[4] Market Risk Premium (Rm − Rf)	[5] ROE (K)
Atmos Energy Corporation	ATO	4.30%	0.90	14.92%	10.62%	13.85%
New Jersey Resources Corporation	NJR	4.30%	1.00	14.92%	10.62%	14.92%
NiSource Inc.	NI	4.30%	0.95	14.92%	10.62%	14.39%
Northwest Natural Gas Company	NWN	4.30%	0.90	14.92%	10.62%	13.85%
ONE Gas Inc.	OGS	4.30%	0.85	14.92%	10.62%	13.32%
Southwest Gas Holdings, Inc.	SWX	4.30%	0.95	14.92%	10.62%	14.39%
Spire, Inc.	SR	4.30%	0.90	14.92%	10.62%	13.85%
Median			0.90			13.85%
Mean			0.92			14.08%

Notes:
[1] Source: Blue Chip Financial Forecasts, Vol. 43, No. 6, November 27, 2024 at 14
[2] Source: Value Line Reports
[3] Source: Exhibit JCN-5, page 1
[4] Equals [3] - [1]
[5] Equals [1] + [2] x [4]

CAPITAL ASSET PRICING MODEL -- CURRENT RISK-FREE RATE, BLOOMBERG BETA, AND
MARKET RISK PREMIUM DERIVED FROM S&P 500 - ALL COMPANIES
K = Rf + β (Rm − Rf)

Company	Ticker	[1] Current 30-day average of 30-year U.S. Treasury bond yield	[2] Beta (β)	[3] Market Return (Rm)	[4] Market Risk Premium (Rm − Rf)	[5] ROE (K)
Atmos Energy Corporation	ATO	4.61%	0.74	14.92%	10.31%	12.28%
New Jersey Resources Corporation	NJR	4.61%	0.79	14.92%	10.31%	12.72%
NiSource Inc.	NI	4.61%	0.78	14.92%	10.31%	12.70%
Northwest Natural Gas Company	NWN	4.61%	0.69	14.92%	10.31%	11.75%
ONE Gas Inc.	OGS	4.61%	0.76	14.92%	10.31%	12.42%
Southwest Gas Holdings, Inc.	SWX	4.61%	0.83	14.92%	10.31%	13.15%
Spire, Inc.	SR	4.61%	0.76	14.92%	10.31%	12.47%
Median			0.76			12.47%
Mean			0.77			12.50%

Notes:
[1] Source: Bloomberg Professional, 30-day average as of March 31, 2025
[2] Source: Bloomberg Professional, as of February 28, 2025
[3] Source: Exhibit JCN-5, page 1
[4] Equals [3] - [1]
[5] Equals [1] + [2] x [4]

CAPITAL ASSET PRICING MODEL -- NEAR-TERM PROJECTED RISK-FREE RATE, BLOOMBERG BETA, AND
MARKET RISK PREMIUM DERIVED FROM S&P 500 - ALL COMPANIES
K = Rf + β (Rm − Rf)

Company	Ticker	[1] Near-term projected 30-year U.S. Treasury bond yield (Q3 2025 - Q3 2026)	[2] Beta (β)	[3] Market Return (Rm)	[4] Market Risk Premium (Rm − Rf)	[5] ROE (K)
Atmos Energy Corporation	ATO	4.52%	0.74	14.92%	10.40%	12.25%
New Jersey Resources Corporation	NJR	4.52%	0.79	14.92%	10.40%	12.70%
NiSource Inc.	NI	4.52%	0.78	14.92%	10.40%	12.68%
Northwest Natural Gas Company	NWN	4.52%	0.69	14.92%	10.40%	11.72%
ONE Gas Inc.	OGS	4.52%	0.76	14.92%	10.40%	12.40%
Southwest Gas Holdings, Inc.	SWX	4.52%	0.83	14.92%	10.40%	13.13%
Spire, Inc.	SR	4.52%	0.76	14.92%	10.40%	12.45%
Median			0.76			12.45%
Mean			0.77			12.48%

Notes:
[1] Source: Blue Chip Financial Forecasts, Vol. 44, No. 4, April 1, 2025 at 2
[2] Source: Bloomberg Professional, as of February 28, 2025
[3] Source: Exhibit JCN-5, page 1
[4] Equals [3] - [1]
[5] Equals [1] + [2] x [4]

CAPITAL ASSET PRICING MODEL -- LONG-TERM PROJECTED RISK-FREE RATE, BLOOMBERG BETA, AND
MARKET RISK PREMIUM DERIVED FROM S&P 500 - ALL COMPANIES
K = Rf + β (Rm − Rf)

Company	Ticker	[1] Projected 30-year U.S. Treasury bond yield (2026 - 2030)	[2] Beta (β)	[3] Market Return (Rm)	[4] Market Risk Premium (Rm − Rf)	[5] ROE (K)
Atmos Energy Corporation	ATO	4.30%	0.74	14.92%	10.62%	12.20%
New Jersey Resources Corporation	NJR	4.30%	0.79	14.92%	10.62%	12.65%
NiSource Inc.	NI	4.30%	0.78	14.92%	10.62%	12.63%
Northwest Natural Gas Company	NWN	4.30%	0.69	14.92%	10.62%	11.65%
ONE Gas Inc.	OGS	4.30%	0.76	14.92%	10.62%	12.35%
Southwest Gas Holdings, Inc.	SWX	4.30%	0.83	14.92%	10.62%	13.09%
Spire, Inc.	SR	4.30%	0.76	14.92%	10.62%	12.40%
Median			0.76			12.40%
Mean			0.77			12.43%

Notes:
[1] Source: Blue Chip Financial Forecasts, Vol. 43, No. 6, November 27, 2024 at 14
[2] Source: Bloomberg Professional, as of February 28, 2025
[3] Source: Exhibit JCN-5, page 1
[4] Equals [3] - [1]
[5] Equals [1] + [2] x [4]

CAPITAL ASSET PRICING MODEL -- CURRENT RISK-FREE RATE, VALUE LINE BETA, AND MARKET RISK PREMIUM DERIVED FROM S&P 500 - FERC METHODOLOGY
K = Rf + β (Rm − Rf)

Company	Ticker	[1] Current 30-day average of 30-year U.S. Treasury bond yield	[2] Beta (β)	[3] Market Return (Rm)	[4] Market Risk Premium (Rm − Rf)	[5] ROE (K)
Atmos Energy Corporation	ATO	4.61%	0.90	11.81%	7.20%	11.09%
New Jersey Resources Corporation	NJR	4.61%	1.00	11.81%	7.20%	11.81%
NiSource Inc.	NI	4.61%	0.95	11.81%	7.20%	11.45%
Northwest Natural Gas Company	NWN	4.61%	0.90	11.81%	7.20%	11.09%
ONE Gas Inc.	OGS	4.61%	0.85	11.81%	7.20%	10.73%
Southwest Gas Holdings, Inc.	SWX	4.61%	0.95	11.81%	7.20%	11.45%
Spire, Inc.	SR	4.61%	0.90	11.81%	7.20%	11.09%
Median			0.90			11.09%
Mean			0.92			11.24%

Notes:
[1] Source: Bloomberg Professional, 30-day average as of March 31, 2025
[2] Source: Value Line Reports
[3] Source: Exhibit JCN-5, page 8
[4] Equals [3] - [1]
[5] Equals [1] + [2] x [4]

CAPITAL ASSET PRICING MODEL -- NEAR-TERM PROJECTED RISK-FREE RATE, VALUE LINE BETA, AND MARKET RISK PREMIUM DERIVED FROM S&P 500 - FERC METHODOLOGY
K = Rf + β (Rm − Rf)

Company	Ticker	[1] Near-term projected 30-year U.S. Treasury bond yield (Q3 2025 - Q3 2026)	[2] Beta (β)	[3] Market Return (Rm)	[4] Market Risk Premium (Rm − Rf)	[5] ROE (K)
Atmos Energy Corporation	ATO	4.52%	0.90	11.81%	7.29%	11.08%
New Jersey Resources Corporation	NJR	4.52%	1.00	11.81%	7.29%	11.81%
NiSource Inc.	NI	4.52%	0.95	11.81%	7.29%	11.44%
Northwest Natural Gas Company	NWN	4.52%	0.90	11.81%	7.29%	11.08%
ONE Gas Inc.	OGS	4.52%	0.85	11.81%	7.29%	10.71%
Southwest Gas Holdings, Inc.	SWX	4.52%	0.95	11.81%	7.29%	11.44%
Spire, Inc.	SR	4.52%	0.90	11.81%	7.29%	11.08%
Median			0.90			11.08%
Mean			0.92			11.23%

Notes:
[1] Source: Blue Chip Financial Forecasts, Vol. 44, No. 4, April 1, 2025 at 2
[2] Source: Value Line Reports
[3] Source: Exhibit JCN-5, page 8
[4] Equals [3] - [1]
[5] Equals [1] + [2] x [4]

CAPITAL ASSET PRICING MODEL -- LONG-TERM PROJECTED RISK-FREE RATE, VALUE LINE BETA, AND MARKET RISK PREMIUM DERIVED FROM S&P 500 - FERC METHODOLOGY
K = Rf + β (Rm − Rf)

Company	Ticker	[1] Projected 30-year U.S. Treasury bond yield (2026 - 2030)	[2] Beta (β)	[3] Market Return (Rm)	[4] Market Risk Premium (Rm − Rf)	[5] ROE (K)
Atmos Energy Corporation	ATO	4.30%	0.90	11.81%	7.51%	11.06%
New Jersey Resources Corporation	NJR	4.30%	1.00	11.81%	7.51%	11.81%
NiSource Inc.	NI	4.30%	0.95	11.81%	7.51%	11.43%
Northwest Natural Gas Company	NWN	4.30%	0.90	11.81%	7.51%	11.06%
ONE Gas Inc.	OGS	4.30%	0.85	11.81%	7.51%	10.68%
Southwest Gas Holdings, Inc.	SWX	4.30%	0.95	11.81%	7.51%	11.43%
Spire, Inc.	SR	4.30%	0.90	11.81%	7.51%	11.06%
Median			0.90			11.06%
Mean			0.92			11.22%

Notes:
[1] Source: Blue Chip Financial Forecasts, Vol. 43, No. 6, November 27, 2024 at 14
[2] Source: Value Line Reports
[3] Source: Exhibit JCN-5, page 8
[4] Equals [3] - [1]
[5] Equals [1] + [2] x [4]

CAPITAL ASSET PRICING MODEL -- CURRENT RISK-FREE RATE, BLOOMBERG BETA, AND MARKET RISK PREMIUM DERIVED FROM S&P 500 - FERC METHODOLOGY
K = Rf + β (Rm − Rf)

Company	Ticker	[1] Current 30-day average of 30-year U.S. Treasury bond yield	[2] Beta (β)	[3] Market Return (Rm)	[4] Market Risk Premium (Rm − Rf)	[5] ROE (K)
Atmos Energy Corporation	ATO	4.61%	0.74	11.81%	7.20%	9.96%
New Jersey Resources Corporation	NJR	4.61%	0.79	11.81%	7.20%	10.27%
NiSource Inc.	NI	4.61%	0.78	11.81%	7.20%	10.26%
Northwest Natural Gas Company	NWN	4.61%	0.69	11.81%	7.20%	9.59%
ONE Gas Inc.	OGS	4.61%	0.76	11.81%	7.20%	10.07%
Southwest Gas Holdings, Inc.	SWX	4.61%	0.83	11.81%	7.20%	10.57%
Spire, Inc.	SR	4.61%	0.76	11.81%	7.20%	10.10%
Median			0.76			10.10%
Mean			0.77			10.12%

Notes:
[1] Source: Bloomberg Professional, 30-day average as of March 31, 2025
[2] Source: Bloomberg Professional, as of February 28, 2025
[3] Source: Exhibit JCN-5, page 8
[4] Equals [3] - [1]
[5] Equals [1] + [2] x [4]

CAPITAL ASSET PRICING MODEL -- NEAR-TERM PROJECTED RISK-FREE RATE, BLOOMBERG BETA, AND MARKET RISK PREMIUM DERIVED FROM S&P 500 - FERC METHODOLOGY
K = Rf + β (Rm − Rf)

Company	Ticker	[1] Near-term projected 30-year U.S. Treasury bond yield (Q3 2025 - Q3 2026)	[2] Beta (β)	[3] Market Return (Rm)	[4] Market Risk Premium (Rm − Rf)	[5] ROE (K)
Atmos Energy Corporation	ATO	4.52%	0.74	11.81%	7.29%	9.94%
New Jersey Resources Corporation	NJR	4.52%	0.79	11.81%	7.29%	10.25%
NiSource Inc.	NI	4.52%	0.78	11.81%	7.29%	10.24%
Northwest Natural Gas Company	NWN	4.52%	0.69	11.81%	7.29%	9.57%
ONE Gas Inc.	OGS	4.52%	0.76	11.81%	7.29%	10.04%
Southwest Gas Holdings, Inc.	SWX	4.52%	0.83	11.81%	7.29%	10.55%
Spire, Inc.	SR	4.52%	0.76	11.81%	7.29%	10.08%
Median			0.76			10.08%
Mean			0.77			10.10%

Notes:
[1] Source: Blue Chip Financial Forecasts, Vol. 44, No. 4, April 1, 2025 at 2
[2] Source: Bloomberg Professional, as of February 28, 2025
[3] Source: Exhibit JCN-5, page 8
[4] Equals [3] - [1]
[5] Equals [1] + [2] x [4]

CAPITAL ASSET PRICING MODEL -- LONG-TERM PROJECTED RISK-FREE RATE, BLOOMBERG BETA, AND MARKET RISK PREMIUM DERIVED FROM S&P 500 - FERC METHODOLOGY
K = Rf + β (Rm − Rf)

Company	Ticker	[1] Projected 30-year U.S. Treasury bond yield (2026 - 2030)	[2] Beta (β)	[3] Market Return (Rm)	[4] Market Risk Premium (Rm − Rf)	[5] ROE (K)
Atmos Energy Corporation	ATO	4.30%	0.74	11.81%	7.51%	9.88%
New Jersey Resources Corporation	NJR	4.30%	0.79	11.81%	7.51%	10.20%
NiSource Inc.	NI	4.30%	0.78	11.81%	7.51%	10.19%
Northwest Natural Gas Company	NWN	4.30%	0.69	11.81%	7.51%	9.50%
ONE Gas Inc.	OGS	4.30%	0.76	11.81%	7.51%	9.99%
Southwest Gas Holdings, Inc.	SWX	4.30%	0.83	11.81%	7.51%	10.52%
Spire, Inc.	SR	4.30%	0.76	11.81%	7.51%	10.03%
Median			0.76			10.03%
Mean			0.77			10.04%

Notes:
[1] Source: Blue Chip Financial Forecasts, Vol. 43, No. 6, November 27, 2024 at 14
[2] Source: Bloomberg Professional, as of February 28, 2025
[3] Source: Exhibit JCN-5, page 8
[4] Equals [3] - [1]
[5] Equals [1] + [2] x [4]

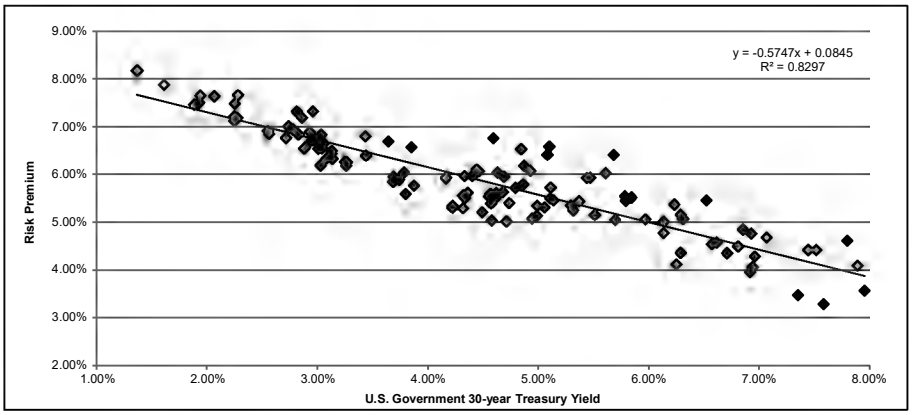
BOND YIELD PLUS RISK PREMIUM ANALYSIS
Risk Premium -- Natural Gas Utilities (US)

	[1]	[2]	[3]
	Average Authorized Gas ROE	U.S. Govt. 30-year Treasury	Risk Premium
1992.1	12.42%	7.80%	4.62%
1992.2	11.98%	7.89%	4.09%
1992.3	11.87%	7.45%	4.42%
1992.4	11.94%	7.52%	4.42%
1993.1	11.75%	7.07%	4.68%
1993.2	11.71%	6.86%	4.85%
1993.3	11.39%	6.31%	5.07%
1993.4	11.16%	6.14%	5.02%
1994.1	11.12%	6.57%	4.55%
1994.2	10.84%	7.35%	3.48%
1994.3	10.87%	7.58%	3.28%
1994.4	11.53%	7.96%	3.57%
1995.2	11.00%	6.94%	4.06%
1995.3	11.07%	6.71%	4.35%
1995.4	11.61%	6.23%	5.37%
1996.1	11.45%	6.29%	5.16%
1996.2	10.88%	6.92%	3.96%
1996.3	11.25%	6.96%	4.29%
1996.4	11.19%	6.62%	4.58%
1997.1	11.31%	6.81%	4.49%
1997.2	11.70%	6.93%	4.77%
1997.3	12.00%	6.53%	5.47%
1997.4	10.92%	6.14%	4.78%
1998.2	11.37%	5.85%	5.52%
1998.3	11.41%	5.47%	5.94%
1998.4	11.69%	5.10%	6.59%
1999.1	10.82%	5.37%	5.44%
1999.2	11.25%	5.79%	5.46%
1999.4	10.38%	6.25%	4.12%
2000.1	10.66%	6.29%	4.36%
2000.2	11.03%	5.97%	5.06%
2000.3	11.33%	5.79%	5.55%
2000.4	12.10%	5.69%	6.41%
2001.1	11.38%	5.44%	5.93%
2001.2	10.75%	5.70%	5.05%
2001.4	10.65%	5.30%	5.35%
2002.1	10.67%	5.51%	5.15%
2002.2	11.64%	5.61%	6.03%
2002.3	11.50%	5.08%	6.42%
2002.4	11.01%	4.93%	6.08%
2003.1	11.38%	4.85%	6.53%
2003.2	11.36%	4.60%	6.76%
2003.3	10.61%	5.11%	5.50%
2003.4	10.84%	5.11%	5.73%
2004.1	11.06%	4.88%	6.18%
2004.2	10.57%	5.32%	5.25%
2004.3	10.37%	5.06%	5.31%
2004.4	10.66%	4.86%	5.79%
2005.1	10.65%	4.69%	5.96%
2005.2	10.54%	4.47%	6.07%
2005.3	10.47%	4.44%	6.03%
2005.4	10.32%	4.68%	5.63%
2006.1	10.68%	4.63%	6.05%
2006.2	10.60%	5.14%	5.46%
2006.3	10.34%	4.99%	5.34%
2006.4	10.14%	4.74%	5.40%
2007.1	10.52%	4.80%	5.72%
2007.2	10.13%	4.99%	5.14%
2007.3	10.03%	4.95%	5.08%
2007.4	10.12%	4.61%	5.50%
2008.1	10.38%	4.41%	5.97%
2008.2	10.17%	4.57%	5.60%
2008.3	10.55%	4.44%	6.11%
2008.4	10.34%	3.65%	6.69%
2009.1	10.24%	3.44%	6.81%
2009.2	10.11%	4.17%	5.94%
2009.3	9.88%	4.32%	5.56%
2009.4	10.31%	4.34%	5.97%
2010.1	10.24%	4.62%	5.61%
2010.2	9.99%	4.36%	5.62%
2010.3	10.43%	3.86%	6.57%
2010.4	10.09%	4.17%	5.93%
2011.1	10.10%	4.56%	5.54%
2011.2	9.85%	4.34%	5.51%
2011.3	9.65%	3.69%	5.96%
2011.4	9.88%	3.04%	6.84%
2012.1	9.63%	3.14%	6.50%
2012.2	9.83%	2.93%	6.90%
2012.3	9.75%	2.74%	7.01%
2012.4	10.06%	2.86%	7.19%
2013.1	9.57%	3.13%	6.44%
2013.2	9.47%	3.14%	6.33%
2013.3	9.60%	3.71%	5.89%
2013.4	9.83%	3.79%	6.04%
2014.1	9.54%	3.69%	5.85%
2014.2	9.84%	3.44%	6.39%
2014.3	9.45%	3.26%	6.19%

BOND YIELD PLUS RISK PREMIUM ANALYSIS
Risk Premium -- Natural Gas Utilities (US)

	[1]	[2]	[3]
	Average Authorized Gas ROE	U.S. Govt. 30-year Treasury	Risk Premium
2014.4	10.28%	2.96%	7.32%
2015.1	9.47%	2.55%	6.91%
2015.2	9.43%	2.88%	6.55%
2015.3	9.75%	2.96%	6.79%
2015.4	9.68%	2.96%	6.72%
2016.1	9.48%	2.72%	6.76%
2016.2	9.42%	2.57%	6.85%
2016.3	9.47%	2.28%	7.19%
2016.4	9.67%	2.83%	6.84%
2017.1	9.60%	3.04%	6.56%
2017.2	9.47%	2.90%	6.58%
2017.3	10.14%	2.82%	7.32%
2017.4	9.70%	2.82%	6.88%
2018.1	9.68%	3.02%	6.66%
2018.2	9.43%	3.09%	6.34%
2018.3	9.71%	3.06%	6.65%
2018.4	9.53%	3.27%	6.26%
2019.1	9.55%	3.01%	6.54%
2019.2	9.73%	2.78%	6.94%
2019.3	9.95%	2.29%	7.66%
2019.4	9.74%	2.25%	7.48%
2020.1	9.35%	1.89%	7.46%
2020.2	9.55%	1.38%	8.17%
2020.3	9.54%	1.37%	8.18%
2020.4	9.50%	1.62%	7.88%
2021.1	9.71%	2.07%	7.64%
2021.2	9.48%	2.25%	7.22%
2021.3	9.43%	1.93%	7.50%
2021.4	9.59%	1.94%	7.65%
2022.1	9.38%	2.25%	7.12%
2022.2	9.23%	3.03%	6.19%
2022.3	9.52%	3.26%	6.26%
2022.4	9.65%	3.88%	5.77%
2023.1	9.64%	3.74%	5.89%
2023.2	9.40%	3.80%	5.60%
2023.3	9.53%	4.23%	5.30%
2023.4	9.619%	4.58%	5.04%
2024.1	9.617%	4.32%	5.29%
2024.2	9.97%	4.58%	5.40%
2024.3	9.58%	4.23%	5.35%
2024.4	9.70%	4.50%	5.21%
2025.1	9.73%	4.71%	5.02%
AVERAGE	10.36%	4.48%	5.88%
MEDIAN	10.17%	4.50%	5.93%

BOND YIELD PLUS RISK PREMIUM ANALYSIS
Risk Premium -- Natural Gas Utilities (US)



SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.91087043
R Square	0.82968494
Adjusted R Square	0.828343877
Standard Error	0.004161027
Observations	129

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	0.01071186	0.01071186	618.6768651	1.1847E-50
Residual	127	0.002198896	1.73141E-05		
Total	128	0.012910757			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	0.084524319	0.001098285	76.96025445	2.0153E-108	0.082351011	0.08669763
X Variable 1	-0.574671259	0.023104019	-24.87321582	1.1847E-50	-0.620389944	-0.5289526

	[7] U.S. Govt. 30-year Treasury	[8] Risk Premium	[9] ROE
Current 30-day average of 30-year U.S. Treasury bond yield [4]	4.61%	5.80%	10.41%
Blue Chip Near-Term Projected Forecast (Q2 2025 - Q2 2026) [5]	4.52%	5.85%	10.37%
Blue Chip Long-Term Projected Forecast (2026-2030) [6]	4.30%	5.98%	10.28%
AVERAGE			10.36%

Notes:
[1] Source: Regulatory Research Associates, rate cases through February 28, 2025
[2] Source: Bloomberg Professional, quarterly bond yields are the average of each trading day in the quarter
[3] Equals Column [1] − Column [2]
[4] Source: Bloomberg Professional, 30-day average as of February 28, 2025
[5] Source: Blue Chip Financial Forecasts, Vol. 44, No. 3, February 28, 2025 at 2
[6] Source: Blue Chip Financial Forecasts, Vol. 43, No. 6, November 27, 2024 at 14
[7] See notes [4], [5] & [6]
[8] Equals 0.084524 + (-0.574671 x Column [7])
[9] Equals Column [7] + Column [8]

EXPECTED EARNINGS ANALYSIS

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
		Value Line ROE 2027-2029	Value Line Total Capital 2023	Value Line Common Equity Ratio 2023	Total Equity 2023	Value Line Total Capital 2027-2029	Value Line Common Equity Ratio 2027-2029	Total Equity 2027-2029	Compound Annual Growth Rate	Adjustment Factor	Adjusted Return on Common Equity
Atmos Energy Corporation	ATO	9.00%	20,018.00	60.70%	12,151	30,000.00	60.00%	18,000.00	8.18%	1.039	9.35%
New Jersey Resources Corporation	NJR	14.50%	5,079.90	43.30%	2,200	6,300.00	45.00%	2,835.00	5.21%	1.025	14.87%
NiSource Inc.	NI	10.00%	22,800.00	46.00%	10,488	30,000.00	45.00%	13,500.00	5.18%	1.025	10.25%
Northwest Natural Gas Company	NWN	8.00%	3,150.00	45.00%	1,418	4,915.00	45.00%	2,211.75	9.31%	1.044	8.36%
ONE Gas Inc.	OGS	7.50%	5,415.00	54.00%	2,924	7,200.00	55.00%	3,960.00	6.25%	1.030	7.73%
Southwest Gas Holdings, Inc.	SWX	8.50%	8,200.00	45.00%	3,690	10,000.00	44.00%	4,400.00	3.58%	1.018	8.65%
Spire, Inc.	SR	9.00%	6,937.10	43.10%	2,990	9,250.00	45.00%	4,162.50	6.84%	1.033	9.30%
Median											9.30%
Mean											9.79%

Notes:
[1] Source: Value Line
[2] Source: Value Line
[3] Source: Value Line
[4] Equals [2] x [3]
[5] Source: Value Line
[6] Source: Value Line
[7] Equals [5] x [6]
[8] Equals ([7] / [4]) ^ (1/5) - 1
[9] Equals 2 x (1 + [8]) / (2 + [8])
[10] Equals [1] x [9]

COMPARISON OF PROXY GROUP COMPANIES
REGULATORY FRAMEWORK

		[1]	[2]	[3]	[4]
Company	**Jurisdiction/Service**	**Test Year**	**Rate Base**	**Revenue Decoupling**	**Capital Cost Recovery Mechanism**
Atmos Energy Corporation	Kansas - Gas	Historical	Year End	Partial	Yes
	Kentucky - Gas	Fully Forecast	Average	Partial	Yes
	Louisiana - Gas	Partially Forecast	Average	Partial	No
	Mississippi - Gas	Fully Forecast	Year End	Partial	Yes
	Tennessee - Gas	Historical	Average	Partial	No
	Texas - Gas	Historical	Year End	Partial	Yes
New Jersey Resources Corporation	New Jersey - Gas	Partially Forecast	Year End	Full	Yes
NiSource Inc.	Indiana - Gas	Fully Forecast	Year End	No	Yes
	Kentucky - Gas	Fully Forecast	Average	Partial	Yes
	Maryland - Gas	Historical	Average	Partial	Yes
	Ohio - Gas	Partially Forecast	Year End	No	Yes
	Pennsylvania - Gas	Fully Forecast	Year End	Partial	Yes
	Virginia - Gas	Fully Forecast	Average	Partial	Yes
Northwest Natural Gas Company	Oregon - Gas	Fully Forecast	Average	Partial	Yes
	Washington - Gas	Historical	Average	No	No
ONE Gas, Inc.	Kansas - Gas	Historical	Year End	Partial	Yes
	Oklahoma - Gas	Historical	Year End	Partial	No
	Texas - Gas	Historical	Year End	Partial	Yes
Southwest Gas Holdings, Inc.	Arizona - Gas	Historical	Year End	Full	Yes
	Californinia - Gas	Fully Forecast	Average	Full	No
	Nevada - Gas	Historical	Year End	Full	Yes
Spire, Inc.	Spire Alabama Inc.	Historical	Average	Partial	No
	Spire Gulf Inc.	Historical	Year End	Partial	No
	Spire Missouri Inc.	Historical	Year End	Partial	Yes

Proxy Group Operating Company Count	Fully Forecast	8	Year End	14	Full	4	Yes	17
	Partially Forecast	3	Average	10	Partial	17	No	7
	Historical	13	Date Certain	0	No	3		
		Forecast		Year End		RDM		CCRM
		45.83%		58.33%		87.50%		70.83%
Duke Energy Kentucky	Kentucky - Gas	Fully Forecast		Average		Partial		Yes

Notes
[1] - [2] Source: S&P Global - Market Intelligence Rate Case History (Past Rate Cases), accessed 8/31/2024
[3] - [4] Source: "Adjustment Clauses: A State-by-state Overview," Regulatory Research Associates, Jul 2022. Operating subsidiaries not covered in this report were excluded from this exhibit.

CAPITAL STRUCTURE ANALYSIS

COMMON EQUITY RATIO [1]

Proxy Group Company	Ticker	2023	2022	2021	2021-2023 Average
Atmos Energy Corporation	ATO	60.20%	60.01%	59.88%	60.03%
New Jersey Resources Corporation	NJR	55.15%	53.98%	55.19%	54.77%
NiSource Inc.	NI	55.39%	54.17%	54.85%	54.80%
Northwest Natural Holding Company	NWN	47.26%	53.27%	49.57%	50.03%
ONE Gas, Inc.	OGS	60.41%	58.24%	61.09%	59.92%
Southwest Gas Holdings, Inc.	SWX	47.45%	43.96%	50.70%	47.37%
Spire Inc.	SR	46.27%	49.43%	51.66%	49.12%
Proxy Group					
MEAN		53.16%	53.30%	54.71%	53.72%
LOW		46.27%	43.96%	49.57%	47.37%
HIGH		60.41%	60.01%	61.09%	60.03%

COMMON EQUITY RATIO - UTILITY OPERATING COMPANIES

Company Name	Ticker	2023	2022	2021	2021-2023 Average
Atmos Energy Corporation	ATO	60.20%	60.01%	59.88%	60.03%
New Jersey Natural Gas Company	NJR	55.15%	53.98%	55.19%	54.77%
Columbia Gas of Kentucky, Incorporated	NI	53.66%	54.91%	53.87%	54.15%
Columbia Gas of Maryland, Incorporated	NI	52.00%	51.96%	55.26%	53.07%
Columbia Gas of Ohio, Inc.	NI	50.50%	50.67%	50.79%	50.65%
Columbia Gas of Pennsylvania, Inc.	NI	55.88%	56.64%	56.05%	56.19%
Columbia Gas of Virginia, Incorporated	NI	45.25%	44.25%	44.52%	44.67%
Northern Indiana Public Service Company, LLC	NI	59.14%	56.92%	58.59%	58.22%
Northwest Natural Gas Company	NWN	47.26%	53.27%	49.57%	50.03%
Kansas Gas Service Company, Inc.	OGS	60.44%	58.37%	61.37%	60.06%
Oklahoma Natural Gas Company	OGS	60.46%	58.26%	60.99%	59.90%
Texas Gas Service Company, Inc.	OGS	60.35%	58.13%	60.98%	59.82%
Southwest Gas Corporation	SWX	47.45%	43.96%	50.70%	47.37%
Spire Alabama Inc.	SR	51.50%	52.01%	56.67%	53.39%
Spire Gulf Inc.	SR	44.44%	41.35%	41.14%	42.31%
Spire Missouri Inc.	SR	44.11%	48.66%	49.85%	47.54%

Notes:
[1] Ratios are weighted by actual common capital, long-term debt, of Operating Subsidiaries. No company had any preferred stock outstanding

CAPITAL STRUCTURE ANALYSIS

LONG-TERM DEBT RATIO [1]

Proxy Group Company	Ticker	2023	2022	2021	2021-2023 Average
Atmos Energy Corporation	ATO	39.80%	39.99%	40.12%	39.97%
New Jersey Resources Corporation	NJR	44.85%	46.02%	44.81%	45.23%
NiSource Inc.	NI	44.61%	45.83%	45.15%	45.20%
Northwest Natural Holding Company	NWN	52.74%	46.73%	50.43%	49.97%
ONE Gas, Inc.	OGS	39.59%	41.76%	38.91%	40.08%
Southwest Gas Holdings, Inc.	SWX	52.55%	56.04%	49.30%	52.63%
Spire Inc.	SR	53.73%	50.57%	48.34%	50.88%
Proxy Group					
MEAN		46.84%	46.70%	45.29%	46.28%
LOW		39.59%	39.99%	38.91%	39.97%
HIGH		53.73%	56.04%	50.43%	52.63%

LONG-TERM DEBT RATIO - UTILITY OPERATING COMPANIES

Company Name	Ticker	2023	2022	2021	2021-2023 Average
Atmos Energy Corporation	ATO	39.80%	39.99%	40.12%	39.97%
New Jersey Natural Gas Company	NJR	44.85%	46.02%	44.81%	45.23%
Columbia Gas of Kentucky, Incorporated	NI	46.34%	45.09%	46.13%	45.85%
Columbia Gas of Maryland, Incorporated	NI	48.00%	48.04%	44.74%	46.93%
Columbia Gas of Ohio, Inc.	NI	49.50%	49.33%	49.21%	49.35%
Columbia Gas of Pennsylvania, Inc.	NI	44.12%	43.36%	43.95%	43.81%
Columbia Gas of Virginia, Incorporated	NI	54.75%	55.75%	55.48%	55.33%
Northern Indiana Public Service Company, LLC	NI	40.86%	43.08%	41.41%	41.78%
Northwest Natural Gas Company	NWN	52.74%	46.73%	50.43%	49.97%
Kansas Gas Service Company, Inc.	OGS	39.56%	41.63%	38.63%	39.94%
Oklahoma Natural Gas Company	OGS	39.54%	41.74%	39.01%	40.10%
Texas Gas Service Company, Inc.	OGS	39.65%	41.87%	39.02%	40.18%
Southwest Gas Corporation	SWX	52.55%	56.04%	49.30%	52.63%
Spire Alabama Inc.	SR	48.50%	47.99%	43.33%	46.61%
Spire Gulf Inc.	SR	55.56%	58.65%	58.86%	57.69%
Spire Missouri Inc.	SR	55.89%	51.34%	50.15%	52.46%

Notes:
[1] Ratios are weighted by actual common capital, long-term debt, of Operating Subsidiaries. No company had any preferred stock outstanding

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 NATURAL GAS RATES; 2) APPROVAL OF NEW TARIFFS; AND 3) ALL OTHER REQUIRED APPROVALS, WAIVERS, AND RELIEF.	))))))	CASE NO. 2025-00125

DIRECT TESTIMONY OF

JOHN R. PANIZZA

ON BEHALF OF

DUKE ENERGY KENTUCKY, INC.

June 2, 2025

TABLE OF CONTENTS

PAGE

I. INTRODUCTION AND PURPOSE

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is John R. Panizza and my business address is 525 South Tryon Street, Charlotte, North Carolina 28202.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by Duke Energy Business Services LLC (DEBS) as Director, Tax Operations. DEBS provides various administrative and other services to Duke Energy Kentucky, Inc., (Duke Energy Kentucky or Company) and other affiliated companies of Duke Energy Corporation (Duke Energy).

Q. PLEASE BRIEFLY SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL EXPERIENCE.

A. I have a Bachelor of Science degree in Accounting from Montclair State University and a Master's in Taxation from Seton Hall University. I am a Certified Public Accountant in the state of New Jersey. My professional work experience began in 1989 as an auditor with KPMG. From 1993 to 2002, I held a number of financial positions primarily at two companies, in telecommunications and automotive (AT&T Corp., and Collins & Aikman Inc.). In 2002, I joined Duke Energy and have held a number of financial positions of increasing responsibilities, including various accounting and tax related positions. In March 2018, after a three-year rotation primarily in Corporate Accounting, I moved back into the role of Director, Tax Operations, a position that I had previously held.

Q. PLEASE SUMMARIZE YOUR RESPONSIBILITIES AS DIRECTOR, TAX OPERATIONS.

A. As Director, Tax Operations, I have overall responsibility for corporate tax compliance, and accounting for Duke Energy. The Duke Energy Tax Operations Department prepares and files federal, state, and local income tax returns for Duke Energy. The department also files tax returns for various joint ventures if Duke Energy is the designated tax matters partner.

The Tax Department maintains and reconciles Duke Energy's tax accounts and is responsible for the reporting and disclosure of tax-related matters, to the extent required.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE KENTUCKY PUBLIC SERVICE COMMISSION?

A. Yes. Most recently, I provided testimony in Case No. 2024-00354, Duke Energy Kentucky's last electric base rate case proceeding. I also provided testimony in Case No. 2021-00190, Duke Energy Kentucky's last natural gas base rate case proceeding.

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

A. My testimony addresses Duke Energy Kentucky's income tax expense presented in this filing and certain other tax matters. I sponsor Schedule B-6 and Schedule E-1 and E-2 in response to Filing Requirements FR 16(8)(b) and FR 16(8)(e), respectively. I also provided certain additional tax information to other witnesses for their use in certain calculations for the base period and the forecasted period.

II. SCHEDULES SPONSORED BY WITNESS

Q. PLEASE DESCRIBE SCHEDULE B-6.

A. Schedule B-6 includes the Accumulated Deferred Investment Tax Credit, Accumulated Deferred Income Tax (ADIT) and Excess Deferred Income Tax (EDIT) balance information.

Q. PLEASE DESCRIBE SCHEDULE E-1.

A. Schedule E-1 is the calculation of adjusted jurisdictional federal and state taxable income and federal and state income tax expense for the base period under current income tax rates and for the forecasted period at income tax rates in effect for that period. Included within this calculation is an amortization of excess deferred income taxes.

Q. PLEASE DESCRIBE SCHEDULE E-2.

A. Schedule E-2 is for the calculation of jurisdictional federal and state taxable income and federal and state income tax expense. Since the utility taxes are 100% jurisdictional, this schedule is not applicable.

Q. WHAT TAX INFORMATION DID YOU PROVIDE TO OTHER WITNESSES?

A. I provided Duke Energy Kentucky witness Ms. Claire C. Hudson with the property tax expense for the forecasted financial data. These expenses are based on projected property tax rates applied to the most recent valuations as approved by the Kentucky Department of Revenue (KDR) and updated growth rates.

I also provided Ms. Hudson and Company witness Mr. Jefferson "Jay" P. Brown with the income tax rates and the amortization of the investment tax credit

and EDITs for both the forecasted portion of the base period consisting of the six months ending August 31, 2025, and the forecasted test period ending December 31, 2026.

I reviewed Ms. Hudson and Mr. Brown's calculation of deferred income taxes for the base period and the forecasted period, I provided the amount of tax depreciation she used for this calculation, and I support the methodology she used for calculating deferred income taxes.

III. INCOME TAX EXPENSE

Q. WHAT TAX RATE DID THE COMPANY USE TO CALCULATE ITS TEST PERIOD FEDERAL INCOME TAX EXPENSE?

A. The Company used the statutory Federal corporate income tax rate of 21% for both the base period and forecasted period.

Q. WHAT TAX RATE DID THE COMPANY USE TO CALCULATE ITS TEST PERIOD STATE INCOME TAX EXPENSE?

A. The Company used the composite statutory Kentucky corporate income tax rate of 5% for both the base period and the forecast period.

Q. HOW IS THE EDIT RELATING TO THE TAX CUTS AND JOBS ACT (TCJA) BEING FLOWED BACK TO CUSTOMERS?

A. The protected EDIT is amortized using Average Rate Assumption Method (ARAM) and the unprotected EDIT is amortized over 10 years. Per the Commission Orders in Case No. 2018-00261 and Case No. 2021-00190, Duke Energy Kentucky has incorporated the impacts of the TCJA into its natural gas base rates. In this case, the Company is not proposing any changes.

Q. HOW IS THE EDIT RELATING TO THE KENTUCKY STATE INCOME TAX REDUCTION BEING FLOWED BACK TO CUSTOMERS?

A. Per the Commission Order in Case No. 2018-00261, Kentucky state EDIT is being returned to the customer over a 10-year amortization period. In this case, the Company is not proposing any changes.

Q. WHAT IS THE COMBINED FEDERAL AND STATE STATUTORY INCOME TAX RATE APPLICABLE DURING THE TEST PERIOD?

A. The combined statutory federal and state statutory income tax rate for Duke Energy Kentucky, which is expected to be in effect during the base period and for the forecasted period is 24.925%. This rate includes the corporate statutory federal income tax rate of 21% and the composite statutory Kentucky corporate income tax rate of 5%. State income taxes are deductible in computing the federal tax liability and this deduction is considered in computing the overall effective tax liability. I provided this information to Mr. Brown for his use in calculating the revenue requirement. I also provided him with the amount of income tax expense for the base period and the forecasted test period, based on these income tax rates.

IV. PROPERTY TAX EXPENSE

Q. HOW DID DUKE ENERGY KENTUCKY CALCULATE THE PROPERTY TAX EXPENSE FOR THE FORECASTED TEST PERIOD?

A. Duke Energy Kentucky's forecasted property tax expense for assets located in Kentucky, Ohio, and North Carolina was calculated using the most recent actual assessed values and tax rates, along with estimated growth rates. The estimated growth rates were derived from projected investments in property, plant, and

equipment (PP&E) and net operating income. Since Duke Energy Kentucky actively manages property tax values with the KDR, the forecasted property tax expense is determined by estimating adjustments to property tax values.

V. CONCLUSION

Q. WAS THE TAX INFORMATION YOU SUPPLIED FOR SCHEDULE B-6 AND SCHEDULES E-1 AND E-2, AND THE TAX INFORMATION YOU SUPPLIED TO OTHER WITNESSES, PREPARED UNDER YOUR DIRECTION AND SUPERVISION?

A. Yes.

Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?

A. Yes.

VERIFICATION

STATE OF NORTH CAROLINA)
)
COUNTY OF MECKLENBURG)

SS:

The undersigned, John R. Panizza, Director, Tax Operations, 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 R. Panizza

John R. Panizza Affiant

Subscribed and sworn to before me by John R. Panizza on this 6th day of May, 2025.

Teresa Ray

NOTARY PUBLIC

My Commission Expires: 01/21/29

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 NATURAL GAS RATES; 2) APPROVAL OF NEW TARIFFS; AND 3) ALL OTHER REQUIRED APPROVALS, WAIVERS, AND RELIEF.	))))))	CASE NO. 2025-00125

DIRECT TESTIMONY OF

LINDSAY B. PHILEMON

ON BEHALF OF

DUKE ENERGY KENTUCKY, INC.

June 2, 2025

TABLE OF CONTENTS

PAGE

ATTACHMENT:

I. INTRODUCTION AND PURPOSE

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND POSITION WITH DUKE ENERGY CAROLINAS, LLC.

A. My name is Lindsay B. Philemon, and my business address is 525 South Tryon Street, Charlotte, North Carolina 28202. I am employed by Duke Energy Carolinas, LLC (DEC) as Manager of Customer Governance and Compliance. DEC is a subsidiary of Duke Energy Corporation (Duke Energy) which provides various services to Duke Energy Kentucky, Inc., (Duke Energy Kentucky or Company) and other affiliated companies of Duke Energy.

Q. PLEASE BRIEFLY DESCRIBE YOUR EDUCATION AND PROFESSIONAL EXPERIENCE.

A. I graduated from Wingate University with a Bachelor of Science degree in Accounting and earned a Master of Professional Accountancy from Clemson University. I started my career as a senior associate with Grant Thornton LLP, before joining Duke Energy in 2007 where I held various positions in several areas including audit, ethics, and technical accounting. In 2015, I assumed the role of Rates and Regulatory Strategy Manager, where I provided strategic business guidance to the state president, and regulatory support for North and South Carolina retail rate initiatives, including rate cases. I transitioned to the Customer Services regulatory organization in 2020, and over time, ascended to my current role of Manager of Customer Governance and Compliance. I am also a licensed certified public accountant in the state of North Carolina.

Q. WHAT ARE YOUR RESPONSIBILITIES IN YOUR CURRENT POSITION?

A. My responsibilities include oversight of the regulatory governance process, and the audit and compliance functions within Customer Services.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE KENTUCKY PUBLIC SERVICE COMMISSION?

A. No.

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

A. The primary purpose of my testimony is to highlight Duke Energy Kentucky's excellent service to our customers and to describe how that translates to customer satisfaction. To that end, I describe the Company's customer initiatives and discuss the Company's customer satisfaction program and measurements. In addition, I describe the various ways the Company serves and supports our customers, especially the unique needs of our low-income customers. Finally, in keeping with hearing our customers' concerns and providing excellent customer service, I discuss the Company's proposal to expand the fee-free payment options available to residential customers to include payments by debit, credit, prepaid cards, and electronic check (collectively, Card Payments), which will provide them with more flexibility in their bill payments.

II. OVERVIEW OF CUSTOMER SERVICES

Q. PLEASE DESCRIBE HOW THE COMPANY VIEWS CUSTOMER SERVICE.

A. At Duke Energy Kentucky, the customer is at the center of our purpose. Evolving customer expectations, emerging technologies, and changing public policies all converge to create a dynamic environment for the Company and the industry. Duke Energy Kentucky strives to exceed customer expectations through building genuine connections with its customers by soliciting customer feedback, taking note of evolving customer expectations, anticipating customer needs, leveraging emerging technologies, and offering dynamic solutions to customer issues. Customer service is a major factor in Company policies, programs, and decisions, and is at the forefront of our mission to provide safe and reliable service to all of our customers.

Q. PLEASE PROVIDE AN OVERVIEW OF THE COMPANY'S CUSTOMER EXPERIENCE AND SERVICES FUNCTIONS.

A. Duke Energy Kentucky's customer experience and services functions are comprised of multiple departments responsible for developing and executing policies, processes, and procedures to engage with our customers across multiple communication channels. The primary channels our customers use to interact with us are Duke Energy's website (including recently launched live agent chat), mobile app, phone, email, social media (Facebook, Instagram, LinkedIn, and X), and face-to-face interactions. The organization includes customer contact center operations, customer experience, customer technologies, metering services, complaint resolution, billing and payment processes, and credit and collections activities.

Q. PLEASE DESCRIBE THE COMPANY'S CUSTOMER CONTACT CENTER OPERATIONS.

A. Our contact center operations are designed and continuously enhanced to strive to answer customer inquiries efficiently and accurately, and that starts with being available when our customers need us most. Our 12-hour weekday business hours provide support from 7 a.m. to 7 p.m., and we are available 24 hours a day, 7 days a week for support for outages and emergencies. The contact center team is a combination of remote, on-site, and vendor customer care specialists that are available to process and support inbound and outbound calls, live web chat, emails, mailed letters, faxes, and social media inquiries from Duke Energy Kentucky's non-residential and residential customers.

Q. DOES THE COMPANY RECOGNIZE THE DIVERSE NEEDS OF ITS CUSTOMER BASE WHEN PROVIDING CUSTOMER SERVICE?

A. Yes. In addition to our primary responsibility of providing safe and reliable natural gas service, we understand that our customer base has diverse service needs and strive to recognize and accommodate them where possible. For example, Duke Energy employs Account Managers who are assigned to our large, complex customer accounts to answer questions, provide solutions, and resolve issues. These Account Managers work to foster positive relationships, focusing on the specific and often complex needs of commercial, industrial, and governmental customers. They serve as a single point-of-contact, providing consistency and a level of understanding of the customer's business interests and challenges. This familiarity allows our Account Managers to manage the customer relationship to enhance

customer satisfaction by helping to develop and recommend personalized options in areas such as service delivery, renewables, energy efficiency, and demand response programs.

The Company's Business Service Center (BSC) is focused on providing a service model customized by business segment for our small and medium business (SMB) customers. This organization positions us to better understand and support the many different types and needs of business customers. Our BSC support teams offer dedicated phone numbers, email addresses, and digital experiences so SMB customers can utilize the channel that works best for them.

One business segment supported within the BSC includes builders, developers, multi-family builders, and local inspecting authorities, all of which play important roles for new home construction. The Company recently improved this segment's customer experience through a digital tool called the Builder Portal. The Builder Portal is designed to improve customer experience when submitting work orders, requesting status updates, or seeking online support. Providing dedicated teams specializing in new construction and offering multiple contact channels allows us to better serve this business customer segment and provides options that best suit their needs.

Additionally, within the BSC are the Business Experience (BEX) and Renewable Service Center (RSC) teams. The BEX team provides dedicated support to businesses with one to seven accounts, and the RSC services inquiries related to solar installations and billing options. These teams help customers set up their accounts, answer questions on features, and make changes so they can utilize the

convenient, self-service options at their convenience. We also offer these customers dedicated phone numbers, email addresses, and digital experiences so they can utilize the contact channels that work best for them. And, with the deployment of the Company's current customer information system, Customer Connect, those digital experiences were enhanced through the Business and Landlord Portals. The Business Portal allows business customers to easily manage their business account online. The Business Portal is a one-stop digital resource providing customized tools and self-service options that allow customers to streamline bill payment, view, and track energy usage, and keep designated people in the know by allowing multiple user logins. The Landlord Portal allows property managers or owners ways to easily manage rental energy accounts all in one place. The Landlord Portal provides all the benefits of the Business Portal, plus additional features designed to meet the specific account needs of property managers.

The Company continuously explores ways to improve the customer experience for all customers. For example, for residential customers, we offer a variety of billing and payment choices, including paperless billing, Pick Your Due Date, Budget Billing, and as I discuss further below in my testimony, we enhanced our Mobile App to include the highly sought after payment options of Apple Pay and Google Pay. Another way we strive to improve the customer experience is by sharing important information with our customers through monthly bill inserts, texts, and/or emails, and offering programs and tips to help protect customers from high natural gas bills due to extreme temperatures.

Additionally, we supply customers with ways to protect themselves from utility scammers through dedicated communications, webpages, and a Scam Reporting Tool. The Scam Reporting Tool allows customers to share their experiences with attempted scams and solicits information we can utilize to help protect other Duke Energy customers.

III. TRANSFORMING THE CUSTOMER EXPERIENCE

Q. PLEASE DESCRIBE THE COMPANY'S EFFORTS TO ENHANCE THE CUSTOMER EXPERIENCE THROUGH DIGITAL CHANNELS AND TECHNOLOGIES.

A. The Company continues to experience increased interest in and adoption of digital communication and service channels. With the rapid transformation of technology, customer expectations surrounding technology are increasing at an accelerated rate, and our teams work to provide an easy-to-use, straightforward digital experience to meet customer expectations.

Mobile Application and Web Portal

The Company's digital transformation efforts help us deliver customer benefits, including advanced capabilities and offerings. The Company's free mobile application (Mobile App) offers residential and most small business customers ways to easily manage their account and monitor daily usage from anywhere in the United States. The Mobile App was developed, and continues to be enhanced, based on customer feedback, with the most requested features being the ability to view and pay bills, report an outage, enroll in billing and payment programs, view billing history, monitor energy usage, receive personalized offers, and receive outage restoration updates. The Mobile App also provides links to some

of our most-used account management service features, such as customer requests to start, stop, and move their natural gas service. Mobile App log-in is streamlined with the web portal by using the same customer log-in for both and offers the option to use fingerprint or facial recognition for a fast, secure sign-in if a customer's device supports biometrics. As I mentioned earlier in my testimony, the Company has recently made Apple Pay and Google Pay available as payment options on the Mobile App in December of 2024 and April of 2025, respectively, and they have been well-received by customers. In partnering with our payment vendor to provide Apple Pay and Google Pay, customers can now make quick and easy card payments using their phone wallets. Another new enhancement to the Mobile App that was released to customers last year is the chatbot. The chatbot remediates navigation confusion, answers frequently asked questions, and provides access to external features. For example, the chatbot directs customers to the Duke Energy website for additional information or the authenticated space for certain account-specific features. The Mobile App team recently won an industry award for the development of its chatbot.

The Company's Web Portal has remained a key digital channel for customers to manage their accounts online, with the functionality to easily and conveniently pay their monthly bill, set up auto-pay, update accounting information, and start, stop, or transfer service. Customers can also track their energy usage over time, which can help them understand consumption patterns and make informed decisions for how to efficiently manage their energy usage.

Overall, the Mobile App and Web Portal are increasingly critical channels for customers to interact with the Company. Digital channels enable real-time communication and interactions between customers and Duke Energy, and the top digital interactions include payment and service inquiries. In 2024 alone, Duke Energy Kentucky customers leveraged the web and mobile digital channels to make more than 400 thousand payments.

Live Chat

In 2023, the Company enhanced the online Web Portal to pilot the functionality for a customer to chat live with a customer service specialist. The chat icon is visible to customers during business hours when a specialist is available. After validating a customer's account information, the customer is routed to a specialist to complete their request. Since the launch of live chat in July 2023, nearly 5,000 successful live chat sessions have been handled by the Company, primarily related to billing and payment questions. Based on the success of the pilot, including positive customer feedback, the Company made live chat a permanent option for customers in early 2024.

In addition, the functionality of live chat was recently enhanced to enable account identification to customer service specialists automatically based on web login credentials and to integrate frequently asked questions. This function passes the customers' account information to the specialist to serve the customers' needs more efficiently.

Integrated Voice Response

Like our digital channels, customers can seamlessly self-serve through our

voice channel via Integrated Voice Response (IVR). The key technology enabling self-service for customer calls is the Company's advanced language IVR system. In 2024, the IVR contained over 62% of the calls to the Company, meaning customers efficiently self-served, saving time for the customers, and providing customer service agents time to serve other customers. Self-service functionality, such as requesting a payment arrangement, can be done through voice-activated prompts, helping to provide a more positive customer experience. There are also self-serve options for customers to enroll in, or withdraw from, Budget Billing, add their card information to Speedpay wallet for easy access, update their account's phone number, and request their account number. Another feature of IVR is First-in-Line, which allows customers to either remain on hold or select a call back number in busier than normal call volumes, where they can be reached when a service representative becomes available.

With the capabilities provided by Customer Connect and new enhancements to the IVR, we can better connect with customers through texting experiences. Customers can receive texts with additional options and links and even respond to receive more options. For example, if a bill reminder is texted and a customer responds saying they are not able to pay by the due date, the system can recognize that message and provide options or a link to set up an installment plan.

IV. LOW-INCOME CUSTOMER SUPPORT

Q. HOW DOES DUKE ENERGY KENTUCKY WORK TO SUPPORT ITS LOW-INCOME CUSTOMERS?

A. Support for low-income customers is a priority for Duke Energy Kentucky. In recent years, the Company has recognized that utility assistance agencies serve as

a critical channel for customers to receive support. The Company continues to leverage its Agency Team, which is a single dedicated point of contact for these utility assistance agencies. Additionally, we have established an Agency Portal. This digital tool was built to aid utility assistance agencies in streamlining and efficiently applying pledges and exchanging required information to secure assistance for those in need. Specifically, the platform helps provide agencies with account details to inform pledge decisions, the ability to create and pay pledges, and dashboard views of their activity. The success of the Agency Team is evidenced by the nearly $3.8 million in assistance funds that Duke Energy Kentucky customers have received since 2023.

The Company's Share the Light Fund (STLF) is another way that Duke Energy continues to aid qualifying customers who are struggling to pay their natural gas and electric bills. Share the Light Fund contributions are received from employees and customers, as well as Duke Energy shareholders. Each year, Duke Energy Kentucky contributes $25,000 and will match dollar for dollar up to $25,000 in customer contributions. The Share the Light Fund is administered in partnership with the Northern Kentucky Community Action Commission (NKCAC) using federal low-income guidelines, as well as need, to determine program eligibility.

Additionally, the Company offers the Home Energy Assistance (HEA) program that provides another source of monthly bill assistance for eligible customers whose income is up to 200 percent of the federal poverty level. Active Duke Energy combination electric and natural gas customers can receive up to $99

per month between January-April and July-September through the subsidy component, and natural gas only customers can receive up to $173.25 per month between January-April. Additionally, up to $400 is available for immediate assistance through the crisis component for customers who have a past-due balance and/or are in danger of disconnection. This program is funded through a combination of customer charges and $50,000 in shareholder contributions, and managed by Community Action Kentucky, Inc., and locally, its subcontractor, the NKCAC.

The Company also has an Income Qualified Services Program that is comprised of Weatherization and Payment Plus programs. The Payment Plus program is available to qualifying residential customers and provides the opportunity to receive up to a $500 reduction on their utility bill. This program is coordinated by the NKCAC and customers are able to earn the reduction on their utility bill by participating in three activities at no cost to them. Through participation in the program, customers will learn how to control their energy bills, receive money-saving tips for balancing their budget and can have their home weatherized. The Company partners with People Working Cooperatively (PWC) to aid in its Weatherization Program that aims to help qualifying customers save energy and decrease expenses through the implementation of energy-saving measures in their homes. In the 2023-2024 program year, nearly 100 Duke Energy Kentucky customer homes received weatherization services.

V. CUSTOMER SATISFACTION

Q. HOW DOES THE COMPANY SEEK TO MEASURE EXCELLENCE IN CUSTOMER SERVICE?

A. We recognize that customer expectations continuously evolve and that it is critical we hear and understand the "Voice of the Customer" to improve overall customer satisfaction (CSAT). To that end, we operate a robust CSAT program, which includes proprietary relationships and transactional CSAT studies. We analyze results from these studies in monthly data review sessions, with findings driving improvements to processes, technology, and behaviors, all to continuously improve the customer experience.

As discussed by Witness Spiller, we measure overall customer satisfaction and perceptions about the Company through an ecosystem of measurement tools. One of these tools is the CX Monitor survey that is sent annually to all residential, SMB customers, and large business customers for whom we have a valid email address. Customers are asked to provide feedback regarding their overall sentiment as well as satisfaction with key experiences they have had with the Company over the past twelve months. Examples of these experiences include billing and payment and power quality and reliability. Customers rate overall sentiment and key experience satisfaction on a '0-10' scale, while also providing open-ended verbatim comments detailing the primary reasons for their score.

In addition to our CX Monitor survey, we use Fastrack 2.0, a proprietary, post-transaction CSAT measurement program. Fastrack 2.0 measures customer satisfaction with recent interactions customers have had with the Company. Fastrack 2.0 was intentionally designed to complement the CX Monitor survey and

provide greater insight into experiences that matter to our customers and near real time feedback to our front line, customer-facing employees. The survey questions cover the customer experience regarding completed field work, including requests to start and transfer natural gas service and repair gas trouble/leaks. Analysis of these ratings helps to identify specific service strengths and opportunities that drive overall satisfaction and to provide guidance for the implementation of process and performance improvement efforts.

We also implemented Reflect, a post-contact survey that offers customers the opportunity to provide immediate feedback after they contact us by web, call to the automated system, or call to a live agent. This tool provides critical feedback to help improve the channels customers use when interacting with us. In 2024, the Reflect program collected more than 5,500 Duke Energy Kentucky responses, with 76% of customers on average providing the highest satisfaction ratings ('9' or '10' on a '0-10' point scale).

Q. HOW DOES A CUSTOMER BRING AN ISSUE TO THE COMPANY'S ATTENTION?

A. Our customers have multiple channels to voice an issue, including through our customer care team, engaging on social media platforms, our website, email, through our employees, or utilizing our Ethics line. Additionally, as previously mentioned, CX Monitor and Fastrack are two key proprietary surveys we use to continually monitor and track customer feedback. At the end of each survey, customers are invited to share additional comments regarding any outstanding questions they have for us that still need to be answered or issues that still need to

be resolved. These comments are converted into high priority "Hot Alerts" and forwarded to the Consumer Affairs team for resolution, with a member of our customer service staff personally contacting the customer to ensure satisfactory resolution to the customer's question or issue. Separately, a Hot Alert may be triggered by an automated keyword software review of survey statements, which may indicate potential customer frustration or a negative experience, even if the customer did not directly ask for follow up.

Furthermore, customers raise issues and inquiries directly with our employees. Our employees can then use the "I Can Help" tool to report the concern, kickstart the resolution process, and track it to completion. While the Company remains committed to gathering feedback from customers through various survey instruments, we are also making it easier for customers to contact us, receive assistance, follow-up, and resolution. Most importantly, we are leveraging innovative tools to proactively address issues and reduce complaints and complaint escalation from customers.

Q. HOW DOES THE COMPANY UTILIZE THE RESULTS FROM ITS MEASUREMENT TOOLS?

A. The ecosystem of measurement tools described above was intentionally designed to understand what is working well from a customer perspective and to identify opportunities to improve the customer experience. Actual performance metrics, overall CX Monitor perceptions, Fastrack 2.0 ratings, Reflect feedback, industry CSAT benchmarks and trends, and customer complaints and feedback, all work in concert to assist the Company in targeting areas for improvement and enhancement.

By way of example, the program proposals and discussed improvements set forth in my testimony are born from the Company's measurement tools ecosystem.

VI. FEE FREE PAYMENT PROPOSAL

Q. IS THE COMPANY PROPOSING ANY NEW CUSTOMER-RELATED PROGRAMS OR CHANGES TO EXISTING PROGRAMS?

A. Yes. The Company is proposing one new customer program that will alleviate the most frequently expressed payment-related frustration of residential customers: payment fees. The program would expand the available fee-free payment options to now include payments by debit cards, prepaid cards, credit cards and electronic check (collectively, Card Payments).

Q. PLEASE DESCRIBE THE COMPANY'S CURRENT FEE-FREE PAYMENT OPTIONS AND EXPLAIN WHY THERE ARE NO FEES ASSOCIATED WITH THOSE OPTIONS.

A. Currently, the Company accepts residential customer payments through check, money order, cash (via some walk-in payment locations), automated bank drafts, and Electronic Funds Transfer without fees. The costs for the Company to offer these payment methods are built into the cost of service, paid for by all customers, and are not recovered exclusively from those specific customers that use these methods of payment.

Q. DOES THE COMPANY EXPECT THE PROGRAM TO MAKE PAYMENT OPTIONS MORE INCLUSIVE FOR ALL RESIDENTIAL CUSTOMER SEGMENTS?

A. Yes. Expanding the available fee-free payment options to include Card Payments would make payment options more inclusive for all residential customers. It is

important to ensure that all residential customers, regardless of how their income is received, have access to convenient methods to pay their utility bill without a frustrating or burdensome fee. For example, prepaid and reloadable debit cards are becoming more prevalent as workers' paychecks, Social Security benefits, tax refunds, Medicare benefits, and unemployment benefits are being distributed via these card types. Prepaid card utilization is growing more quickly than debit or credit,[1] and these customers should not be isolated from fee-free options simply because a loadable card is utilized by an employer for payroll, a governmental agency to issue benefits, or the customer is unbanked or underbanked. Additionally, fee-free Card Payments are important to some of the most vulnerable customers. For example, 49% of the Company's agency assistance recipients utilized the Card Payment channel at least once over the past six months compared to only 19% of non-recipients. As we learn more about our customers' payment needs, it is apparent that customers would benefit and be more satisfied with the ability to make their payments without incurring additional fees.

Q. HAS THE COMPANY MADE ANY RECENT ADDITIONS FOR FEE-FREE PAYMENT OPTIONS?

A. In September 2024, the Company began offering fee-free payments at 16 walk-in payment locations within Kroger supermarkets in order to be more inclusive with payment offerings. Customers continue to request additional fee-free payment

[1] According to the Federal Reserve Payments Study: 2022 Triennial Initial Data Release, prepaid debit card payments had the greatest growth rate by number (9.6% per year), reaching 18.1 billion payments in 2021. *See* The Federal Reserve Payments Study: 2022 Triennial Initial Data Release, available at https://www.federalreserve.gov/paymentsystems/2023-April-The-Federal-Reserve-Payments-Study.htm (last accessed Nov. 19, 2024).

options, and fee-free card payments will further expand these options for customers to make payments without a fee.

Q. PLEASE DESCRIBE THE TRANSACTION FEE CURRENTLY ASSOCIATED WITH CARD PAYMENTS AND HOW THOSE FEES ARE COLLECTED.

A. If a residential customer wants to make a Card Payment, there is currently a $1.25 (recently lowered from $1.50) transaction fee collected in order to do so. The transaction fees associated with Card Payments are collected by the third-party directly from the customer at the time of transaction.

Q. HAVE THE COMPANY'S RESIDENTIAL CUSTOMERS REQUESTED CARD PAYMENTS TO BE FEE FREE?

A. Yes. The requirement to pay a transaction fee when making a Card Payment for utility service is one of the largest frustrations a customer experiences when paying their Duke Energy Kentucky bill. Card Payments are also a necessary method of payment by many customers which makes the imposition of the per transaction fee increasingly dissatisfying. Few industries charge a per transaction fee for Card Payment processing and customers have grown accustomed to paying for other life necessities without a separate, additional fee. For example, the feedback received in the Company's recent residential surveys shows that many customers note that payment fees are what they liked least about their billing and payment experience:

- *"Most companies that offer online payment as a convenience to their customers don't charge a fee. You should not charge a fee."*
- *"The $1.50 fee is not good. [Convenience] to pay a bill should not cost!"*
- *"I have a Medicare Advantage plan which would cover my bill but you charge a surcharge to use my card. This is unacceptable..."*

A significant number of additional comments related to card payment fee frustrations from Kentucky customers are included in Attachment LBP-1.

Q. HAS THE COMPANY MADE ANY EFFORTS TO MAKE THE CARD PAYMENT CHANNEL MORE AFFORDABLE?

A. Yes. In 2024, residential customers saw a reduction in the Card Payment fee to one of the lowest in the industry. Through the Company's successful renegotiation with the third-party credit card payment processor, Speedpay, the third-party fee was reduced by 17% for residential customers, from $1.50 to $1.25 per residential transaction.

Q. DOES THE COMPANY RECEIVE ANY PORTION OF THE CONVENIENCE FEES?

A. No, the Company does not receive any portion of the convenience fees.

Q. WILL DUKE ENERGY KENTUCKY STILL OWE SPEEDPAY THE CARD TRANSACTION FEES?

A. Yes, under the expanded fee-free proposal, Duke Energy Kentucky would pay the $1.25 per transaction fee for Card Payments to the third-party credit card payment processor, Speedpay.

VII. SCHEDULES AND FILING REQUIREMENTS SPONSORED BY WITNESS

Q. PLEASE DESCRIBE SCHEDULE D-2.26.

A. Schedule D-2.26 is an adjustment to reflect expenses related to Card Payment fees. The adjustment increases operating expense in the forecasted test period by $237,738.

VIII. CONCLUSION

Q. WERE SCHEDULE D-2.26 AND ATTACHMENT LBP-1 PREPARED BY YOU OR AT YOUR DIRECTION AND UNDER YOUR CONTROL?

A. Yes.

Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?

A. Yes.

VERIFICATION

STATE OF NORTH CAROLINA)
) **SS:**
COUNTY OF MECKLENBURG)

The undersigned, Lindsay B. Philemon, Manager, Customer Governance & Compliance, being duly sworn, deposes and says that she has personal knowledge of the matters set forth in the foregoing testimony and that it is true and correct to the best of her knowledge, information and belief.

Lindsay B. Philemon Affiant

Subscribed and sworn to before me by Lindsay B. Philemon on this 13th day of May, 2025.

NOTARY PUBLIC

My Commission Expires:

CHRISTINE PURSER
NOTARY PUBLIC
Mecklenburg County, North Carolina
My Commission Expires July 20, 2025

Sample of 2023, 2024, and 2025 Customer Survey Comments Regarding Card Payment Fee

- *"Convenience fee" is unnecessary.*
- *$1.50 fee is ridiculous*
- *Again I don't think there should be a service fee to pay online because everything is online these days.*
- *App is easy to use wish you didn't [charge] for using a debit card though*
- *Credit card fees should go away*
- *Do not like processing fees*
- *Do not like the "convenience fee".*
- *Do not like the service charge to pay via credit card, it's 2024.*
- *Don't enjoy paying a fee for speed pay*
- *Don't charge customers a fee to pay online.*
- *Don't like that you have to pay a fee.*
- *Don't like the additional processing fee that is charged.*
- *Don't like the credit card payment fees*
- *Duke Energy is the only company we do business with that charges a fee to pay bills online!*
- *Duke website charges a service fee for paying your bill.*
- *Easy app experience, I don't like the service fee to pay using a card. Seems excessively expensive.*
- *Easy to pay bill but don't agree with the fee to pay online using a credit card*
- *Easy to use, just hate paying a fee to pay online.*
- *Extra fees for credit card processing. Its just something else to bill people for.*
- *Fees are annoying when paying online.*
- *Forced to pay an extra fee to use service.*
- *Get rid of fee for paying bill*
- *Hate that there's a fee for using a card online.*
- *Hate that you have billing fees to pay when paying on line.*
- *Hate to be charged to pay online*
- *I do not like the fee that I have to pay everytime that I pay online. It should not be a fee to pay your bill, especially when you are paying on time or early.*
- *I do not like the transaction fees for payments through mobile app.*
- *I don't believe there should be a fee to pay your bill.*
- *I don't like having to [pay] a fee, but other than that it's easy!*
- *I don't like that your credit and debit payments charge fees. There are plenty of other companies that allow this option free of charge. Otherwise, great experience.*
- *I don't like the fact that you charge a fee to pay online.*
- *I don't like the processing fee.*

- *I don't like to pay the extra fee when I paid online.*
- *I don't understand the online service fee!*
- *I have a Medicare Advantage plan which would cover my bill but you charge a surcharge to use my card. This is unacceptable...*
- *I just don't like paying the extra fee for credit cards.*
- *I like to use a credit card to pay, don't like that I'm charged a fee every time.*
- *I love paying it online just hate the fees*
- *I pay online using the Duke Energy website. I don't like having to pay the fee for this service.*
- *I shouldn't have to pay a credit card fee to pay my bill.*
- *I sometimes pay online using the Duke web site but there is a fee to pay on line. There should never be a fee for that convenience.*
- *I suggest removing credit card fees from online payments. I would love to get away from pay by mail.*
- *I wish there was no credit card fee*
- *I wish I could use my credit card without a fee.*
- *I would like to pay online using my credit card without being charged a fee.*
- *I would like to pay [with] a credit card without [paying] and extra fee as long as I am [paying] early or on time.*
- *It's easy to pay…I appreciate all the ways to pay although I don't like the fee attached when using the website*
- *Let me use a credit card without a fee*
- *Not sure why there is a processing fee*
- *Online/App Portal to pay is easy to use. The extra fees to use a credit card are annoying.*
- *Paying a fee to pay my bill with my debit card is ridiculous*
- *Paying online there's a fee of 1.50 I don't think there should be a fee*
- *Prefer not to pay a credit card processing fee*
- *Remove the fee for paying online*
- *Service fees for paying online…????*
- *Should not be charged a fee to pay online*
- *Should not charge a fee!!!!*
- *Shouldn't have to pay a fee for paying.*
- *Stinks to pay a fee to use a debit card*
- *The 1.50 fee should be waived if paying in full*
- *The 1.50 fee needs to go.*
- *The convenience fee is annoying.*
- *That fact I have to pay a fee to use my card is absurd*
- *The fee for online payment seems unnecessary.*
- *The fee isn't great when using CC*

- *The fee to use a card shouldn't be. No other business charges to pay a bill with a card online*
- *The only thing I would say I didn't like is the fee for payment*
- *The service fee to pay electronically seems to be outdated in an electronic landscape that has been prevalent for several years*
- *We shouldn't have to pay a processing fee.*
- *We would rather pay online but don't like the fee to do so.*
- *Website is easy to use but we shouldn't be charged a fee.*
- *Wish the fee for using a credit card was gone.*
- *Would be nice if there wasn't a fee for using a credit card.*
- *Would like to pay by credit card without the extra fee.*

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 NATURAL GAS RATES; 2) APPROVAL OF NEW TARIFFS; AND 3) ALL OTHER REQUIRED APPROVALS, WAIVERS, AND RELIEF.	))))))	CASE NO. 2025-00125

DIRECT TESTIMONY OF

BRUCE L. SAILERS

ON BEHALF OF

DUKE ENERGY KENTUCKY, INC.

June 2, 2025

TABLE OF CONTENTS

PAGE

ATTACHMENTS:

I. INTRODUCTION AND PURPOSE

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Bruce L. Sailers, and my business address is 139 East Fourth Street, Cincinnati, Ohio 45202.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by Duke Energy Business Services LLC (DEBS) as Director, Jurisdictional Rate Administration for Duke Energy Kentucky, Inc., (Duke Energy Kentucky or the Company) and Duke Energy Ohio, Inc. DEBS provides various administrative and other services to Duke Energy Kentucky and other affiliated companies of Duke Energy Corporation (Duke Energy).

Q. PLEASE BRIEFLY DESCRIBE YOUR EDUCATION AND PROFESSIONAL EXPERIENCE.

A. I received a Bachelor's Degree in Finance and Quantitative Analysis and a Master's Degree in Marketing from the University of Cincinnati. After three years working with Marathon Oil Company as a systems analyst, I began my career in 1990 with The Cincinnati Gas & Electric Company, a predecessor to Duke Energy Ohio, in Load Forecasting. Through 2014, over varying lengths of time, I worked in Load Forecasting, Market Research, and Product Development Analytics (Demand Response). I assumed my current role under the title Rates and Regulatory Strategy Manager, Pricing & Rate Options, in January 2014. Having the same responsibilities, my title has since changed to Manager, Rates and Regulatory Strategy and again to Director, Jurisdictional Rate Administration.

Q. PLEASE DESCRIBE YOUR DUTIES AS DIRECTOR, JURISDICTIONAL RATE ADMINISTRATION.

A. As Director, Jurisdictional Rate Administration, I am responsible for rate design, as well as certain duties related to tariff administration, billing, and revenue reporting in Kentucky and Ohio. I prepare filings to modify charges and terms in Duke Energy Kentucky's retail tariffs and develop rates for new services. During major rate cases, I am responsible for the design of new base rates. Additionally, I frequently work with Duke Energy Kentucky's customer contact and billing personnel to answer rate-related questions and to apply the retail tariffs to specific situations. Occasionally, I meet with customers and Company representatives to explain rates or provide rate training. I also prepare reports that are required by regulatory authorities.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE KENTUCKY PUBLIC SERVICE COMMISSION?

A. Yes. In addition, I have also provided testimony in cases before the Indiana Utility Regulatory Commission, the North Carolina Utilities Commission, and the Public Utilities Commission of Ohio.

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

A. I am responsible for Duke Energy Kentucky's proposed natural gas rate design. My testimony will demonstrate that the rates Duke Energy Kentucky proposes are just and reasonable, that they reflect appropriate rate-making principles, and that they result in an equitable basis for recovery of Duke Energy Kentucky's revenue

requirements across its various customer classes and rate schedules. I describe changes that have been made to the Company's retail natural gas rate schedules, riders, and natural gas Service Regulations, and quantify the effect of these changes to our retail natural gas customers. I sponsor Schedules L, L-1, L-2.1, L-2.2, M, M-2.1 through M-2.3 and N. I also sponsor Filing Requirements (FR) FR 16(1)(b)(3), FR 16(1)(b)(4), FR 16(8)(l), FR 16(8)(m) and FR 16(8)(n). The "L" series of schedules satisfy FR 16(1)(b)(3), FR 16(1)(b)(4), and FR 16(8)(l). The "M" series of schedules satisfies FR 16(8)(m), and the "N" schedule satisfies FR 16(8)(n). Finally, I sponsor the content required in the Company's publication notice under 807 KAR 5:001 Section 17, as reflected in FR 17(4).

II. SCHEDULES AND FILING REQUIREMENTS SPONSORED BY WITNESS

Q. PLEASE DESCRIBE SCHEDULE L.

A. Schedule L has four parts. The first part, identified as Schedule L, is my "Narrative Rationale for Tariff Changes." This schedule describes the changes to Duke Energy Kentucky's current tariffs and the reasons for those changes.

Q. PLEASE DESCRIBE SCHEDULE L-1.

A. Schedule L-1 shows the rate schedules that Duke Energy Kentucky proposes to implement. This schedule contains all tariff sheets including those where no changes are proposed in this case.

Q. PLEASE DESCRIBE SCHEDULE L-2.1.

A. Schedule L-2.1 contains Duke Energy Kentucky's current rate schedules indicating through underlining and coding where changes occur in the proposed rate schedules. There are no proposed changes to tariff schedule sheet numbers 1, 11, 20, 21, 22, 23,

24, 25, 26, 27, 28, 29, 55, 57, 59, 60, 61, 62, 70, 77, and 80.

Q. PLEASE DESCRIBE SCHEDULE L-2.2.

A. Schedule L-2.2 contains Duke Energy Kentucky's proposed rate schedules, showing the revisions that Duke Energy Kentucky proposes in this filing. Proposed changes are crossed out and underscored and coded by letter in the right-hand margin.

Q. PLEASE DESCRIBE SCHEDULE M.

A. Schedule M is a one page, side-by-side comparison of Duke Energy Kentucky's test period revenues at current and proposed rates; Schedule M shows that Duke Energy Kentucky is proposing a 16.8 percent increase in the Residential service class, a 19.3 percent increase in the General Service class, a 3.2 percent increase in the Firm Transportation-Large service class, and a 4.8 percent increase in the Interruptible Transportation service class. These average increases are based upon base rates which include the gas cost adjustment clause and other riders. There is also a Schedule M provided for base period revenues at current and proposed rates.

Q. PLEASE DESCRIBE SCHEDULE M-2.1.

A. Schedule M-2.1 shows test period base revenue dollars at current rates and the percentage distribution among the various rate classes, as well as a breakdown of total revenue. Schedule M-2.1 also shows the actual base revenue average rates per thousand cubic feet of gas (Mcf) for each rate class. There is also a Schedule M-2.1 provided for base period base revenue dollars.

Q. PLEASE DESCRIBE SCHEDULES M-2.2 AND M-2.3.

A. Schedule M-2.2, page 1, shows the test period bills in summary form, base

revenues under current rates, current total revenues, and proposed base revenue increases, all broken down by rate and revenue class. The billing determinants used on these schedules are normalized sales for the twelve months ended December 31, 2026. Schedule M-2.2, pages 2 through 7, contains a detailed calculation of test period numbers using current rates as well as the proposed revenue increase, by rate and revenue class, as summarized on Schedule M-2.2, page 1. Schedule M-2.3 is almost identical to M-2.2, page 1, except that it shows the revenue summary and detailed data calculated at the rates proposed in this case.

Q. PLEASE DESCRIBE SCHEDULE N.

A. Schedule N shows monthly bill comparisons for various consumption levels under each of Duke Energy Kentucky's primary tariff schedules, Rates RS, GS, IT, and FT-L. This schedule allows comparisons and assessment of how these changes impact customers' bills.

Q. PLEASE DESCRIBE FR 16(1)(b)(3).

A. FR 16(1)(b)(3) shows the proposed tariffs in a form complying with 807 KAR 5:011 Section 6. The effective dates of these tariffs are not less than 30 days from the date of the filing of the application in the present case. This filing requirement is met by the L series of schedules I previously described.

Q. PLEASE DESCRIBE FR 16(1)(b)(4).

A. FR 16(1)(b)(4) consists of Duke Energy Kentucky's current tariffs in a comparative form showing proposed changes. The changes are reflected by underscoring additions and striking over deletions. This filing requirement is also

met by the L series of schedules I previously described.

Q. PLEASE DESCRIBE FR16(8)(l).

A. FR16(8)(l) includes a narrative description and explanation of all proposed tariff changes. This filing requirement is also met by the L series of schedules I previously described.

Q. PLEASE DESCRIBE FR 16(8)(m).

A. FR 16(8)(m) shows the revenue summary for both the base period and the forecasted period with supporting schedules that provide detailed billing analysis for all customer classes. These schedules show the amount of change requested in dollars and the resulting percentage increase for each customer classification and by each rate classification to which the change will apply. In the present case, Duke Energy Kentucky proposes an overall revenue increase including riders of 17.1 percent, which breaks down as previously described. This filing requirement is met by the M series of schedules.

Q. PLEASE DESCRIBE FR 16(8)(n).

A. FR 16(8)(n) shows the typical bill comparison under present and proposed rates for customer classes, current and proposed rates for each customer class, and the rate schedule to which the change would apply. This filing requirement is met by the N schedules previously described.

Q. PLEASE DESCRIBE FR 17(4)(a).

A. FR 17(4)(a) shows the proposed effective date and the date the proposed rates are expected to be filed with the Commission. In this case the effective date is July 2, 2025, and the dates the proposed rates are expected to be filed are June 2, 2025.

Q. PLEASE DESCRIBE FR 17(4)(b).

A. FR 17(4)(b) shows the present rates and proposed rates for each customer classification to which the proposed rates will apply.

Q. PLEASE DESCRIBE FR 17(4)(c).

A. FR 17(4)(c) shows the amount of the change requested in both dollar amounts and percentage change for each customer classification to which the proposed rates will apply.

Q. PLEASE DESCRIBE FR 17(4)(d).

A. FR17(4)(d) shows the amount of the average usage and the effect on the average bill for each customer classification to which the proposed rates will apply.

Q. PLEASE DESCRIBE FR 17(4)(e) THROUGH (j).

A. FR17(4)(e) through (j) are statements required for inclusion in the Company's notice to customers, including that customers may examine the Company's application at its offices, at the Commission's offices, or on its website. The statements include instructions for submittal of comments to the Commission and that the rates are only proposed and could be changed by the Commission, as well as instructions for intervention. As evidenced by the Company's Notice, Attachment BLS-1, these various statements are included.

III. RETAIL NATURAL GAS RATE SCHEDULES AND RIDERS

A. Rate Design and Major Retail Natural Gas Rate Schedules

Q. HOW DID YOU DESIGN THE VARIOUS RATE SCHEDULES IN THIS CASE?

A. I used the cost of service information provided by Duke Energy Kentucky witness Douglas J. Heitkamp as a basis for the rate design. As more fully described in his

testimony, the cost of service information provided for the allocation of costs to the various classes, separation of customer and demand components of cost, and further reduced subsidy/excess revenue by 50 percent.

Q. PLEASE DESCRIBE ANY OTHER CONSIDERATIONS THAT GUIDED YOUR RATE DESIGN.

A. First, Duke Energy Kentucky supports the general concept that rates charged to core markets, which include customers in the residential, commercial, industrial, and other public authority classes, should approximate the cost of providing these customers with service. This is because it is intrinsically fair that customers should pay rates that reflect the cost that the utility incurs to provide the service. Duke Energy Kentucky's proposed rates in this case make reasonable movement toward reflecting the cost of service developed and sponsored by Mr. Heitkamp. In particular, the Company proposes increased customer charges for rate schedules RS and GS to better align the charges with cost causation. For Rate RS, the rate design concept of gradualism is incorporated to temper the proposed customer charge increase.

Q. WHAT ARE THE COMPANY'S MAJOR RETAIL NATURAL GAS RATE SCHEDULES?

A. The Company's major retail natural gas rate schedules include: Rate RS - Residential Service (Rate RS); Rate GS –General Service (Rate GS); Rate IT – Interruptible Service (Rate IT); and Rate FT-L - Firm Transportation Service (Rate FT-L). Together, these rate schedules comprise a substantial portion of the Company's retail natural gas revenue requirement.

Q. PLEASE DESCRIBE THE COMPANY'S RATE DESIGN OBJECTIVES FOR RATES RS, GS, IT, AND FT-L.

A. Given the overall percentage increase in this case, our rate design objective for these rate schedules is to generally increase the rates to maintain a similar structure that minimizes impacts to the class of customers while collecting the total revenue requirement. Aside from this, there are no significant structural changes to the rate schedules. In addition, as more fully described below, the Company has a Weather Normalization Adjustment (WNA) Rider applicable to Rates RS and GS. This rider normalizes the volumetric component of base revenues for Rates RS and GS customers' bills, adjusting the bills to mitigate the volatility in natural gas consumptions due to abnormal weather during winter months.

Q. WHAT ARE THE PROPOSED CUSTOMER CHARGES?

A. The proposed customer charge for each rate is as follows: for Rate RS, $21.00; for Rate GS, $65.00; for Rate IT, $430.00; and for Rate FT-L, $430.00. Attachment BLS-2 sets forth the customer-related costs of providing service to the various customer classes. This information was obtained from the functional cost of service study provided by Mr. Heitkamp and dividing the customer component revenue requirement by the applicable class test period number of bills. These customer charges better align the recovery of customer-related costs with the fixed nature of these costs resulting in a better price signal to customers.

Q. DO THE PROPOSED CUSTOMER CHARGES ALIGN WITH THE RATE DESIGN PRINCIPLE OF GRADUALISM?

A. Yes. As shown in Attachment BLS-2, the cost of service study supports a residential customer charge value of $32.56. However, the Company proposes a residential customer charge of $21.00. Similarly, the Rate GS customer charge is proposed to modestly increase from the current value of $58.00 to $65.00, while the cost of service study supports a customer charge of $72.12.

Q. WHAT ARE THE ADMINISTRATIVE CHARGES PROPOSED FOR RATES FT-L AND IT?

A. Customers may receive service through a combination of Rates FT-L and IT and in this situation only receive one administrative charge on their bill. Therefore, the Company proposes the current administrative charge for both rates remain at $430.00, which is between the charges supported by the cost of service study of $248.29 for Rate FT-L and $463.18 for Rate IT.

Q. HAVE YOU PREPARED RATE SCHEDULES FOR THE COMPANY'S NATURAL GAS RATES?

A. Yes. Again, there are no significant structural changes. The design objective of the natural gas rates was to collect the revenue requirement while maintaining the existing structural characteristics of the rate schedules. More information is provided on Schedule L.

B. Weather Normalization Adjustment Rider (Rider WNA)

Q. PLEASE DESCRIBE RIDER WNA?

A. In this case, the Company proposes a normalized level of revenues and expenses

for a test period, which is designed to be the most reasonable estimate of the Company's operations during the time the rates are to be in effect. These normalized revenues and expenses include the assumption of normal weather conditions to eliminate unusual weather-related fluctuations in the test period that may otherwise cause rates to be set too high or too low. Specifically, test period weather related sales volumes reflect normal levels of heating degree days. (A heating degree day value is calculated by taking the difference between average daily temperature and a base temperature value). As described in Company witness Mr. Jonathan Thorpe's testimony, the average daily temperatures represent normal weather and are determined based on 30 years of past weather data. However, normal weather rarely occurs which can cause customers' bills to fluctuate significantly from month to month and can result in the Company earning more or less than the authorized rate of return. In an effort to help reduce these fluctuations in customer bills and Company earnings, the Company's WNA mechanism adjusts the volumetric component of base delivery charges on customer bills to reflect normal weather conditions. Although customers use gas all year round, the largest share of the Company's revenue is dependent on heating load. Heating load generally occurs during the months of November through April (*i.e.*, winter months) and, because it is highly correlated with temperature, can vary significantly when the temperature deviates from "normal." Under the WNA mechanism, when temperatures are colder than normal, volumetric sales will be higher than normal and the customer will receive a credit on their bill. When weather is warmer than normal, volumetric sales will be lower

than normal; so, the customer's bill includes a surcharge. The result is that customers' bills during winter months should not fluctuate as significantly as they would without a WNA mechanism, and the Company should receive more stable base revenues.

Q. HOW IS THIS ADJUSTMENT PERFORMED?

A. The equation for the WNA mechanism can be found on Rider WNA, Sheet No. 65 in Schedule L-1. As detailed, the adjustment is based on the difference between actual and normal degree days associated with a customer's billing period. This heating degree day deviation is combined with two class level parameters to calculate a delivery charge rate adjustment that is applied to the customer's consumption for the billing period. The two class level parameters are called the Base Load (BL) and the Heat Sensitivity Factor (HSF).

Q. WHAT VALUES ARE PROPOSED FOR THE BL AND HSF?

A. As discussed in Mr. Thorpe's testimony, the proposed values for BL and HSF are 0.986070 Mcf and 0.014698 Mcf/DD, respectively, for Rate RS. For Rate GS, they are 11.921161 Mcf and 0.100621 Mcf/DD, respectively. As ordered by the Commission in Case 2018-00261, these proposed values will be updated whenever the Company files a base rate case. Since these factors will only change through a base rate case, they are now included on Tariff Sheet No. 65.

C. New Riders

Q. DOES THE COMPANY PROPOSE ANY NEW RIDERS IN THIS CASE?

A. No.

D. Revised Riders and Miscellaneous Charges

Q. DOES THE COMPANY PROPOSE TO ELIMINATE ANY TARIFF SCHEDULES IN THIS CASE?

A. No.

Q. WHAT CHANGES ARE PROPOSED TO THE COMPANY'S CHARGES FOR RECONNECTION OF SERVICE, SHEET NO. 81?

A. Duke Energy Kentucky proposes revision to the charges for reconnection of natural gas service as discussed below:

(1) The reconnection charge for service which has been disconnected due to enforcement of Rule 3, Sheet No. 25, Billing and Payment shall be $110.00.

(2) The reconnection charge for service which has been disconnected within the preceding twelve months at the request of the customer shall be $110.00.

(3) The reconnection charge for service which has been disconnected because of fraudulent use shall be $110.00.

(4) The Company proposes to eliminate the seasonal soft close option. If customers desire to disconnect during the summer months, a hard close process will be required.

Q. WHAT INFORMATION IS USED TO SUPPORT THE SERVICE RECONNECTION COSTS?

A. Confidential Attachment BLS-3 shows the calculation of natural gas service reconnection and the Company's proposed value.

Q. DESCRIBE THE INFORMATION PRESENTED IN ATTACHMENT BLS-3, CALCULATION OF RECONNECTION FEES.

A. The reconnection fee calculations use a weighted average calculation including an internal Company rate for employee performed reconnections, which includes no labor costs as directed by the Commission in Case No. 2021-00190, and a confidential, contractually set price paid for reconnections performed by contractors.

Q. IS THE COMPANY PROPOSING ADDITIONAL CHANGES TO MISCELLANEOUS CHARGES?

A. Yes. The Company proposes to make changes to the Meter Pulse Service rate, Rate MPS.

Q. WHAT CHANGES ARE MADE TO RATE MPS, SHEET NO. 84?

A. The Company proposes to increase the Meter Pulse Equipment and the Meter Index costs to $1,025 and $760, respectively, due to the increased cost to provide this equipment as supported in Attachment BLS-4. This optional service is intended for large commercial and industrial customers who desire more detailed information about their natural gas usage. On average, the Company installs this equipment for approximately 1 customer per year.

Q. WHAT CHANGES ARE PROPOSED TO RIDER PMM, PIPELINE MODERNIZATION MECHANISM, SHEET NO. 66?

A. The Company proposes to revise the description of the rider to acknowledge that regulations from the U.S. Department of Transportation Pipeline and Hazardous Materials Administration (USDTPHMA) are not necessarily the only source of

increased costs. The Company may need to comply with safety advisory bulletins or other guidance from the USDTPHMA. In addition, the list of projects currently considered for cost recovery is updated.

IV. OTHER TARIFF CHANGES

Q. WHAT CHANGES ARE PROPOSED FOR THE COMPANY'S CURTAILMENT PLAN FOR MANAGEMENT OF AVAILABLE GAS SUPPLIES, SHEET NO. 83?

A. Upon review, the Company noticed that the curtailment plan to manage available gas supplies during emergencies had not been updated to recognize the existence of Rate IT and other more recent planning elements. This tariff sheet is thoroughly revised to align with current planning criteria for gas supply management during emergency conditions.

Q. WHAT CHANGES ARE PROPOSED FOR THE FULL REQUIREMENTS AGGREGATION SERVICE RATE, RATE FRAS, SHEET NO. 44?

A. The Company proposes a new calculation and process for fees for suppliers who fail to comply with Operation Flow Orders. For under-deliveries, the Company better defines "the payment of a gas cost equal to the highest incremental cost paid by Company…" by defining the source of those potential prices and adding a flat $15/DTH fee to ensure suppliers do not intentionally select non-compliance. This can occur if the supplier assesses that the Company would charge a lower cost for gas than the cost they would pay on the open market. Such action could create gas volume shortages leading to emergency conditions to include curtailments and pipeline penalty charges. For over deliveries which may result in pipeline penalties, the Company proposes confiscating the over delivered gas

quantity and assessing the same $15/DTH fee to the over delivered gas to ensure compliance. This would be a fee in addition to any pipeline penalty charges attributed to the supplier.

Q. WHAT CHANGES ARE PROPOSED FOR THE INTERRUPTIBLE MONTHLY BALANCING SERVICE, RATE IMBS, SHEET NO. 58?

A. The Company proposes changing the imbalance charge to $0.3915 per MCF to reflect current charges from the interstate pipeline providing the storage service that is used to balance the system. Calculations to support the imbalance charge are provided in Attachment BLS-5.

Q. ARE THERE ADDITIONAL CHANGES PROPOSED FOR THE INTERRUPTIBLE MONTHLY BALANCING SERVICE, RATE IMBS?

A. Yes. The Company proposes the same changes as described above for Rate FRAS to the fee structure for suppliers who do not comply with Operational Flow Orders.

Q. PLEASE EXPLAIN THE CHANGE TO THE COMPANY'S LOCAL GOVERNMENT FEE TARIFF, SHEET NO. 82.

A. The Company noticed a typo upon review of the tariff sheet and proposes to correct it.

V. CONCLUSION

Q. HOW DOES THE COMPANY PROPOSE THAT ITS TARIFFS, INCLUDING THE PREVIOUSLY DISCUSSED RATES AND CHARGES, BE IMPLEMENTED?

A. We propose that the revised tariff, including the rates and charges complying with the Commission's order in this Case, be established effective July 2, 2025, for all

customers.

Q. WERE SCHEDULES L, L-1, L-2,1, L-2,2, M, M-2.1 THROUGH M-2.3 AND N AS WELL AS, FR 16(1)(b)(3), FR 16(1)(b)(4), FR 16(8)(l), FR 16(8)(m) AND FR 16(8)(n), FR 17(4) AND ATTACHMENTS BLS-1, BLS-2, CONFIDENTIAL BLS-3, BLS-4, AND BLS-5 PREPARED BY YOU OR UNDER YOUR SUPERVISION?

A. Yes.

Q. IS THE INFORMATION CONTAINED IN THOSE SCHEDULES AND SUPPLEMENTAL FILING REQUIREMENTS ACCURATE TO THE BEST OF YOUR KNOWLEDGE AND BELIEF?

A. Yes.

Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?

A. Yes.

VERIFICATION

STATE OF OHIO)
) **SS:**
COUNTY OF HAMILTON)

The undersigned, Bruce L. Sailers, Director Jurisdictional Rate Administration, 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.

Bruce L. Sailers

Bruce L. Sailers Affiant

Subscribed and sworn to before me by Bruce L. Sailers on this 30th day of May, 2025.

NOTARY PUBLIC

My Commission Expires: July 8, 2027

EMILIE SUNDERMAN
Notary Public
State of Ohio
My Comm. Expires
July 8, 2027

NOTICE

Duke Energy Kentucky, Inc. (Duke Energy Kentucky or Company) hereby gives notice that, in an application to be filed no sooner than June 2, 2025, Duke Energy Kentucky will be seeking approval by the Public Service Commission, Frankfort, Kentucky, of an adjustment of natural gas rates and charges proposed to become effective on and after July 2, 2025. The Commission has docketed this proceeding as Case No. 2025-00125.

The proposed gas rates are applicable to the Company's service area including the following communities:

Alexandria	Elsmere	Ludlow
Bellevue	Erlanger	Melbourne
Boone County	Fairview	Newport
Bracken County	Falmouth	Park Hills
Bromley	Florence	Pendleton County
Butler	Fort Mitchell	Ryland Heights
Campbell County	Fort Thomas	Silver Grove
Cold Spring	Fort Wright	Southgate
Covington	Gallatin County	Taylor Mill
Crescent Park	Glencoe	Union
Crescent Springs	Grant County	Villa Hills
Crestview	Highland Heights	Visalia
Crestview Hills	Independence	Walton
Crittenden	Kenton County	Warsaw
Dayton	Kenton Vale	Wilder
Dry Ridge	Lakeside Park	Woodlawn
Edgewood	Latonia Lakes	Williamstown

DUKE ENERGY KENTUCKY CURRENT AND PROPOSED NATURAL GAS RATES & SIGNIFICANT TEXT CHANGES

Index to Applicable Gas Tariff Schedules and Communities Served (Gas Tariff Sheet No. 10)

Current Description of Sheet No. 82:
Local Franchise Fee.

Proposed Description of Sheet No. 82:
Local Government Fee.

Residential Service – Rate RS (Gas Tariff Sheet No. 30)

	Current Rate	Proposed Rate
Customer Charge per month	$17.50	$21.00
Base Rate for all Ccf	$0.52474	$0.73613
GCA* for all Ccf	$0.82800	$0.82800
Total Rate (Base Rate + GCA) for all Ccf	$1.35274	$1.56413

*The proposed rates do not include the regular and quarterly adjustments to the gas cost adjustment (GCA) mechanism and final rates could vary based upon this mechanism and final orders by the Commission.

General Service – Rate GS
(Gas Tariff Sheet No. 31)

	Current Rate	Proposed Rate
Customer Charge per month	$58.00	$65.00
Base Rate for all Ccf	$0.37443	$0.59280
GCA* for all Ccf	$0.82800	$0.82800
Total Rate (Base Rate + GCA) for all Ccf	$1.20243	$1.42080

*The proposed rates do not include the regular and quarterly adjustments to the gas cost adjustment (GCA) mechanism and final rates could vary based upon this mechanism and final orders by the Commission.

Full Requirements Aggregation Service – Rate FRAS
(Gas Tariff Sheet No. 44)

Current Operation Flow Orders (OFO):

Under-deliveries

(1) the payment of a gas cost equal to the highest incremental cost paid by Company on the date of non-compliance, plus transportation and fuel charges to the Company's city gate;
(2) one month's demand charges on the OFO shortfall. This charge shall not be imposed more frequently than once in any calendar month; and
(3) the payment of all other charges incurred by Company including but not limited to pipeline penalty charges on the date of the OFO shortfall.

Over-deliveries

(1) Over-deliveries will be cashed out to the Supplier at the lowest cost of gas available to Company on the date of non-compliance, plus transportation and fuel charges to the Company's city gate; and
(2) Company shall bill and Supplier shall pay any charges incurred by Company including but not limited to pipeline penalty charges from the interstate pipelines for such excess deliveries, provided such penalties can be attributed to Supplier's over-deliveries.

Proposed Operation Flow Orders (OFO):

Under-deliveries

(1) Supplier will be subject to a daily charge based on the per Dekatherm difference between the scheduled quantity and the actual deliveries multiplied by $15/DTH; plus
(2) the higher of Platts' Gas Daily Daily Columbia Gulf, Mainline + TCO FTS fuel and transportation commodity variables or Platts' Gas Daily Daily Tennessee, 800 Leg + TCO FTS fuel and transportation commodity variables; multiplied by the per Dekatherm difference between the scheduled quantity and the actual deliveries;
(3) one month's demand charges on the OFO shortfall. This charge shall not be imposed more frequently than once in any calendar month; and
(4) the payment of all other charges incurred by Company including but not limited to pipeline penalty charges on the date of the OFO shortfall.

Over-deliveries

(1) Over-deliveries will be confiscated by the Company and used for its general supply requirements, without compensation to Supplier; and
(2) An OFO over-delivery charge of $15 per DTH will be charged for unauthorized over-delivery resulting from the pool operator's failure to comply with the OFO; and
(3) Company shall bill and Supplier shall pay any charges incurred by Company including but not limited to pipeline penalty charges from the interstate pipelines for such excess deliveries, provided such penalties can be attributed to Supplier's over-deliveries.

Interruptible Transportation Service – Rate IT
(Gas Tariff Sheet No. 50)

	Current Rate	Proposed Rate
Customer Charge per month	$430.00	$430.00
Base Rate for all Ccf	$0.11300	$0.11878

Current Charges for Unauthorized Deliveries:

Any customer taking unauthorized deliveries shall be billed: (1) an amount reflective of the general service delivery rate, Rate GS, Sheet No. 31; plus (2) the higher of (a) the expected gas cost component of the gas cost recovery rate, (b) the Company's highest cost gas plus one month's demand charges on the highest daily unauthorized volume (this charge shall not be imposed more frequently than once in any calendar month), or (c) the cost of operating the Company's propane peak shaving plant. In any event, customer shall reimburse the Company for any interstate pipeline penalty charges resulting from such unauthorized deliveries as well as the cost incurred to valve-off the customer's service if so required to effectuate compliance with the interruptible provisions of this rate.

Proposed Charges for Unauthorized Deliveries:

Any customer taking unauthorized deliveries shall be billed: (1) an amount reflective of the general service delivery rate, Rate GS, Sheet No. 31; plus (2) the higher of (a) the expected gas cost component of the gas cost recovery rate, or (b) the Company's highest cost gas plus one month's demand charges on the highest daily unauthorized volume (this charge shall not be imposed more frequently than once in any calendar month). In any event, customer shall reimburse the Company for any interstate pipeline penalty charges resulting from such unauthorized deliveries as well as the cost incurred to valve-off the customer's service if so required to effectuate compliance with the interruptible provisions of this rate.

Firm Transportation Service – Rate FT-L
(Gas Tariff Sheet No. 51)

	Current Rate	Proposed Rate
Customer Charge per month	$430.00	$430.00
Base Rate for all Ccf	$0.21976	$0.22770

Aggregation Service for Interruptible Gas Transportation – Rate AS
(Gas Tariff Sheet No. 55)

Current Rate:

Pooling service available to (1) customers receiving interruptible gas transportation service under Rate IT and special contract interruptible customers who are acting as their own pool operator for supply management purposes, and (2) pool operators designated by Rate IT and special contract interruptible customers to manage gas supplies on their behalf and as a part of an aggregated customer pool. For purposes of administering this tariff, the usages of all customers within a pool will be combined into a single pool usage number, which will be matched against the pool operator's total deliveries to its Rate IT and special contract interruptible transportation pool.

Proposed Rate:

There are no proposed changes to this rate.

Gas Trading Service – Rate GTS
(Gas Tariff Sheet No. 57)

	Current Rate	Proposed Rate
Per Transaction	$5.00	No proposed changes

Interruptible Monthly Balancing Service – Rate IMBS
(Gas Tariff Sheet No. 58)

	Current Rate	Proposed Rate
All Pools per Mcf	$0.1366	$0.3915

Current Net Monthly Bill – Operational Flow Orders:

(a) Over-deliveries
  (i) Over-deliveries will be cashed out to the pool operator at the lowest cost of gas available to Company on the date of non-compliance, plus transportation and fuel charges to the Company's city gate; and
  (ii) Company shall bill and Supplier shall pay any charges incurred by Company including but not limited to pipeline penalty charges from the interstate pipelines for such excess deliveries, provided such penalties can be attributed to Supplier's over-deliveries.

(b) Under-deliveries
  (i) the payment of a gas cost equal to the highest incremental cost paid by Company on the date of non-compliance, plus transportation and fuel charges to the Company's city gate;
  (ii) one month's demand charges on the OFO shortfall. This charge shall not be imposed more frequently than once in any calendar month; and
  (iii) the payment of all other charges incurred by Company including but not limited to pipeline penalty charges on the date of the OFO shortfall.

Proposed Net Monthly Bill – Operational Flow Orders:

(a) Over-deliveries
  (i) Over-deliveries will be confiscated by the Company and used for its general supply requirements, without compensation to Supplier, and
  (ii) Company shall bill and Supplier shall pay any charges incurred by Company including but not limited to pipeline penalty charges from the interstate pipelines for such excess deliveries, provided such penalties can be attributed to Supplier's over-deliveries; and
  (iii) An OFO over-delivery charge of $15 per dth will be charged for unauthorized over-delivery resulting from the pool operator's failure to comply with the OFO.

(b) Under-deliveries
  (i) Supplier will be subject to a daily charge based on the per Dekatherm difference between the scheduled quantity and the actual deliveries multiplied by $15/DTH; plus
  (ii) The higher of Platts' Gas Daily Daily Columbia Gulf, Mainline + TCO FTS fuel and transportation commodity variables or Platts' Gas Daily Daily Tennessee, 800 Leg + TCO FTS fuel and transportation commodity variables; multiplied by the per Dekatherm difference between the scheduled quantity and the actual deliveries;
  (iii) one month's demand charges on the OFO shortfall. This charge shall not be imposed more frequently than once in any calendar month; and
  (iv) the payment of all other charges incurred by Company including but not limited to pipeline penalty charges on the date of the OFO shortfall.

Distributed Generation Service – Rate DGS
(Gas Tariff Sheet No. 59)

	Current Rate	Proposed Rate
Administration Charge	$25.00	No Proposed
Minimum Capacity Reservation Charge	$2.00	Rate
Facilities Charge	Per Service Agreement	Changes to
Delivery Charge	Per Applicable Service Tariff	this Rider

Main Extension Policy – Rider X
(Gas Tariff Sheet No. 60)

Current Rate:
Normal Extensions. An extension of one hundred (100) feet or less shall be made by the Company to an existing distribution main without charge for a prospective customer who shall apply for and contract to use service for one year or more.

Proposed Rate:
There are no proposed rate changes to this rider.

Demand Side Management Cost Recovery Rider – Rider DSM
(Gas Tariff Sheet No. 61)

	Current Rate	Proposed Rate
DSM Charge	PC + LR + PI + BA	No Proposed Rate Changes to this Rider

PC = DSM Program Cost Recovery
LR = Lost Revenue from Decreased Throughput Recovery
PI = DSM Program Incentive Recovery
BA = DSM Balance Adjustment

Demand Side Management Rate – Rider DSMR
(Gas Tariff Sheet No. 62)

	Current Rate	Proposed Rate
DSMR per Ccf	$0.001249	No Proposed Rate
Home Energy Assistance Program per bill	$0.30	Changes to this Rider

Weather Normalization Adjustment Rider – Rider WNA
(Gas Tariff Sheet No. 65)

	Current Factors	Proposed Factors
Base Load for RS	1.047887	0.986070
Heat Sensitivity Factor for RS	0.015467	0.014698
Base Load for GS	9.159645	11.921161
Heat Sensitivity Factor for GS	0.096462	0.100621

Pipeline Modernization Mechanism – Rider PMM
(Gas Tariff Sheet No. 66)

PMM Surcharge or Credit per Ccf

	Current Rate	Proposed Rate
Residential (Rate RS)	$0.12 / Ccf	No Proposed Rate
General Service (Rate GS)	$0.03 / Ccf	Changes to
Firm Transportation – Large (Rate FT-L)	$0.00102 / Ccf	this
Interruptible Transportation (Rate IT)	$0.00115 / Ccf	Rider

Current Rate:
Customers shall be assessed a surcharge or credit to enable the Company to recover costs associated with compliance with regulations promulgated by the U.S. Department of Transportation Pipeline and Hazardous Materials Administration, as approved by the Kentucky Public Service Commission. The Rider includes a true-up provision based on a two-year lag. The monthly billing amount calculated for each rate schedule for which this rider is eligible shall increase or decrease as shown below. This Rider shall initially be limited to the Company's AM07 Project, which is subject to approval of a certificate of public convenience and necessity by the Kentucky Public

Service Commission. This Rider will not reflect costs for other pipeline projects unless approved by the Kentucky Public Service Commission.

Proposed Rate:
Customers shall be assessed a surcharge or credit to enable the Company to recover costs associated with compliance with regulations and guidance, including but not limited to safety advisory bulletins, promulgated by the U.S. Department of Transportation Pipeline and Hazardous Materials Administration, as approved by the Kentucky Public Service Commission. The Rider includes a true-up provision based on a two-year lag. The monthly billing amount calculated for each rate schedule for which this rider is eligible shall increase or decrease as shown below. This Rider has been approved to recover costs for the Company's AM07 Project, which is subject to approval of a certificate of public convenience and necessity by the Kentucky Public Service Commission and for the replacement of Aldyl-A polyethylene pipe within the Company's distribution system. This Rider will not reflect costs for other pipeline projects unless approved by the Kentucky Public Service Commission.

Gas Cost Adjustment Clause – Rider GCA
(Gas Tariff Sheet No. 70)

	Current Rate	Proposed Rate
GCA Rate	EGC + RA + AA + BA	No Proposed Rate Changes to this Rider

EGC = Expected Gas Cost
RA = Refund Adjustment
AA = Actual Adjustment
BA = Balance Adjustment

Gas Cost Adjustment Transition Rider – Rider GCAT
(Gas Tariff Sheet No. 77)

	Current Rate	Proposed Rate
Charge (Credit) per Ccf	$0.0037	No Proposed Rate Changes to this Rider

Bad Check Charge
(Gas Tariff Sheet No. 80)

	Current Rate	Proposed Rate
Bad Check Charge	$5.00	No Proposed Rate Changes to this Rider

Charge for Reconnection of Service
(Gas Tariff Sheet No. 81)

	Current Rate	Proposed Rate
Reconnect charge for service which has been disconnected due to enforcement of Rule 3	$90.00	$110.00
Reconnect charge for service which has been disconnected within the preceding twelve months at the request of the customer	$90.00	$110.00
If service is discontinued because of fraudulent use	$90.00 plus estimated gas used and expenses incurred by the Company	$110.00 plus estimated gas used and expenses incurred by the Company

Current Section D:
For eligible customers who desire to disconnect on a seasonal basis the company will utilize a soft close process in which the meter will be read remotely and billing will be discontinued until the customer uses more than 40 Ccf for residential customers, 100 Ccf for non-residential customers or October 15th, whichever comes first. The soft-close

process will be discontinued for a residential customer who uses more than 20 Ccf prior to July 15th or a non-residential customer who uses more than 50 Ccf prior to July 15th. Since the meter will not be physically disconnected or reconnected, there will be no reconnection fee for this service. Gas only customers are not eligible for the soft close process.

Proposed Section D:
The Company proposes to delete this section.

Local Government Fee
(Gas Tariff Sheet No. 82)

Current Rate:
The amount of such fee added to the customer's bill shall be determined in accordance with the terms of the ordinance, franchise or other directive agreed to be the Company.

Proposed Rate:
The amount of such fee added to the customer's bill shall be determined in accordance with the terms of the ordinance, franchise or other directive agreed to by the Company.

Curtailment Plan for Management of Available Gas Supplies
(Gas Tariff Sheet No. 83)

Current Curtailment Plan:
AVAILABILITY
Available in entire territory to which tariff Ky.P.S.C. Gas No. 2 applies.

APPLICABILITY
In the event of an emergency which necessitates curtailment of gas service, Duke Energy Kentucky, Inc. shall curtail gas service to its customers in the manner set forth herein, except where the Public Service Commission of Kentucky (Commission) or other authority having jurisdiction in the matter orders otherwise.

DEFINITIONS
Special Gas Service Contract Customers:
A customer who purchases gas, off-peak and firm, under a Special Gas Service Contract. Such a customer shall not qualify as a Domestic or Non-Domestic Customer.
Domestic Customers:
Customers which use gas in private homes, boarding houses, apartment houses, hotels, motels, restaurants, food processors, hospitals and places of like kind where the element of human welfare is the predominating requirement.
Non-Domestic Customers:
All other customers not defined as Domestic Customers or Special Gas Service Contract Customers.
Winter Period:
The consecutive customer billing months of November and December, of one year and the months of January, February and March in the next year.
Summer Period:
The consecutive customer billing months of April, May, June, July, August, September and October.
Winter Base Volumetric Limitation:
A Non-Domestic Customer's total gas usage during the billing months of January, February, March, November and December of 1972.
Summer Base Volumetric Limitation:
A Non-Domestic Customer's total gas usage during the billing months of April, May, June, July, August, September and October of 1972.
Adjusted Winter Volumetric Limitation:
A Non-Domestic Customer's winter base volumetric limitation for the gas usage during a winter period as adjusted from time to time by Duke Energy Kentucky, Inc. to reflect pro rata curtailment.

Adjusted Summer Volumetric Limitation:
A Non-Domestic Customer's summer base volumetric limitation for the gas usage during the summer period as adjusted from time to time by Duke Energy Kentucky, Inc. to reflect pro rata curtailment.

ORDER OF CURTAILMENT
(1) The Special Gas Service Contract Customer will be curtailed to the extent of its off-peak usage limitation noted in the customer's contract whenever:
(a) Duke Energy Kentucky, Inc. cannot supply the Special Gas Service Contract customer its full requirements in excess of such customer's Contract Demand without incurring penalties under tariffs of Duke Energy Kentucky, Inc.'s supplier, or without having to purchase additional volumes of gas at premium rates, or without Duke Energy Kentucky, Inc. operating its peak load manufacturing facilities.
(b) Duke Energy Kentucky, Inc.'s supplier curtails delivery and as a result Duke Energy Kentucky, Inc. determines that it cannot supply the total requirements of its customers.

The off-peak gas of the Special Gas Service Contract Customer shall be fully curtailed before curtailment is imposed upon other customers; however, since all the contracted for firm gas is considered necessary for plant protection, it will not be curtailed prior to other customer curtailment.
(2) Where additional curtailment is necessary after full curtailment of the off-peak of the Special Gas Service Contract Customers, Duke Energy Kentucky, Inc. shall, after giving reasonable notice, curtail those Non-Domestic Customers which use 50,000 cubic feet or more of gas per day on a pro rata basis by adjusting their Winter and/or Summer Base Volumetric Limitations downward to the extent necessary to limit the total usage to the gas supply available to Duke Energy Kentucky, Inc. The resulting volumes will be the Non-Domestic Customer's adjusted Winter and/or Summer Volumetric Limitation. For plant protection the adjusted Winter and Summer Volumetric Limitations shall not be less than 20% of the respective Winter and Summer Base Volumetric Limitation. A Non-Domestic Customer consuming over 50,000 cubic feet or more of gas per day and having more than one metering location may, upon mutual agreement with Duke Energy Kentucky, Inc., combine his adjusted Volumetric Limitation at one or more locations only for curtailment purposes. Such customer must notify Duke Energy Kentucky, Inc. in writing and receive Duke Energy Kentucky, Inc.'s written consent of the accounts to be effected and the volumes to be combined.
(3) Where additional curtailment of gas service is necessary, after curtailment in curtailment with paragraph (2) above, then gas service to Non-Domestic Customers using under 50,000 cubic feet of gas per day shall be curtailed on a pro rata basis in the same manner provided in the above paragraph (2).
(4) Where additional curtailment is necessary the Domestic Customer will then be curtailed on a pro rata basis.

CARRY-OVER AND ADJUSTMENT OF BASE VOLUMETRIC LIMITATION
No carry-over of volumes will be permitted from the Winter to Summer Period or from the Summer to Winter Period. In the establishment of the Winter and Summer Base Volumetric Limitations a customer may request an investigation as to the proper maximum volumes so determined. If such investigation discloses that the volumetric limitations do not reasonably reflect the normal usage of his equipment that was connected in 1972 or authorized by Duke Energy Kentucky, Inc. to be installed at a later date, such limitation will be adjusted accordingly. Such request must be made within 60 days of the approval of this curtailment plan and absent such a request the Base Volumetric Limitations will not be subject to any increase.

PENALTIES
Special Gas Service Contract Customers will be subject to penalties as set forth in their contract. As to the Non-Domestic Customers, after the end of the Winter Period and Summer Period the actual gas usage of each Non-Domestic Customer for the period during which curtailment was required shall be compared respectively to the Adjusted Winter and Summer Volumetric Limitations, and in addition to the Non-Domestic Customer's regular monthly bill, a penalty shall be charged if such usage exceeds the respective Adjusted Winter or Summer Volumetric Limitation. The penalty amount will be based on the same penalty rate applicable to Duke Energy Kentucky, Inc. from its sold supplier of natural gas, the Columbia Gas Transmission Corporation. As of June 1, 1975 the penalty as stated in the Columbia Gas Transmission Corporation's FPC filed tariff is ten dollars ($10.00) for each 1,000 cubic feet overrun.

ACTION FOR EXCESSIVE USAGE
During periods of curtailment, where it appears to Duke Energy Kentucky, Inc. through its procedure of monitoring monthly usage of Non-Domestic Customers being curtailed, that a Non-Domestic Customer's usage will significantly exceed his adjusted Winter or Summer Volumetric Limitation, Duke Energy Kentucky, Inc. will give such customer notice to cease such excessive usage and, in the event such customer does not cease, Duke Energy Kentucky, Inc. may disconnect gas service to such customer.

PENALTY REFUND
Penalties collected from Duke Energy Kentucky, Inc.'s customers will be added to the refunds received from Duke Energy Kentucky, Inc.'s supplier and held for redistribution and shall be refunded to all customers in accordance with Duke Energy Kentucky, Inc.'s gas cost adjustment provision. If Duke Energy Kentucky, Inc. incurred penalties from its supplier as a result of volumetric overruns, the amount of such penalties shall be subtracted from the total penalties collected by Duke Energy Kentucky, Inc. from its customers to determine the amount of penalties to be refunded.

BILLING OF PENALTIES
Penalties, as provided above, shall be reflected in the customers service bill for the Winter Period on the May bill and for the Summer Period on the December bill. Two and three tenths percent (2.3%) will be added to the penalty amount if not paid on or before fourteen (14) calendar days after mailing date of the bill.

EMERGENCIES
In the event of a short-term emergency situation where immediate deliveries of additional gas are needed to prevent irreparable injury to life or property of an existing customer, Duke Energy Kentucky, Inc. shall, at its option, have the right to deliver additional volumes of gas to meet such emergency needs in excess of any limited volumes specified herein, without imposition of penalties where the emergency volumes are repaid by reduction of future gas purchases by the customer within ninety (90) days after termination of the emergency period.

EXEMPTION
No exemptions from this Plan, other than emergency deliveries, as defined above, shall be granted except by Order of the Commission, directly through its duly designated Staff, or other authority having jurisdiction in this matter.

AMENDMENT, MODIFICATION OR CLARIFICATION
Due to governmental order or rapid changes in gas supply it may be necessary to amend, modify or clarify this Curtailment Plan. This Plan may be so amended, modified or clarified by filing a Motion with the Commission.

AVAILABILITY OF THE PLAN
Copies of this Plan, together with the address and telephone number of the Commission shall be kept at each business office of Duke Energy Kentucky, Inc. and shall be made available to any customer upon request.

Proposed Curtailment Plan:
AVAILABILITY
Available in entire territory to which tariff Ky.P.S.C. Gas No. 2 applies.

APPLICABILITY
In the event of an emergency which necessitates curtailment of gas service, Duke Energy Kentucky, Inc. shall curtail gas service to its customers in the manner set forth herein, except where the Public Service Commission of Kentucky (Commission) or other authority having jurisdiction in the matter orders otherwise.

DEFINITIONS
Interruptible Transportation (IT) Customers:
A customer who receives gas under a Gas Transportation Agreement, Duke Energy Kentucky Rate IT (KY P.S.C. Gas No. 2, Sheet No. 50). These customers are subject to interruption in accordance with the gas curtailment provisions of Duke Energy Rate IT.
Priority Use Customers:

Gas supply needed for human needs customers and for specific and definable plant protection purposes; including, but not limited to: residential sites; medical facilities; governmental offices; utility companies; production, processing, or transportation of perishable medicines or foods; and other similar uses as may be determined by the Commission.
Firm Customers:
A firm customer shall mean any customer being served under Duke Energy Kentucky Rates: RS, GS, and FT-L.

CURTAILMENT COMMUNICATIONS
To the extent practicable, Duke Energy Kentucky shall appeal to all customers to voluntarily reduce their consumption prior to and during a curtailment.
To the extent practicable, Duke Energy Kentucky shall communicate with customers and suppliers directly via its electronic bulletin board, email, fax and/or telephone. Where such communication is not practical, Duke Energy Kentucky shall, at its discretion, utilize media, governmental, and other outlets deemed appropriate.
Duke Energy Kentucky Gas Control will advise the Commission, as required by the Commission or as Duke Energy Kentucky may otherwise deem appropriate, of the nature, time, and duration of implemented emergency conditions and procedures that affect normal service to customers.

CURTAILMENT SEQUENCE
In case of a declared emergency, the order of curtailment below refers to those customers whose curtailment will allow Duke Energy Kentucky to maintain operating pressures and its system integrity in areas that have been, or may be, affected by a supply or capacity disruption.
Duke Energy Kentucky will minimize, to the extent possible, the number of Priority Use Customers whose service will be disrupted.

ORDER OF CURTAILMENT
There is no distinction made between supply, pressure, or capacity shortage related scenarios for implementation of the Gas Supply Emergency Curtailment Plan, as all have similar impacts with regard to potential disruptions of service.

Methods to be utilized for curtailing gas usage shall be determined by Duke Energy Kentucky's Gas Operations personnel on an as-needed basis, in response to the particular needs of the situation. Methods may include, but are not limited to, the actions described below:
Stage 1 - Under a mandatory curtailment, the first stage will include the following actions:
- Interruption of Rate IT customers in accordance with the Duke Energy Kentucky Rate IT curtailment provisions;
- In consultation with Duke Energy Kentucky's Corporate Communications personnel, implement general public service announcement(s).

Stage 2 - Under a mandatory curtailment where stage one is elevated, the following provisions will be added to the previous stage restrictions:
- Firm gas to customers using more than fifty thousand cubic feet per day shall be curtailed, except for service to any Priority Use Customer for such priority use;
- In consultation with Duke Energy Kentucky's Corporate Communications personnel, implement general public service announcement(s).

Stage 3 - Under a mandatory curtailment where stage two is elevated, the following provisions will be added to the previous stage restrictions:
- Gas to firm customers shall be curtailed, except for service to any Priority Use Customer for such priority use;
- In consultation with Duke Energy Kentucky's Corporate Communications personnel, implement general public service announcement(s).

OPERATIONS TO RESTORE SERVICE
Upon termination of a gas emergency or event, if service to customers has been curtailed, the service restoration process will be based upon the configuration of the distribution system at the time and system supply distribution assets, with consideration for Priority Use Customers, as practicable.

SERVICE RESTRICTIONS DURING CURTAILMENT
During an emergency curtailment period, unless otherwise ordered by the Commission or other authority having jurisdiction in the matter, Duke Energy Kentucky reserves the right to restrict or permit service as set forth in KRS 278.506(5).

CONSEQUENCES OF NONCOMPLIANCE
During periods of curtailment, if deliveries of gas to a Non-Priority Use Customer exceed its authorized daily volumetric limitation, Duke Energy Kentucky will give such customer notice to cease such unauthorized usage. In the event such customer does not cease, Duke Energy Kentucky may, at its sole discretion, disconnect gas service to the customer. The customer shall be liable for all gas costs, transportation costs, penalties, and fines incurred by Duke Energy Kentucky as a result of the unauthorized usage.

Meter Pulse Service – Rate MPS
(Gas Tariff Sheet No. 84)

	Current Rate	Proposed Rate
Installation of Meter Pulse Equipment:	$970.00	$1,025.00
If replacement of Meter Index is necessary, additional charge of:	$680.00	$760.00

Current Type of Charges:
If the Company is required to make additional visits to the meter site due to the inability to gain access to the meter location or the necessary Communication Link has not been installed, or the Communication Link is not working properly, the Company may charge the customer for any additional trip to the meter site at the per visit rate of: $60.00.

Proposed Type of Charges:
If the Company is required to make additional visits to the meter site due to the inability to gain access to the meter location or the necessary Communication Link has not been installed, or the Communication Link is not working properly, the Company may charge the customer for any additional trip to the meter site during normal business hours at the per visit rate of: $60.00. After hour visits to the meter site are not available for this service.

IMPACT OF PROPOSED RATES

The foregoing rates reflect a proposed increase in gas revenues of approximately $26,387,365 or 17.13% over current total gas revenues to Duke Energy Kentucky. The estimated amount of increase per customer class is as follows:

	Total Increase ($)	Total Increase (%)
Rate RS – Residential Service:	$17,139,137	16.8%
Rate GS – Commercial Service	$6,985,263	19.3%
Rate GS – Industrial Service	$463,527	19.9%
Rate GS – Other Public Authority Service	$601,619	19.8%
Rate FT-L – Firm Transportation Service	$238,374	3.2%
Rate IT – Interruptible Transportation Service	$95,655	4.8%
Charge for Reconnection of Service	$1,925	22.2%
Interdepartmental	$9,875	19.8%
Special Contracts	$851,990	125.8%

The average monthly bill for each customer class to which the proposed rates will apply will increase approximately as follows:

	Average Ccf/Bill	Monthly Increase ($)	Percent Increase (%)
Rate RS – Residential Service:	51	$14.28	16.8%
Rate GS – Commercial Service	363	$86.27	19.3%
Rate GS – Industrial Service	1,005	$226.46	19.9%
Rate GS – Other Public Authority Service	749	$170.56	19.8%
Rate FT-L – Firm Transportation Service	16,596	$131.77	3.2%
Rate IT – Interruptible Transportation Service	73,227	$423.25	4.8%
Rate IMBS – Interruptible Monthly Balancing Service *	89,823	$2,289.59	186.6%

* IMBS revenues are credited to sales customers through the GCA.

The rates contained in this notice are the rates proposed by Duke Energy Kentucky; however, the Kentucky Public Service Commission may order rates to be charged that differ from the proposed rates contained in this notice. Such action may result in rates for consumers other than the rates in this notice.

Any corporation, association, body politic or person with a substantial interest in the matter may, by written request within thirty (30) days after publication of this notice of the proposed rate changes, request leave to intervene; intervention may be granted beyond the 30-day period for good cause shown. Such motion shall be submitted to the Kentucky Public Service Commission, P.O. Box 615, 211 Sower Boulevard, Frankfort, Kentucky 40602-0615, and shall set forth the grounds for the request including the status and interest of the party. If the Commission does not receive a written request for intervention within thirty (30) days of the initial publication the Commission may take final action on the application.

Intervenors may obtain copies of the application and other filings made by the Company by requesting same through email at DEKInquiries@duke-energy.com or by telephone at (513) 287-4366. A copy of the application and other filings made by the Company is available for public inspection through the Commission's website at http://psc.ky.gov, at the Commission's office at 211 Sower Boulevard, Frankfort, Kentucky, Monday through Friday, 8:00 am. to 4:30 p.m., and at the following Company offices: 1262 Cox Road, Erlanger, Kentucky 41018. Comments regarding the application may be submitted to the Public Service Commission through its website, or by mail at the following Commission address.

For further information contact:

PUBLIC SERVICE COMMISSION
COMMONWEALTH OF KENTUCKY
P.O. BOX 615
211 SOWER BOULEVARD
FRANKFORT, KENTUCKY 40602-0615
(502) 564-3940

DUKE ENERGY KENTUCKY
1262 COX ROAD
ERLANGER, KENTUCKY 41018
(513) 287-4366

Duke Energy Kentucky, Inc.
Cost of Service Study Customer Component and Customer Charge Calculations

Line	Rate	(A) COSS Customer Component	(B) Test Period Customer Bills	(C) = (A) / (B) COSS Supported Customer Charge	(D) Proposed Customer Charge
1	RS	$ 38,885,454	1,194,296	$ 32.56	$ 21.00
2	GS	$ 6,238,413	86,505	$ 72.12	$ 65.00
3	FT-L	$ 431,286	1,737	$ 248.29	$ 430.00
4	IT	$ 104,678	226	$ 463.18	$ 430.00

CONFIDENTIAL PROPRIETARY TRADE SECRET

Duke Energy Kentucky, Inc.
Calculation of Gas Service Reconnection Cost and Proposed Charge

Base Labor		$46.62	
Unproductive	20.3%	$9.47	Loads on Base - direct labor
Incentives	6.9%	$3.88	Loads on Base plus Unprod
Subtotal		$13.35	
Fringes	32.7%		
Payroll Tax	6.9%		
Subtotal	39.5%	23.71	Loads on Base plus Unprod plus Incentive
Fleet	5.2%	2.93	Loads on Base - direct labor
Loaded Labor w/ Fleet		$86.61	
Indirects	70.8%	$32.99	Load on Loaded Labor
Total Cost Per Hour Including Labor Items		$ 119.60	
Total Cost Per Hour Excluding Labor Items (Employee Performed Gas Reconnections)		$ 2.93	
Contracted Reconnection Rate (Contractor Performed Gas Reconnection)		[redacted]	
Percentage of Reconnections Performed:			
Employee		35.54%	
Contractor		64.46%	
Weighted Average Reconnection Rate		$ 112.14	
Proposed Reconnection Charge		$ 110.00	

Duke Energy Kentucky, Inc.
Calculation of Meter Pulse Service Charges

Line No.	Equipment Descriptions	Cost
1	Installation of Meter Pulse Equipment:	
2	Pulser (1 of 2 options):	
3	Single Lead Metretek Pulser (#50116511):	$ 146.00
4	Dual Lead Metretek Pulser (#50130416):	$ 162.00
5	Average Pulser Cost (Average Lines 3 & 4)	$ 154.00
6	Intrinsically Safe Barriers (ISB) AC115/DC24V Power	$ 300.00
7	Weather-proof Box	$ 100.00
8	Total ISB Cost: (Line 6 + Line 7)	$ 400.00
9	Labor Hourly Rate	$ 118.08
10	Estimated hours	4.00
11	Total Labor (Line 9 x Line 10)	$ 472.32
12	Total Meter Pulse Equipment: (Line 5 + Line 8 + Line 11)	$ 1,026.32
13	Tariff Sheet Value Proposed: (Based on Line 12)	$ 1,025.00
14	Meter Index if needed (1 of 2 options):	
15	Life Lube Rotary Index (#50101099, #140013)	$ 584.00
16	Life Lube Rotary Index Conversion Kit (#140007, #140008)	$ 709.00
17	Average Meter Index Cost	$ 646.50
18	Labor Hourly Rate	$ 118.08
19	Estimated hours	1.00
20	Total Labor (Line 18 x Line 19)	$ 118.08
21	Total Meter Index (Line 17 + Line 20)	$ 764.58
22	Tariff Sheet Value Proposed: (Based on Line 21)	$ 760.00

Duke Energy Kentucky, Inc.
Pipeline Services
IT Balancing Charge Calculation based on Pipeline Rates Effective April 1, 2025

Charges based on Daily Balancing

				Annual Cost	
Demand Charges					
Columbia Gas FSS					
FSS MDWQ	5,500	$6.4610	12	$426,426.00	
Winter SST	5,500	$22.0480	7	$848,848.00	
Summer SST	2,750	$22.0480	5	$303,160.00	
Commodity Charges					
SST Inject *	406,704		$0.0204	$8,296.76	
FSS Inject	399,274		$0.0333	$13,295.81	
FSS Withdraw	394,375		$0.0333	$13,132.69	
SST Withdraw	387,170		$0.0190	$7,356.23	
Total				$1,620,515.48	
Total IT & FT Average Throughput				4,250,543	mcf
Cost for Daily Balancing (All Options)				**$0.3812**	**per mcf**

Charges Based on Carry-Over Amounts

Columbia Gas FSS					
FSS SCQ Summer (8%)	28,337	$0.1160	7	$23,009.61	
FSS SCQ Winter (10%)	35,421	$0.1160	5	$20,544.29	
				$43,553.90	
Total IT & FT Average Throughput				4,250,543	mcf
Charge for Monthly Carry-over				**$0.0102**	**per mcf**
Total Charge for Option 3				**$0.3915**	**per mcf**

* Commodity Charges include ACA of $0.0014

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 NATURAL GAS RATES; 2) APPROVAL OF NEW TARIFFS; AND 3) ALL OTHER REQUIRED APPROVALS, WAIVERS, AND RELIEF.	))))))	CASE NO. 2025-00125

DIRECT TESTIMONY OF

JOHN J. SPANOS

ON BEHALF OF

DUKE ENERGY KENTUCKY

June 2, 2025

TABLE OF CONTENTS

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND ADDRESS.

A. My name is John J. Spanos. My business address is 300 Sterling Parkway, Mechanicsburg, Pennsylvania 17050 (formerly 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 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 38 years of depreciation experience, which includes giving expert testimony in more than 490 cases before 47 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 over 900 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 natural gas utility plant of Duke Energy Kentucky. The study represents all natural gas plant assets.

II. DEPRECIATION STUDY

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, "2024 Depreciation Study - Calculated Annual Depreciation Accruals Related to Gas Plant as of September 30, 2024." This report sets forth the results of my depreciation study for Duke Energy Kentucky (Depreciation Study).

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 SEPTEMBER 30, 2024?

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 natural gas 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 and VI-5 of the Depreciation Study presents the estimated survivor curve, the net salvage percent, the original cost as of September 30, 2024, 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 September 30, 2024.

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 general plant accounts 291.10, 291.15, 294.00 and 297.00, 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 historical data from records related to Duke Energy Kentucky's plant; analyzing this data to obtain historical 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 natural gas utilities to form judgments of average service life and net salvage characteristics.

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

A. For most accounts, I analyzed the Company's accounting entries that record plant transactions during the period 1956 through 2024. 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 September 30, 2024.

Q. WHAT METHOD DID YOU USE TO ANALYZE THESE 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 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 65-R2.5 indicates an average service life of sixty-five years; a right-moded, or R, type curve (the mode occurs after average life for right-moded curves); and a moderate height, 2.5, for the mode (possible modes for R type curves range from 0.5 to 5).

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. A field review was made of Duke Energy Kentucky's property during February 2025 to observe representative portions of plant. Additionally, I have conducted field visits in prior studies since 1990 with the most recent trip prior to the February 2025 trip being in March 2018. 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 gross salvage value received for the asset upon retirement less the cost to retire the asset. When the cost to retire exceeds the gross 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 $5,000 regulator will include not only the $5,000 of original cost, but also, on average, $550 to remove the regulator at the end of its life and $50 in salvage value. In this example, the net salvage component is negative $500 ($50 - $550), and the net salvage percent is negative 10% (($50 - $550)/$5,000).

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 1980 through 2024 for most accounts, and considers the cost of removal and gross salvage ratios to the associated retirements during the 45-year period. Trends of these data are also

measured based on three-year moving averages and the most recent five-year indications.

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 for all accounts, 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 was developed as of September 30, 2024.

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. This calculation is further detailed in Part V of Attachment JJS-1.

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

A. Amortization accounting is only appropriate for certain general plant accounts. These accounts are 291.10, 291.15, 294.00, and 297.00 which represents slightly less than two 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 276.50, Mains – Steel Feeder Lines, as an example because it is one of the largest depreciable groups.

The retirement rate method was used to analyze the survivor characteristics of the combined property groups for Account 276.00 Mains – Steel and Account 276.50, Mains – Steel Feeder Lines. Aged plant accounting data were compiled from 1956 through 2024 and analyzed in periods that best represent the overall service life of this property. The life tables for the 1956-2024 and 1995-2024 experience bands are presented in the Depreciation Study on pages VII-22 through VII-27. Each life table displays the retirement and surviving ratios of the aged plant data exposed to retirement by age interval. For example, page VII-22 of Attachment JJS-1, shows $173,314 retired during age interval 0.5-1.5 with $309,877,157 exposed to retirement at the beginning of the interval. Consequently, the retirement ratio is 0.0006 ($173,314/$309,877,157) and the survivor ratio is 0.9994 (1-0.0006). The life tables, or original survivor curves, are plotted along with the

estimated smooth survivor curve, the 65-R2.5, on page VII-21 of Attachment JJS-1.

The net salvage percent for the combined analyses of Account 276.10, Mains – Cast Iron, Copper and All Valves through Account 276.50, Mains – Steel Feeder Lines, is presented on pages VIII-4 through VIII-6. 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 1980 through 2024. The 45-year period experienced $7,738,371 ($2,080,590 - $9,818,961) in net salvage for $21,724,401 plant retired. The result is negative net salvage of 36 percent ($7,738,371/$21,724,401). Recent trends (i.e., the five-year average) have shown indications of negative 93 percent which has been influenced by considerably more cast iron pipe being retired. It is expected that the majority of future retirements will be at younger ages than what has occurred most recently. Therefore, it was determined that based on industry ranges, overall historical indications, and Company expectations, that negative 25 percent was the most appropriate estimate. The negative 25 percent estimate considers the entire period, and does not put as much weight on recent trends as cost of removal is expected to be lower in the future than the levels over last five years for the assets being retired.

My calculation of the annual depreciation related to original cost of natural gas utility plant as of September 30, 2024 for Account 276.50 is presented on pages IX-13 and IX-14 of Attachment JJS-1. The calculation is based on the 65-R2.5 survivor curve, 25% 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-4.

III. CONCLUSION

Q. WAS ATTACHMENT JJS-1 PREPARED UNDER YOUR DIRECTION AND CONTROL?

A. Yes.

Q. DOES THIS CONCLUDE YOUR PRE-FILED 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 Affiant

Subscribed and sworn to before me by John J. Spanos on this 8th day of May, 2025.

NOTARY PUBLIC

Commonwealth of Pennsylvania - Notary Seal
Cheryl Ann Rutter, Notary Public
Cumberland County
My commission expires February 20, 2027
Commission number 1143028
Member, Pennsylvania Association of Notaries

My Commission Expires: February 20, 2027

JOHN SPANOS

DEPRECIATION EXPERIENCE

Q. Please state your name.

A. My name is John J. Spanos.

Q. What is your educational background?

A. I have Bachelor of Science degrees in Industrial Management and Mathematics from Carnegie-Mellon University and a Master of Business Administration from York College.

Q. Do you belong to any professional societies?

A. Yes. I am a member and past President of the Society of Depreciation Professionals and a member of the American Gas Association/Edison Electric Institute Industry Accounting Committee.

Q. Do you hold any special certification as a depreciation expert?

A. Yes. The Society of Depreciation Professionals has established national standards for depreciation professionals. The Society administers an examination to become certified in this field. I passed the certification exam in September 1997 and was recertified in August 2003, February 2008, January 2013, February 2018 and February 2023.

Q. Please outline your experience in the field of depreciation.

A. In June 1986, I was employed by Gannett Fleming Valuation and Rate Consultants, Inc. as a Depreciation Analyst. During the period from June 1986 through December 1995, I helped prepare numerous depreciation and original cost studies for utility companies in various industries. I helped perform depreciation studies for the following telephone companies: United Telephone of Pennsylvania, United Telephone of New Jersey, and Anchorage Telephone Utility. I helped perform depreciation studies for the following companies in

the railroad industry: Union Pacific Railroad, Burlington Northern Railroad, and Wisconsin Central Transportation Corporation.

I helped perform depreciation studies for the following organizations in the electric utility industry: Chugach Electric Association, The Cincinnati Gas and Electric Company (CG&E), The Union Light, Heat and Power Company (ULH&P), Northwest Territories Power Corporation, and the City of Calgary - Electric System.

I helped perform depreciation studies for the following pipeline companies: TransCanada Pipelines Limited, Trans Mountain Pipe Line Company Ltd., Interprovincial Pipe Line Inc., Nova Gas Transmission Limited and Lakehead Pipeline Company.

I helped perform depreciation studies for the following gas utility companies: Columbia Gas of Pennsylvania, Columbia Gas of Maryland, The Peoples Natural Gas Company, T. W. Phillips Gas & Oil Company, CG&E, ULH&P, Lawrenceburg Gas Company and Penn Fuel Gas, Inc.

I helped perform depreciation studies for the following water utility companies: Indiana-American Water Company, Consumers Pennsylvania Water Company and The York Water Company; and depreciation and original cost studies for Philadelphia Suburban Water Company and Pennsylvania-American Water Company.

In each of the above studies, I assembled and analyzed historical and simulated data, performed field reviews, developed preliminary estimates of service life and net salvage, calculated annual depreciation, and prepared reports for submission to state public utility commissions or federal regulatory agencies. I performed these studies under the general direction of William M. Stout, P.E.

In January 1996, I was assigned to the position of Supervisor of Depreciation Studies. In July 1999, I was promoted to the position of Manager, Depreciation and

Valuation Studies. In December 2000, I was promoted to the position as Vice-President of Gannett Fleming Valuation and Rate Consultants, Inc., in April 2012, I was promoted to the position as Senior Vice President of the Valuation and Rate Division of Gannett Fleming Inc. (now doing business as Gannett Fleming Valuation and Rate Consultants, LLC) and in January of 2019, I was promoted to my present position of President of Gannett Fleming Valuation and Rate Consultants, LLC. In my current position I am responsible for conducting all depreciation, valuation and original cost studies, including the preparation of final exhibits and responses to data requests for submission to the appropriate regulatory bodies.

Since January 1996, I have conducted depreciation studies similar to those previously listed including assignments for Pennsylvania-American Water Company; Aqua Pennsylvania; Kentucky-American Water Company; Virginia-American Water Company; Indiana-American Water Company; Iowa-American Water Company; New Jersey-American Water Company; Hampton Water Works Company; Omaha Public Power District; Enbridge Pipe Line Company; Inc.; Columbia Gas of Virginia, Inc.; Virginia Natural Gas Company National Fuel Gas Distribution Corporation - New York and Pennsylvania Divisions; The City of Bethlehem - Bureau of Water; The City of Coatesville Authority; The City of Lancaster - Bureau of Water; Peoples Energy Corporation; The York Water Company; Public Service Company of Colorado; Enbridge Pipelines; Enbridge Gas Distribution, Inc.; Reliant Energy-HLP; Massachusetts-American Water Company; St. Louis County Water Company; Missouri-American Water Company; Chugach Electric Association; Alliant Energy; Oklahoma Gas & Electric Company; Nevada Power Company; Dominion Virginia Power; NUI-Virginia Gas Companies; Pacific Gas & Electric Company; PSI Energy; NUI - Elizabethtown Gas Company; Cinergy Corporation – CG&E; Cinergy

Corporation – ULH&P; Columbia Gas of Kentucky; South Carolina Electric & Gas Company; Idaho Power Company; El Paso Electric Company; Aqua North Carolina; Aqua Ohio; Aqua Texas, Inc.; Aqua Illinois, Inc.; Ameren Missouri; Central Hudson Gas & Electric; Centennial Pipeline Company; CenterPoint Energy-Arkansas; CenterPoint Energy – Oklahoma; CenterPoint Energy – Entex; CenterPoint Energy - Louisiana; NSTAR – Boston Edison Company; Westar Energy, Inc.; United Water Pennsylvania; PPL Electric Utilities; PPL Gas Utilities; Wisconsin Power & Light Company; TransAlaska Pipeline; Avista Corporation; Northwest Natural Gas; Allegheny Energy Supply, Inc.; Public Service Company of North Carolina; South Jersey Gas Company; Duquesne Light Company; MidAmerican Energy Company; Laclede Gas; Duke Energy Company; E.ON U.S. Services Inc.; Elkton Gas Services; Anchorage Water and Wastewater Utility; Kansas City Power and Light; Duke Energy North Carolina; Duke Energy South Carolina; Monongahela Power Company; Potomac Edison Company; Duke Energy Ohio Gas; Duke Energy Kentucky; Duke Energy Indiana; Duke Energy Progress; Northern Indiana Public Service Company; Tennessee- American Water Company; Columbia Gas of Maryland; Maryland-American Water Company; Bonneville Power Administration; NSTAR Electric and Gas Company; EPCOR Distribution, Inc.; B. C. Gas Utility, Ltd; Entergy Arkansas; Entergy Texas; Entergy Mississippi; Entergy Louisiana; Entergy Gulf States Louisiana; the Borough of Hanover; Louisville Gas and Electric Company; Kentucky Utilities Company; Madison Gas and Electric; Central Maine Power; PEPCO; PacifiCorp; Minnesota Energy Resource Group; Jersey Central Power & Light Company; Cheyenne Light, Fuel and Power Company; United Water Arkansas; Central Vermont Public Service Corporation; Green Mountain Power; Portland General Electric Company; Atlantic City Electric; Nicor Gas Company; Black Hills Power; Black Hills Colorado Gas; Black Hills Energy Arkansas, Inc.; Black Hills Kansas

Gas; Black Hills Service Company; Black Hills Utility Holdings; Public Service Company of Oklahoma; City of Dubois; Peoples Gas Light and Coke Company; North Shore Gas Company; Connecticut Light and Power; New York State Electric and Gas Corporation; Rochester Gas and Electric Corporation; Greater Missouri Operations; Tennessee Valley Authority; Omaha Public Power District; Indianapolis Power & Light Company; Vermont Gas Systems, Inc.; Metropolitan Edison; Pennsylvania Electric; West Penn Power; Pennsylvania Power; PHI Service Company - Delmarva Power and Light; Atmos Energy Corporation; Citizens Energy Group; PSE&G Company; Berkshire Gas Company; Alabama Gas Corporation; Mid-Atlantic Interstate Transmission, LLC; SUEZ Water; WEC Energy Group; Rocky Mountain Natural Gas, LLC; Illinois-American Water Company; Northern Illinois Gas Company; Public Service of New Hampshire; FirstEnergy Service Corporation; Northeast Ohio Natural Gas Corporation; Blue Granite Water Company; Spire Missouri, Inc.; Dominion Energy South Carolina, Inc.; South FirstEnergy Operating Companies; Dayton Power and Light Company; Liberty Utilities; East Kentucky Power Cooperative; Bangor Natural Gas; Hanover Borough Municipal Water Works; West Virginia American Water Company; Evergy Metro; Evergy Missouri West; Granite State Electric; Bluegrass Water; The Borough of Ambler; Newtown Artesian Water Company and Connecticut Water Company.

My additional duties include determining final life and salvage estimates, conducting field reviews, presenting recommended depreciation rates to management for its consideration and supporting such rates before regulatory bodies.

Q. Have you submitted testimony to any state utility commission on the subject of utility plant depreciation?

A. Yes. I have submitted testimony to the Pennsylvania Public Utility Commission; the

Commonwealth of Kentucky Public Service Commission; the Public Utilities Commission of Ohio; the Nevada Public Utility Commission; the Public Utilities Board of New Jersey; the Missouri Public Service Commission; the Massachusetts Department of Telecommunications and Energy; the Alberta Energy & Utility Board; the Idaho Public Utility Commission; the Louisiana Public Service Commission; the State Corporation Commission of Kansas; the Oklahoma Corporate Commission; the Public Service Commission of South Carolina; Railroad Commission of Texas – Gas Services Division; the New York Public Service Commission; Illinois Commerce Commission; the Indiana Utility Regulatory Commission; the California Public Utilities Commission; the Federal Energy Regulatory Commission ("FERC"); the Arkansas Public Service Commission; the Public Utility Commission of Texas; Maryland Public Service Commission; Washington Utilities and Transportation Commission; The Tennessee Regulatory Commission; the Regulatory Commission of Alaska; Minnesota Public Utility Commission; Utah Public Service Commission; District of Columbia Public Service Commission; the Mississippi Public Service Commission; Delaware Public Service Commission; Virginia State Corporation Commission; Colorado Public Utility Commission; Oregon Public Utility Commission; South Dakota Public Utilities Commission; Wisconsin Public Service Commission; Wyoming Public Service Commission; the Public Service Commission of West Virginia; Maine Public Utility Commission; Iowa Utility Board; Connecticut Public Utilities Regulatory Authority; New Mexico Public Regulation Commission; Commonwealth of Massachusetts Department of Public Utilities; Rhode Island Public Utilities Commission and the North Carolina Utilities Commission.

Q. Have you had any additional education relating to utility plant depreciation?

A. Yes. I have completed the following courses conducted by Depreciation Programs, Inc.:

"Techniques of Life Analysis," "Techniques of Salvage and Depreciation Analysis," "Forecasting Life and Salvage," "Modeling and Life Analysis Using Simulation," and "Managing a Depreciation Study." I have also completed the "Introduction to Public Utility Accounting" program conducted by the American Gas Association.

Q. Does this conclude your qualification statement?

A. Yes.

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY

	Year	Jurisdiction	Docket No.	Client Utility	Subject
01.	1998	PA PUC	R-00984375	City of Bethlehem – Bureau of Water	Original Cost and Depreciation
02.	1998	PA PUC	R-00984567	City of Lancaster	Original Cost and Depreciation
03.	1999	PA PUC	R-00994605	The York Water Company	Depreciation
04.	2000	D.T.&E.	DTE 00-105	Massachusetts-American Water Company	Depreciation
05.	2001	PA PUC	R-00016114	City of Lancaster	Original Cost and Depreciation
06.	2001	PA PUC	R-00017236	The York Water Company	Depreciation
07.	2001	PA PUC	R-00016339	Pennsylvania-American Water Company	Depreciation
08.	2001	OH PUC	01-1228-GA-AIR	Cinergy Corp – Cincinnati Gas & Elect Company	Depreciation
09.	2001	KY PSC	2001-092	Cinergy Corp – Union Light, Heat & Power Co.	Depreciation
10.	2002	PA PUC	R-00016750	Philadelphia Suburban Water Company	Depreciation
11.	2002	KY PSC	2002-00145	Columbia Gas of Kentucky	Depreciation
12.	2002	NJ BPU	GF02040245	NUI Corporation/Elizabethtown Gas Company	Depreciation
13.	2002	ID PUC	IPC-E-03-7	Idaho Power Company	Depreciation
14.	2003	PA PUC	R-0027975	The York Water Company	Depreciation
15.	2003	IN URC	R-0027975	Cinergy Corp – PSI Energy, Inc.	Depreciation
16.	2003	PA PUC	R-00038304	Pennsylvania-American Water Company	Depreciation
17.	2003	MO PSC	WR-2003-0500	Missouri-American Water Company	Depreciation
18.	2003	FERC	ER03-1274-000	NSTAR-Boston Edison Company	Depreciation
19.	2003	NJ BPU	BPU 03080683	South Jersey Gas Company	Depreciation
20.	2003	NV PUC	03-10001	Nevada Power Company	Depreciation
21.	2003	LA PSC	U-27676	CenterPoint Energy – Arkla	Depreciation
22.	2003	PA PUC	R-00038805	Pennsylvania Suburban Water Company	Depreciation
23.	2004	AB En/Util Bd	1306821	EPCOR Distribution, Inc.	Depreciation
24.	2004	PA PUC	R-00038168	National Fuel Gas Distribution Corp (PA)	Depreciation
25.	2004	PA PUC	R-00049255	PPL Electric Utilities	Depreciation
26.	2004	PA PUC	R-00049165	The York Water Company	Depreciation
27.	2004	OK Corp Cm	PUC 200400187	CenterPoint Energy – Arkla	Depreciation
28.	2004	OH PUC	04-680-El-AIR	Cinergy Corp. – Cincinnati Gas and Electric Company	Depreciation
29.	2004	RR Com of TX	GUD#	CenterPoint Energy – Entex Gas Services Div.	Depreciation
30.	2004	NY PUC	04-G-1047	National Fuel Gas Distribution Gas (NY)	Depreciation
31.	2004	AR PSC	04-121-U	CenterPoint Energy – Arkla	Depreciation
32.	2005	IL CC	05-ICC-06	North Shore Gas Company	Depreciation
33.	2005	IL CC	05-ICC-06	Peoples Gas Light and Coke Company	Depreciation
34.	2005	KY PSC	2005-00042	Union Light Heat & Power	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
35.	2005	IL CC	05-0308	MidAmerican Energy Company	Depreciation
36.	2005	MO PSC	GF-2005	Laclede Gas Company	Depreciation
37.	2005	KS CC	05-WSEE-981-RTS	Westar Energy	Depreciation
38.	2005	RR Com of TX	GUD #	CenterPoint Energy – Entex Gas Services Div.	Depreciation
39.	2005	US District Court	Cause No. 1:99-CV-1693-LJM/VSS	Cinergy Corporation	Accounting
40.	2005	OK CC	PUD 200500151	Oklahoma Gas and Electric Company	Depreciation
41.	2005	MA Dept Tele-com & Ergy	DTE 05-85	NSTAR	Depreciation
42.	2005	NY PUC	05-E-934/05-G-0935	Central Hudson Gas & Electric Company	Depreciation
43.	2005	AK Reg Com	U-04-102	Chugach Electric Association	Depreciation
44.	2005	CA PUC	A05-12-002	Pacific Gas & Electric	Depreciation
45.	2006	PA PUC	R-00051030	Aqua Pennsylvania, Inc.	Depreciation
46.	2006	PA PUC	R-00051178	T.W. Phillips Gas and Oil Company	Depreciation
47.	2006	NC Util Cm.	G-5, Sub522	Pub. Service Company of North Carolina	Depreciation
48.	2006	PA PUC	R-00051167	City of Lancaster	Depreciation
49.	2006	PA PUC	R00061346	Duquesne Light Company	Depreciation
50.	2006	PA PUC	R-00061322	The York Water Company	Depreciation
51.	2006	PA PUC	R-00051298	PPL GAS Utilities	Depreciation
52.	2006	PUC of TX	32093	CenterPoint Energy – Houston Electric	Depreciation
53.	2006	KY PSC	2006-00172	Duke Energy Kentucky	Depreciation
54.	2006	SC PSC		SCANA	Accounting
55.	2006	AK Reg Com	U-06-6	Municipal Light and Power	Depreciation
56.	2006	DE PSC	06-284	Delmarva Power and Light	Depreciation
57.	2006	IN URC	IURC43081	Indiana American Water Company	Depreciation
58.	2006	AK Reg Com	U-06-134	Chugach Electric Association	Depreciation
59.	2006	MO PSC	WR-2007-0216	Missouri American Water Company	Depreciation
60.	2006	FERC	IS05-82-002, et al	TransAlaska Pipeline	Depreciation
61.	2006	PA PUC	R-00061493	National Fuel Gas Distribution Corp. (PA)	Depreciation
62.	2007	NC Util Com.	E-7 SUB 828	Duke Energy Carolinas, LLC	Depreciation
63.	2007	OH PSC	08-709-EL-AIR	Duke Energy Ohio Gas	Depreciation
64.	2007	PA PUC	R-00072155	PPL Electric Utilities Corporation	Depreciation
65.	2007	KY PSC	2007-00143	Kentucky American Water Company	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
66.	2007	PA PUC	R-00072229	Pennsylvania American Water Company	Depreciation
67.	2007	KY PSC	2007-0008	NiSource – Columbia Gas of Kentucky	Depreciation
68.	2007	NY PSC	07-G-0141	National Fuel Gas Distribution Corp (NY)	Depreciation
69.	2008	AK PSC	U-08-004	Anchorage Water & Wastewater Utility	Depreciation
70.	2008	TN Reg Auth	08-00039	Tennessee-American Water Company	Depreciation
71.	2008	DE PSC	08-96	Artesian Water Company	Depreciation
72.	2008	PA PUC	R-2008-2023067	The York Water Company	Depreciation
73.	2008	KS CC	08-WSEE1-RTS	Westar Energy	Depreciation
74.	2008	IN URC	43526	Northern Indiana Public Service Company	Depreciation
75.	2008	IN URC	43501	Duke Energy Indiana	Depreciation
76.	2008	MD PSC	9159	NiSource – Columbia Gas of Maryland	Depreciation
77.	2008	KY PSC	2008-000251	Kentucky Utilities	Depreciation
78.	2008	KY PSC	2008-000252	Louisville Gas & Electric	Depreciation
79.	2008	PA PUC	2008-20322689	Pennsylvania American Water Co. - Wastewater	Depreciation
80.	2008	NY PSC	08-E887/08-00888	Central Hudson	Depreciation
81.	2008	WV TC	VE-080416/VG-8080417	Avista Corporation	Depreciation
82.	2008	IL CC	ICC-09-166	Peoples Gas, Light and Coke Company	Depreciation
83.	2009	IL CC	ICC-09-167	North Shore Gas Company	Depreciation
84.	2009	DC PSC	1076	Potomac Electric Power Company	Depreciation
85.	2009	KY PSC	2009-00141	NiSource – Columbia Gas of Kentucky	Depreciation
86.	2009	FERC	ER08-1056-002	Entergy Services	Depreciation
87.	2009	PA PUC	R-2009-2097323	Pennsylvania American Water Company	Depreciation
88.	2009	NC Util Cm	E-7, Sub 090	Duke Energy Carolinas, LLC	Depreciation
89.	2009	KY PSC	2009-00202	Duke Energy Kentucky	Depreciation
90.	2009	VA St. CC	PUE-2009-00059	Aqua Virginia, Inc.	Depreciation
91.	2009	PA PUC	2009-2132019	Aqua Pennsylvania, Inc.	Depreciation
92.	2009	MS PSC	Docket No. 2011-UA-183	Entergy Mississippi	Depreciation
93.	2009	AK PSC	09-08-U	Entergy Arkansas	Depreciation
94.	2009	TX PUC	37744	Entergy Texas	Depreciation
95.	2009	TX PUC	37690	El Paso Electric Company	Depreciation
96.	2009	PA PUC	R-2009-2106908	The Borough of Hanover	Depreciation
97.	2009	KS CC	10-KCPE-415-RTS	Kansas City Power & Light	Depreciation
98.	2009	PA PUC	R-2009-	United Water Pennsylvania	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
99.	2009	OH PUC		Aqua Ohio Water Company	Depreciation
100.	2009	WI PSC	3270-DU-103	Madison Gas & Electric Company	Depreciation
101.	2009	MO PSC	WR-2010	Missouri American Water Company	Depreciation
102.	2009	AK Reg Cm	U-09-097	Chugach Electric Association	Depreciation
103.	2010	IN URC	43969	Northern Indiana Public Service Company	Depreciation
104.	2010	WI PSC	6690-DU-104	Wisconsin Public Service Corp.	Depreciation
105.	2010	PA PUC	R-2010-2161694	PPL Electric Utilities Corp.	Depreciation
106.	2010	KY PSC	2010-00036	Kentucky American Water Company	Depreciation
107.	2010	PA PUC	R-2009-2149262	Columbia Gas of Pennsylvania	Depreciation
108.	2010	MO PSC	GR-2010-0171	Laclede Gas Company	Depreciation
109.	2010	SC PSC	2009-489-E	South Carolina Electric & Gas Company	Depreciation
110.	2010	NJ BD OF PU	ER09080664	Atlantic City Electric	Depreciation
111.	2010	VA St. CC	PUE-2010-00001	Virginia American Water Company	Depreciation
112.	2010	PA PUC	R-2010-2157140	The York Water Company	Depreciation
113.	2010	MO PSC	ER-2010-0356	Greater Missouri Operations Company	Depreciation
114.	2010	MO PSC	ER-2010-0355	Kansas City Power and Light	Depreciation
115.	2010	PA PUC	R-2010-2167797	T.W. Phillips Gas and Oil Company	Depreciation
116.	2010	PSC SC	2009-489-E	SCANA – Electric	Depreciation
117.	2010	PA PUC	R-2010-22010702	Peoples Natural Gas, LLC	Depreciation
118.	2010	AK PSC	10-067-U	Oklahoma Gas and Electric Company	Depreciation
119.	2010	IN URC	Cause No. 43894	Northern Indiana Public Serv. Company - NIFL	Depreciation
120.	2010	IN URC	Cause No. 43894	Northern Indiana Public Serv. Co. - Kokomo	Depreciation
121.	2010	PA PUC	R-2010-2166212	Pennsylvania American Water Co. - WW	Depreciation
122.	2010	NC Util Cn.	W-218,SUB310	Aqua North Carolina, Inc.	Depreciation
123.	2011	OH PUC	11-4161-WS-AIR	Ohio American Water Company	Depreciation
124.	2011	MS PSC	EC-123-0082-00	Entergy Mississippi	Depreciation
125.	2011	CO PUC	11AL-387E	Black Hills Colorado	Depreciation
126.	2011	PA PUC	R-2010-2215623	Columbia Gas of Pennsylvania	Depreciation
127.	2011	PA PUC	R-2010-2179103	City of Lancaster – Bureau of Water	Depreciation
128.	2011	IN URC	43114 IGCC 4S	Duke Energy Indiana	Depreciation
129.	2011	FERC	IS11-146-000	Enbridge Pipelines (Southern Lights)	Depreciation
130.	2011	IL CC	11-0217	MidAmerican Energy Corporation	Depreciation
131.	2011	OK CC	201100087	Oklahoma Gas & Electric Company	Depreciation
132.	2011	PA PUC	2011-2232243	Pennsylvania American Water Company	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
133.	2011	FERC	RP11-___-000	Carolina Gas Transmission	Depreciation
134.	2012	WA UTC	UE-120436/UG-120437	Avista Corporation	Depreciation
135.	2012	AK Reg Cm	U-12-009	Chugach Electric Association	Depreciation
136.	2012	MA PUC	DPU 12-25	Columbia Gas of Massachusetts	Depreciation
137.	2012	TX PUC	40094	El Paso Electric Company	Depreciation
138.	2012	ID PUC	IPC-E-12	Idaho Power Company	Depreciation
139.	2012	PA PUC	R-2012-2290597	PPL Electric Utilities	Depreciation
140.	2012	PA PUC	R-2012-2311725	Borough of Hanover – Bureau of Water	Depreciation
141.	2012	KY PSC	2012-00222	Louisville Gas and Electric Company	Depreciation
142.	2012	KY PSC	2012-00221	Kentucky Utilities Company	Depreciation
143.	2012	PA PUC	R-2012-2285985	Peoples Natural Gas Company	Depreciation
144.	2012	DC PSC	Case 1087	Potomac Electric Power Company	Depreciation
145.	2012	OH PSC	12-1682-EL-AIR	Duke Energy Ohio (Electric)	Depreciation
146.	2012	OH PSC	12-1685-GA-AIR	Duke Energy Ohio (Gas)	Depreciation
147.	2012	PA PUC	R-2012-2310366	City of Lancaster – Sewer Fund	Depreciation
148.	2012	PA PUC	R-2012-2321748	Columbia Gas of Pennsylvania	Depreciation
149.	2012	FERC	ER-12-2681-000	ITC Holdings	Depreciation
150.	2012	MO PSC	ER-2012-0174	Kansas City Power and Light	Depreciation
151.	2012	MO PSC	ER-2012-0175	KCPL Greater Missouri Operations Company	Depreciation
152.	2012	MO PSC	GO-2012-0363	Laclede Gas Company	Depreciation
153.	2012	MN PUC	G007,001/D-12-533	Integrys – MN Energy Resource Group	Depreciation
154.	2012	TX PUC	SOAH 582-14-1051/ TECQ 2013-2007-UCR	Aqua Texas	Depreciation
155.	2012	PA PUC	2012-2336379	York Water Company	Depreciation
156.	2013	NJ BPU	ER12121071	PHI Service Company– Atlantic City Electric	Depreciation
157.	2013	KY PSC	2013-00167	Columbia Gas of Kentucky	Depreciation
158.	2013	VA St CC	2013-00020	Virginia Electric and Power Company	Depreciation
159.	2013	IA Util Bd	2013-0004	MidAmerican Energy Corporation	Depreciation
160.	2013	PA PUC	2013-2355276	Pennsylvania American Water Company	Depreciation
161.	2013	NY PSC	13-E-0030, 13-G-0031, 13-S-0032	Consolidated Edison of New York	Depreciation
162.	2013	PA PUC	2013-2355886	Peoples TWP LLC	Depreciation
163.	2013	TN Reg Auth	12-0504	Tennessee American Water	Depreciation
164.	2013	ME PUC	2013-168	Central Maine Power Company	Depreciation
165.	2013	DC PSC	Case 1103	PHI Service Company – PEPCO	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
166.	2013	WY PSC	2003-ER-13	Cheyenne Light, Fuel and Power Company	Depreciation
167.	2013	FERC	ER13-2428-0000	Kentucky Utilities	Depreciation
168.	2013	FERC	ER13- -0000	MidAmerican Energy Company	Depreciation
169.	2013	FERC	ER13-2410-0000	PPL Utilities	Depreciation
170.	2013	PA PUC	R-2013-2372129	Duquesne Light Company	Depreciation
171.	2013	NJ BPU	ER12111052	Jersey Central Power and Light Company	Depreciation
172.	2013	PA PUC	R-2013-2390244	Bethlehem, City of – Bureau of Water	Depreciation
173.	2013	OK CC	UM 1679	Oklahoma, Public Service Company of	Depreciation
174.	2013	IL CC	13-0500	Nicor Gas Company	Depreciation
175.	2013	WY PSC	20000-427-EA-13	PacifiCorp	Depreciation
176.	2013	UT PSC	13-035-02	PacifiCorp	Depreciation
177.	2013	OR PUC	UM 1647	PacifiCorp	Depreciation
178.	2013	PA PUC	2013-2350509	Dubois, City of	Depreciation
179.	2014	IL CC	14-0224	North Shore Gas Company	Depreciation
180.	2014	FERC	ER14- -0000	Duquesne Light Company	Depreciation
181.	2014	SD PUC	EL14-026	Black Hills Power Company	Depreciation
182.	2014	WY PSC	20002-91-ER-14	Black Hills Power Company	Depreciation
183.	2014	PA PUC	2014-2428304	Borough of Hanover – Municipal Water Works	Depreciation
184.	2014	PA PUC	2014-2406274	Columbia Gas of Pennsylvania	Depreciation
185.	2014	IL CC	14-0225	Peoples Gas Light and Coke Company	Depreciation
186.	2014	MO PSC	ER-2014-0258	Ameren Missouri	Depreciation
187.	2014	KS CC	14-BHCG-502-RTS	Black Hills Service Company	Depreciation
188.	2014	KS CC	14-BHCG-502-RTS	Black Hills Utility Holdings	Depreciation
189.	2014	KS CC	14-BHCG-502-RTS	Black Hills Kansas Gas	Depreciation
190.	2014	PA PUC	2014-2418872	Lancaster, City of – Bureau of Water	Depreciation
191.	2014	WV PSC	14-0701-E-D	First Energy – MonPower/PotomacEdison	Depreciation
192	2014	VA St CC	PUC-2014-00045	Aqua Virginia	Depreciation
193.	2014	VA St CC	PUE-2013	Virginia American Water Company	Depreciation
194.	2014	OK CC	PUD201400229	Oklahoma Gas and Electric Company	Depreciation
195.	2014	OR PUC	UM1679	Portland General Electric	Depreciation
196.	2014	IN URC	Cause No. 44576	Indianapolis Power & Light	Depreciation
197.	2014	MA DPU	DPU. 14-150	NSTAR Gas	Depreciation
198.	2014	CT PURA	14-05-06	Connecticut Light and Power	Depreciation
199.	2014	MO PSC	ER-2014-0370	Kansas City Power & Light	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
200.	2014	KY PSC	2014-00371	Kentucky Utilities Company	Depreciation
201.	2014	KY PSC	2014-00372	Louisville Gas and Electric Company	Depreciation
202.	2015	PA PUC	R-2015-2462723	United Water Pennsylvania Inc.	Depreciation
203.	2015	PA PUC	R-2015-2468056	NiSource - Columbia Gas of Pennsylvania	Depreciation
204.	2015	NY PSC	15-E-0283/15-G-0284	New York State Electric and Gas Corporation	Depreciation
205.	2015	NY PSC	15-E-0285/15-G-0286	Rochester Gas and Electric Corporation	Depreciation
206.	2015	MO PSC	WR-2015-0301/SR-2015-0302	Missouri American Water Company	Depreciation
207.	2015	OK CC	PUD 201500208	Oklahoma, Public Service Company of	Depreciation
208.	2015	WV PSC	15-0676-W-42T	West Virginia American Water Company	Depreciation
209.	2015	PA PUC	2015-2469275	PPL Electric Utilities	Depreciation
210.	2015	IN URC	Cause No. 44688	Northern Indiana Public Service Company	Depreciation
211.	2015	OH PSC	14-1929-EL-RDR	First Energy-Ohio Edison/Cleveland Electric/ Toledo Edison	Depreciation
212.	2015	NM PRC	15-00127-UT	El Paso Electric	Depreciation
213.	2015	TX PUC	PUC-44941; SOAH 473-15-5257	El Paso Electric	Depreciation
214.	2015	WI PSC	3270-DU-104	Madison Gas and Electric Company	Depreciation
215.	2015	OK CC	PUD 201500273	Oklahoma Gas and Electric	Depreciation
216.	2015	KY PSC	Doc. No. 2015-00418	Kentucky American Water Company	Depreciation
217.	2015	NC UC	Doc. No. G-5, Sub 565	Public Service Company of North Carolina	Depreciation
218.	2016	WA UTC	Docket UE-17	Puget Sound Energy	Depreciation
219.	2016	NY PSC	Case No. 16-W-0130	SUEZ Water New York, Inc.	Depreciation
220.	2016	MO PSC	ER-2016-0156	KCPL – Greater Missouri	Depreciation
221.	2016	WI PSC		Wisconsin Public Service Corporation	Depreciation
222.	2016	KY PSC	Case No. 2016-00026	Kentucky Utilities Company	Depreciation
223.	2016	KY PSC	Case No. 2016-00027	Louisville Gas and Electric Company	Depreciation
224.	2016	OH PUC	Case No. 16-0907-WW-AIR	Aqua Ohio	Depreciation
225.	2016	MD PSC	Case 9417	NiSource - Columbia Gas of Maryland	Depreciation
226.	2016	KY PSC	2016-00162	Columbia Gas of Kentucky	Depreciation
227.	2016	DE PSC	16-0649	Delmarva Power and Light Company – Electric	Depreciation
228.	2016	DE PSC	16-0650	Delmarva Power and Light Company – Gas	Depreciation
229.	2016	NY PSC	Case 16-G-0257	National Fuel Gas Distribution Corp – NY Div	Depreciation
230.	2016	PA PUC	R-2016-2537349	Metropolitan Edison Company	Depreciation
231.	2016	PA PUC	R-2016-2537352	Pennsylvania Electric Company	Depreciation
232.	2016	PA PUC	R-2016-2537355	Pennsylvania Power Company	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
233.	2016	PA PUC	R-2016-2537359	West Penn Power Company	Depreciation
234.	2016	PA PUC	R-2016-2529660	NiSource - Columbia Gas of PA	Depreciation
235.	2016	KY PSC	Case No. 2016-00063	Kentucky Utilities / Louisville Gas & Electric Co	Depreciation
236.	2016	MO PSC	ER-2016-0285	KCPL Missouri	Depreciation
237.	2016	AR PSC	16-052-U	Oklahoma Gas & Electric Co	Depreciation
238.	2016	PSCW	6680-DU-104	Wisconsin Power and Light	Depreciation
239.	2016	ID PUC	IPC-E-16-23	Idaho Power Company	Depreciation
240.	2016	OR PUC	UM1801	Idaho Power Company	Depreciation
241.	2016	ILL CC	16-	MidAmerican Energy Company	Depreciation
242.	2016	KY PSC	Case No. 2016-00370	Kentucky Utilities Company	Depreciation
243.	2016	KY PSC	Case No. 2016-00371	Louisville Gas and Electric Company	Depreciation
244.	2016	IN URC	Cause No. 45029	Indianapolis Power & Light	Depreciation
245.	2016	AL RC	U-16-081	Chugach Electric Association	Depreciation
246.	2017	MA DPU	D.P.U. 17-05	NSTAR Electric Company and Western Massachusetts Electric Company	Depreciation
247.	2017	TX PUC	PUC-26831, SOAH 973-17-2686	El Paso Electric Company	Depreciation
248.	2017	WA UTC	UE-17033 and UG-170034	Puget Sound Energy	Depreciation
249.	2017	OH PUC	Case No. 17-0032-EL-AIR	Duke Energy Ohio	Depreciation
250.	2017	VA SCC	Case No. PUE-2016-00413	Virginia Natural Gas, Inc.	Depreciation
251.	2017	OK CC	Case No. PUD201700151	Public Service Company of Oklahoma	Depreciation
252.	2017	MD PSC	Case No. 9447	Columbia Gas of Maryland	Depreciation
253.	2017	NC UC	Docket No. E-2, Sub 1142	Duke Energy Progress	Depreciation
254.	2017	VA SCC	Case No. PUR-2017-00090	Dominion Virginia Electric and Power Company	Depreciation
255.	2017	FERC	ER17-1162	MidAmerican Energy Company	Depreciation
256.	2017	PA PUC	R-2017-2595853	Pennsylvania American Water Company	Depreciation
257.	2017	OR PUC	UM1809	Portland General Electric	Depreciation
258.	2017	FERC	ER17-217-000	Jersey Central Power & Light	Depreciation
259.	2017	FERC	ER17-211-000	Mid-Atlantic Interstate Transmission, LLC	Depreciation
260.	2017	MN PUC	Docket No. G007/D-17-442	Minnesota Energy Resources Corporation	Depreciation
261.	2017	IL CC	Docket No. 17-0124	Northern Illinois Gas Company	Depreciation
262.	2017	OR PUC	UM1808	Northwest Natural Gas Company	Depreciation
263.	2017	NY PSC	Case No. 17-W-0528	SUEZ Water Owego-Nichols	Depreciation
264.	2017	MO PSC	GR-2017-0215	Laclede Gas Company	Depreciation
265.	2017	MO PSC	GR-2017-0216	Missouri Gas Energy	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
266.	2017	ILL CC	Docket No. 17-0337	Illinois-American Water Company	Depreciation
267.	2017	FERC	Docket No. ER18-22-000	PPL Electric Utilities Corporation	Depreciation
268.	2017	IN URC	Cause No. 44988	Northern Indiana Public Service Company	Depreciation
269.	2017	NJ BPU	BPU Docket No. WR17090985	New Jersey American Water Company, Inc.	Depreciation
270.	2017	RI PUC	Docket No. 4800	SUEZ Water Rhode Island	Depreciation
271.	2017	OK CC	Cause No. PUD 201700496	Oklahoma Gas and Electric Company	Depreciation
272.	2017	NJ BPU	ER18010029 & GR18010030	Public Service Electric and Gas Company	Depreciation
273.	2017	NC Util Com.	Docket No. E-7, SUB 1146	Duke Energy Carolinas, LLC	Depreciation
274.	2017	KY PSC	Case No. 2017-00321	Duke Energy Kentucky, Inc.	Depreciation
275.	2017	MA DPU	D.P.U. 18-40	Berkshire Gas Company	Depreciation
276.	2018	IN IURC	Cause No. 44992	Indiana-American Water Company, Inc.	Depreciation
277.	2018	IN IURC	Cause No. 45029	Indianapolis Power and Light	Depreciation
278.	2018	NC Util Com.	Docket No. W-218, Sub 497	Aqua North Carolina, Inc.	Depreciation
279.	2018	PA PUC	Docket No. R-2018-2647577	NiSource - Columbia Gas of Pennsylvania, Inc.	Depreciation
280.	2018	OR PUC	Docket UM 1933	Avista Corporation	Depreciation
281.	2018	WA UTC	Docket No. UE-108167	Avista Corporation	Depreciation
282.	2018	ID PUC	AVU-E-18-03, AVU-G-18-02	Avista Corporation	Depreciation
283.	2018	IN URC	Cause No. 45039	Citizens Energy Group	Depreciation
284.	2018	FERC	Docket No. ER18-	Duke Energy Progress	Depreciation
285.	2018	PA PUC	Docket No. R-2018-3000124	Duquesne Light Company	Depreciation
286.	2018	MD PSC	Case No. 948	NiSource - Columbia Gas of Maryland	Depreciation
287.	2018	MA DPU	D.P.U. 18-45	NiSource - Columbia Gas of Massachusetts	Depreciation
288.	2018	OH PUC	Case No. 18-0299-GA-ALT	Vectren Energy Delivery of Ohio	Depreciation
289.	2018	PA PUC	Docket No. R-2018-3000834	SUEZ Water Pennsylvania Inc.	Depreciation
290.	2018	MD PSC	Case No. 9847	Maryland-American Water Company	Depreciation
291.	2018	PA PUC	Docket No. R-2018-3000019	The York Water Company	Depreciation
292.	2018	FERC	ER-18-2231-000	Duke Energy Carolinas, LLC	Depreciation
293.	2018	KY PSC	Case No. 2018-00261	Duke Energy Kentucky, Inc.	Depreciation
294.	2018	NJ BPU	BPU Docket No. WR18050593	SUEZ Water New Jersey	Depreciation
295.	2018	WA UTC	Docket No. UE-180778	PacifiCorp	Depreciation
296.	2018	UT PSC	Docket No. 18-035-36	PacifiCorp	Depreciation
297.	2018	OR PUC	Docket No. UM-1968	PacifiCorp	Depreciation
298.	2018	ID PUC	Case No. PAC-E-18-08	PacifiCorp	Depreciation
299.	2018	WY PSC	20000-539-EA-18	PacifiCorp	Depreciation
300.	2018	PA PUC	Docket No. R-2018-3003068	Aqua Pennsylvania, Inc.	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
301.	2018	IL CC	Docket No. 18-1467	Aqua Illinois, Inc.	Depreciation
302.	2018	KY PSC	Case No. 2018-00294	Louisville Gas & Electric Company	Depreciation
303.	2018	KY PSC	Case No. 2018-00295	Kentucky Utilities Company	Depreciation
304.	2018	IN URC	Cause No. 45159	Northern Indiana Public Service Company	Depreciation
305.	2018	VA SCC	Case No. PUR-2019-00175	Virginia American Water Company	Depreciation
306.	2019	PA PUC	Docket No. R-2018-3006818	Peoples Natural Gas Company, LLC	Depreciation
307.	2019	OK CC	Cause No. PUD201800140	Oklahoma Gas and Electric Company	Depreciation
308.	2019	MD PSC	Case No. 9490	FirstEnergy – Potomac Edison	Depreciation
309.	2019	SC PSC	Docket No. 2018-318-E	Duke Energy Progress	Depreciation
310.	2019	SC PSC	Docket No. 2018-319-E	Duke Energy Carolinas	Depreciation
311.	2019	DE PSC	DE 19-057	Public Service of New Hampshire	Depreciation
312.	2019	NY PSC	Case No. 19-W-0168 & 19-W-0269	SUEZ Water New York	Depreciation
313.	2019	PA PUC	Docket No. R-2019-3006904	Newtown Artesian Water Company	Depreciation
314.	2019	MO PSC	ER-2019-0335	Ameren Missouri	Depreciation
315.	2019	MO PSC	EC-2019-0200	KCP&L Greater Missouri Operations Company	Depreciation
316.	2019	MN DOC	G011/D-19-377	Minnesota Energy Resource Corp.	Depreciation
317.	2019	NY PSC	Case 19-E-0378 & 19-G-0379	New York State Electric and Gas Corporation	Depreciation
318.	2019	NY PSC	Case 19-E-0380 & 19-G-0381	Rochester Gas and Electric Corporation	Depreciation
319.	2019	WA UTC	Docket UE-190529 / UG-190530	Puget Sound Energy	Depreciation
320.	2019	PA PUC	Docket No. R-2019-3010955	City of Lancaster	Depreciation
321.	2019	IURC	Cause No. 45253	Duke Energy Indiana	Depreciation
322.	2019	KY PSC	Case No. 2019-00271	Duke Energy Kentucky, Inc.	Depreciation
323.	2019	OH PUC	Case No. 18-1720-GA-AIR	Northeast Ohio Natural Gas Corp	Depreciation
324.	2019	NC Util.	Docket No. E-2, Sub 1219	Duke Energy Carolinas	Depreciation
325.	2019	FERC	Docket No. ER20-277-000	Jersey Central Power & Light Company	Depreciation
326.	2019	MA DPU	D.P.U. 19-120	NSTAR Gas Company	Depreciation
327.	2019	SC PSC	Docket No. 2019-290-WS	Blue Granite Water Company	Depreciation
328.	2019	NC Util.	Docket No. E-2, Sub 1219	Duke Energy Progress	Depreciation
329.	2019	MD PSC	Case No. 9609	NiSource Columbia Gas of Maryland, Inc.	Depreciation
330.	2019	HI PUC	Docket No. 2019-0117	Young Brothers, LLC	Depreciation
331.	2020	NJ BPU	Docket No. ER20020146	Jersey Central Power & Light Company	Depreciation
332.	2020	PA PUC	Docket No. R-2020-3018835	NiSource - Columbia Gas of Pennsylvania, Inc.	Depreciation
333.	2020	PA PUC	Docket No. R-2020-3019369	Pennsylvania-American Water Company	Depreciation
334.	2020	PA PUC	Docket No. R-2020-3019371	Pennsylvania-American Water Company	Depreciation
335.	2020	MO PSC	GO-2018-0309, GO-2018-0310	Spire Missouri, Inc.	Depreciation
336.	2020	NM PRC	Case No. 20-00104-UT	El Paso Electric Company	Depreciation
337.	2020	MD PSC	Case No. 9644	Columbia Gas of Maryland, Inc.	Depreciation
338.	2020	MO PSC	GO-2018-0309, GO-2018-0310	Spire Missouri, Inc.	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
339.	2020	VA St CC	Case No. PUR-2020-00095	Virginia Natural Gas Company	Depreciation
340.	2020	SC PSC	Docket No. 2020-125-E	Dominion Energy South Carolina, Inc.	Depreciation
341.	2020	WV PSC	Case No. 20-0745-G-D	Hope Gas, Inc. d/b/a Dominion Energy West Virginia	Depreciation
342.	2020	VA St CC	Case No. PUR-2020-00106	Aqua Virginia, Inc.	Depreciation
343.	2020	PA PUC	Docket No. R-2020-3020256	City of Bethlehem – Bureau of Water	Depreciation
344.	2020	NE PSC	Docket No. NG-109	Black Hills Nebraska	Depreciation
345.	2020	NY PSC	Case No. 20-E-0428 & 20-G-0429	Central Hudson Gas & Electric Corporation	Depreciation
346.	2020	FERC	ER20-598	Duke Energy Indiana	Depreciation
347.	2020	FERC	ER20-855	Northern Indiana Public Service Company	Depreciation
348.	2020	OR PSC	UE 374	PacifiCorp	Depreciation
349.	2020	MD PSC	Case No. 9490 Phase II	Potomac Edison – Maryland	Depreciation
350.	2020	IN URC	Case No. 45447	Southern Indiana Gas and Electric Company	Depreciation
351.	2020	IN URC	IURC Cause No. 45468	Indiana Gas Company, Inc. d/b/a Vectren Energy Delivery	Depreciation
352.	2020	KY PSC	Case No. 2020-00349	Kentucky Utilities Company	Depreciation
353.	2020	KY PSC	Case No. 2020-00350	Louisville Gas and Electric Company	Depreciation
354.	2020	FERC	Docket No. ER21- 000	South FirstEnergy Operating Companies	Depreciation
355.	2020	OH PUC	Case Nos 20-1651-EL-AIR, 20-1652-EL-AAM & 20-1653-EL-ATA	Dayton Power and Light Company	Depreciation
356.	2020	OR PSC	UG 388	Northwest Natural Gas Company	Depreciation
357.	2020	MO PSC	Case No. GR-2021-0241	Ameren Missouri Gas	Depreciation
358.	2021	KY PSC	Case No. 2021-00103	East Kentucky Power Cooperative	Depreciation
359.	2021	MPUC	Docket No. 2021-00024	Bangor Natural Gas	Depreciation
360.	2021	PA PUC	Docket No. R-2021-3024296	Columbia Gas of Pennsylvania, Inc.	Depreciation
361.	2021	NC Util.	Doc. No. G-5, Sub 632	Public Service of North Carolina	Depreciation
362.	2021	MO PSC	ER-2021-0240	Ameren Missouri	Depreciation
363.	2021	PA PUC	Docket No. R-2021-3024750	Duquesne Light Company	Depreciation
364.	2021	KS PSC	21-BHCG-418-RTS	Black Hills Kansas Gas	Depreciation
365.	2021	KY PSC	Case No. 2021-00190	Duke Energy Kentucky	Depreciation
366.	2021	OR PSC	Docket UM 2152	Portland General Electric	Depreciation
367.	2021	ILL CC	Docket No. 20-0810	North Shore Gas Company	Depreciation
368.	2021	FERC	ER21-1939-000	Duke Energy Progress	Depreciation
369.	2021	FERC	ER21-1940-000	Duke Energy Carolina	Depreciation
370.	2021	KY PSC	Case No. 2021-00183	NiSource Columbia Gas of Kentucky	Depreciation
371.	2021	MD PSC	Case No. 9664	NiSource Columbia Gas of Maryland	Depreciation
372.	2021	OH PUC	Case No. 21-0596-ST-AIR	Aqua Ohio	Depreciation
373.	2021	PA PUC	Docket No. R-2021-3026116	Hanover Borough Municipal Water Works	Depreciation
374.	2021	OR PSC	UM-2180	Idaho Power Company	Depreciation
375.	2021	ID PUC	Case No. IPC-E-21-18	Idaho Power Company	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
376.	2021	WPSC	6690-DU-104	Wisconsin Public Service Company	Depreciation
377.	2021	PAPUC	Docket No. R-2021-3026116	Borough of Hanover	Depreciation
378.	2021	OH PUC	Case No. 21-637-GA-AIR; Case No. 21-638-GA-ALT; Case No. 21-639-GA-UNC; Case No. 21-640-GA-AAM	NiSource Columbia Gas of Ohio	Depreciation
379.	2021	TX PUC	Texas PUC Docket No. 52195; SOHA Docket No. 473-21-2606	El Paso Electric	Depreciation
380.	2021	MO PSC	Case No. GR.2021-0108	Spire Missouri	Depreciation
381.	2021	WV PSC	Case No. 21-0215-WS-P	West Virginia American Water Company	Depreciation
382.	2021	FERC	ER21-2736	Duke Energy Carolinas	Depreciation
383.	2021	FERC	ER21-2737	Duke Energy Progress	Depreciation
384.	2021	IN URC	Cause #45621	Northern Indiana Public Service Company	Depreciation
385.	2021	PA PUC	Docket No. R-2021-3026682	City of Lancaster	Depreciation
386.	2021	OH PUC	Case No. 21-887-EL-AIR; Case No. 21-888-EL-ATA; Case No. 889-El-AAM	Duke Energy Ohio	Depreciation
387.	2021	AK PSC	Docket No. 21-097-U	Black Hills Energy Arkansas, Inc.	Depreciation
388.	2021	OK CC	Cause No. PUD202100164	Oklahoma Gas & Electric	Depreciation
389.	2021	FERC	Case ER-22-392-001	El Paso Electric	Depreciation
390.	2021	FERC	Case ER-21-XXX	MidAmerican Electric	Depreciation
391.	2021	PA PUC	Docket Nos. R-2021-3027385, R-2021-3027386	Aqua Pennsylvania, Inc. Aqua Pennsylvania Wastewater, Inc.	Depreciation
392.	2022	FERC	Case ER-22-282-000	El Paso Electric	Depreciation
393.	2022	ILL CC	Docket No. 22-0154	MidAmerican Gas	Depreciation
394.	2022	MO PSC	Case No. ER-2022-0129	Evergy Metro	Depreciation
395.	2022	MO PSC	Case No. ER-2022-0130	Evergy Missouri West	Depreciation
396.	2022	PA PUC	Docket No. R-2022-3031211	NiSource Columbia Gas of Pennsylvania, Inc.	Depreciation
397.	2022	MA DPU	D.P.U. 22-20	The Berkshire Gas Company	Depreciation
398.	2022	PA PUC	R-2022-3031672; R-2022-3031673	Pennsylvania-American Water Company	Depreciation
399.	2022	SD PUC	Docket No. NG22-	MidAmerican Gas	Depreciation
400.	2022	MD PSC	Case No. 9680	NiSource Columbia Gas of Maryland	Depreciation
401.	2022	WYPSC	Docket No. 20003-214-ER-22	Black Hills Energy – Cheyenne Light, Fuel and Power	Depreciation
402.	2022	MA DPU	D.P.U. 22.22	NSTAR Electric Company d/b/a Eversource Energy	Depreciation
403.	2022	NC Util Com	Docket No. W-218, Sub 573	Aqua North Carolina, Inc.	Depreciation
404.	2022	OR PUC	UM2213	Northwest Natural Gas	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
405.	2022	OR PUC	UM2214	Northwest Natural Gas	Depreciation
406.	2022	ME PUC	Docket No. 2022-00152	Central Maine Power	Depreciation
407.	2022	SC PSC	Docket No. 2022-254-E	Duke Energy Progress	Depreciation
408.	2022	NC Util Com	Docket No. E-2, SUB 1300	Duke Energy Progress	Depreciation
409.	2022	IN URC	Cause #45772	Northern Indiana Public Service Company	Depreciation
410.	2022	PA PUC	R-2022-3031340	The York Water Company	Depreciation
411.	2022	PA PUC	R-2022-3032806	The York Water Company	Depreciation
412.	2022	PA PUC	R-2022-3031704	Borough of Ambler	Depreciation
413.	2022	MO PSC	ER-2022-0337	Ameren Missouri	Depreciation
414.	2022	OH PUC	Case No. 22-507-GA-AIR	Duke Energy Ohio	Depreciation
415.	2022	PA PUC	R-2022-3035730	National Fuel Gas Distribution Corporation – PA Division	Depreciation
416.	2022	NC Util Com	Docket No. E-22, Sub 493	Virginia Electric and Power Company	Depreciation
417.	2022	WY PSC	20003-214-ER-22	Cheyenne Light, Fuel and Power Company	Depreciation
418.	2022	NJ BPU	BPU Docket No. ER2303144	Jersey Central Power & Light Company	Depreciation
419.	2022	KY PSC	Case No. 2022-00372	Duke Energy Kentucky	Depreciation
420.	2022	TX PUC	SOAH Docket No. 473-23-04521	Aqua Texas, Inc.	Depreciation
421.	2022	NC Util Com	Docket No. E-7, Sub 1276	Duke Energy Carolinas, LLC	Depreciation
422.	2022	KY PSC	Case No. 2022-00432	Bluegrass Water	Depreciation
423.	2023	ILL CC	Docket No. 23-0069	The Peoples Gas Light and Coke Company	Depreciation
424.	2023	ILL CC	Docket No. 23-0068	North Shore Gas Company	Depreciation
425.	2023	WV PSC	Case No. 23-0030-E-D	Monongahela Power Company and The Potomac Edison	Depreciation
426.	2023	ID PUC	AVU-E-23-01; AVU-G-23-01	Avista Corporation	Depreciation
427.	2023	ILL CC	Docket No. 23-0066	Northern Illinois Gas Company d/b/a Nicor Gas Company	Depreciation
428.	2023	SC PSC	Docket No. 2023-70-G	Dominion Energy South Carolina, Inc.	Depreciation
429.	2023	FERC	Docket No. ER23-xxx-00	Duke Energy Ohio, Inc.	Depreciation
430.	2023	WY PSC	Docket No. 30036-78-GR-23	Black Hills Wyoming Gas Company d/b/a Black Hills Energy	Depreciation
431.	2023	MD PSC	Case No. 9695	The Potomac Edison Company	Depreciation
432.	2023	OR PUC	Case No. UM2277	Avista Corporation	Depreciation
433.	2023	FERC	Docket No. ER23-1629-000	PPL Electric Utilities	Depreciation
434.	2023	OH PUC	Case No. 23-0154-GA-AIR	Northeast Ohio Natural Gas Corporation	Depreciation
435.	2023	DE PSC	PSC Docket No. 23-0601	Artesian Water Company	Depreciation
436.	2023	CO PUC	No. 23AL-0231G	Black Hills Colorado d/b/a Black Hills Energy	Depreciation
437.	2023	NH PUC	Docket No. DE 23-039	Granite State Electric d/b/a Liberty Utilities	Depreciation
438.	2023	MD PSC	Case No. 9701	Columbia Gas of Maryland	Depreciation
439.	2023	NY PSC	Case Nos. 23-E-0418; 23-G-0419	Central Hudson Gas and Electric	Depreciation
440.	2023	FERC	Docket No. ER23-xxx-000	Central Maine Power Company	Depreciation
441.	2023	SD PUC	Docket Number EL23-016	Northwestern Energy	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
442.	2023	CT PURA	Docket No. 23-08-32	Connecticut Water Company	Depreciation
443.	2023	OH PUC	Case 23-0894-GA-AIR	The East Ohio Gas Company d/b/a Dominion Energy Ohio	Depreciation
444.	2023	IN URC	Cause No. 45911	Indianapolis Power & Light	Depreciation
445.	2023	IN URC	Cause No. 45967	Northern Indiana Public Service Company	Depreciation
446.	2023	PA PUC	Docket No. R-2023-3043189 and Docket No. R-2023-3043190	Pennsylvania-American Water Company	Depreciation
447.	2023	IN URC	Cause No. 45988	Citizens Energy Group	Depreciation
448.	2023	NY PSC	Case No. 23-G-0627	National Fuel Gas Distribution Corporation	Depreciation
449.	2023	IN URC	Cause No. 45990	Southern Indiana Gas and Electric Company d/b/a Centerpoint Energy Indiana South	Depreciation
450.	2023	PA PUC	Docket No. R-2023-3044549	Peoples Natural Gas Company LLC	Depreciation
451.	2023	OR PUC	Docket No. UM-2312	Northwest Natural Gas Company	Depreciation
452.	2023	AZ PCC	Docket No. WS-21182A-23-2092	Northwest Natural Water Company, LLC	Depreciation
453.	2023	SC PSC	Docket No. 2023-388-E	Duke Energy Carolinas	Depreciation
454.	2024	FERC	Docket No. ER24-768-000	Duke Energy Progress	Depreciation
455.	2024	FERC	Docket No. ER24-2057	Duke Energy Carolina	Depreciation
456.	2024	FERC	Docket No. SPP-0007	Evergy Metro, Inc. and Evergy Missouri West, Inc.	Depreciation
457.	2024	NJ BPU	Docket No. WR24010057	Aqua New Jersey, Inc.	Depreciation
458.	2024	ILL CC	Docket No. 24-0044	Aqua Illinois, Inc.	Depreciation
459.	2024	PA PUC	Docket No. R-2024-3046519	NiSource – Columbia Gas of Pennsylvania, Inc.	Depreciation
460.	2024	KY PSC	Case No. 2024-00092	NiSource – Columbia Gas of Kentucky, Inc.	Depreciation
461.	2024	VA SCC	Case No. PUR-2024-00030	NiSource – Columbia Gas of Virginia, Inc.	Depreciation
462.	2024	NE PSC	Docket No. 24-	Northwestern Energy	Depreciation
463.	2024	IA Util Bd	Docket No. RPU-2023-0002	Alliant - Interstate Power and Light Company	Depreciation
464.	2024	NE PSC	Docket No. 24-	Northwestern Energy	Depreciation
465.	2004	PA PUC	Docket No. R-2024-3047068	FirstEnergy Pennsylvania – Metropolitan Edison; Pennsylvania Electric; Pennsylvania Power; West Penn Power	Depreciation
466.	2024	PA PUC	Docket No. R-2024-3046523	Duquesne Light Company	Depreciation
467.	2024	NCUC	Docket No. E-22, Sub 694	Dominion Energy North Carolina	Depreciation
468.	2024	IN URC	IURC Cause No. 46038	Duke Energy Indiana	Depreciation
469.	2024	NJ BPU	Docket Nos. ER23120924 and GF 23120925	Public Service Electric and Gas Company	Depreciation
470.	2024	CO PUC	Docket No. 24-AL-0275E	Black Hills Colorado Electric, LLC	Depreciation
471.	2024	OH PUC	Case No. 24-0468-EL-AIR, Case No. 24-0469-EL-ATA, Case No. 24-0470-EL-AAM, Case No. 24-0471-EL-UNC	FirstEnergy Ohio	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
472.	2024	SD PUC	Docket No. NG24-005	Northwestern Energy	Depreciation
473.	2024	PA PUC	Docket No. R-2024-3047822	Aqua Pennsylvania, Inc	Depreciation
474.	2024	PA PUC	Docket No. R-2024-3047824	Aqua Pennsylvania Wastewater, Inc	Depreciation
475.	2024	NH PUC	Docket No. DE 24-070	Eversource Energy - Public Service of New Hampshire	Depreciation
476.	2024	VA SCC	Case No. PUR-2024-00048	Virginia Natural Gas Company	Depreciation
477.	2024	WV PSC	Case No. 24-0678-G-D	Hope Gas, Inc.	Depreciation
478.	2024	MO PSC	ER-2024-0319	Ameren Missouri	Depreciation
479.	2024	PA PUC	Docket No. R-2024-3050208	Newtown Artesian Water Company	Depreciation
480.	2024	PA PUC	Docket No. RP-24-1106-00	Adelphia Gateway	Depreciation
481.	2024	OH PUC	Case No. 24-0832-GA-AIR	Centerpoint Energy Ohio	Depreciation
482.	2024	MT PSC	Docket 2024-05-053	Northwestern Energy	Depreciation
483.	2024	MD PSC	Case No. 9754	NiSource – Columbia Gas of Maryland	Depreciation
484.	2024	IURC	Cause No. 46120	Northern Indiana Public Service Company LLC	Depreciation
485.	2024	MO PSC	GR-2024-0369	Ameren Missouri	Depreciation
486.	2024	PUCO	Case No. 24-1009-EL-AIR, Case No. 24-1010-El-AAM, Case No. 24-1011-El-ATA	The Dayton Power and Light Company d/b/a AES Ohio	Depreciation
487.	2024	KY PSC	Case No. 2024-00354	Duke Energy Kentucky	Depreciation
488.	2024	MO PSC	GR-2025-0107	Spire Missouri, Inc.	Depreciation
489.	2024	PUCO	UG 520	Northwest Natural Gas	Depreciation
490.	2024	TX PUC	SOAH Docket No. 473-25-11219; PUC Docket No. 57568	El Paso Electric	Depreciation
491.	2024	FERC	Docket No. RP24-1106-002	Adelphia Gateway, LLC	Depreciation
492.	2025	PA PUC	Docket No.R-2025-3053499	Columbia Gas of Pennsylvania, Inc.	Depreciation
493.	2025	NE PSC	Case No. NG-124	Black Hills Nebraska Gas, LLC	Depreciation

2024 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION
ACCRUALS RELATED TO GAS PLANT
AS OF SEPTEMBER 30, 2024

Prepared by:

DUKE ENERGY KENTUCKY, INC.

Cincinnati, Ohio

2024 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION
ACCRUALS RELATED TO GAS PLANT
AS OF SEPTEMBER 30, 2024

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC
Mechanicsburg, Pennsylvania

Gannett Fleming
Valuation and Rate Consultants, LLC

Corporate Headquarters
300 Sterling Parkway, Suite 300
Mechanicsburg, PA 17050
P 717.763.7211 | **F** 717.763.8150

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April 17, 2025

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

Attention Reem Grammatico
Director, Asset Accounting

Ladies and Gentlemen:

Pursuant to your request, we have conducted a depreciation study related to the gas plant of Duke Energy Kentucky, Inc. as of September 30, 2024. 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
President

MELISSA M. HOWARD
Assistant Project Manager

JJS:mle

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TABLE OF CONTENTS

TABLE OF CONTENTS, cont

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 gas plant as of September 30, 2024. 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 has been the retirement of all production facilities. Also, the service lives for many distribution plant assets have changes in life and net salvage parameters as would be expected.

Gannett Fleming recommends the calculated annual depreciation accrual rates set forth herein apply specifically to gas plant in service as of September 30, 2024 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 $22.9 million when applied to depreciable plant balances as of September 30, 2024. The results are summarized at the functional level as follows:

SUMMARY OF ORIGINAL COST, ACCRUAL RATES AND AMOUNTS

FUNCTION	ORIGINAL COST AS OF SEPTEMBER 30, 2024	PROPOSED RATE	PROPOSED EXPENSE
Gas Plant			
Distribution Plant	$918,097,344.04	2.38	$21,880,870
General Plant	17,151,916.72	5.80	995,454
Total	**$935,249,260.76**	**2.45**	**$22,876,324**

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 gas plant as of September 30, 2024. The rates and amounts are based on the straight line remaining life method of depreciation. This report also describes the concepts, methods and judgments which underlie the recommended annual depreciation accrual rates related to gas plant in service as of September 30, 2024.

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 September 2024, a review of Company practice and outlook as they relate to plant operation and retirement, and consideration of current practice in the gas industry, including knowledge of service lives and net salvage estimates used for other gas companies.

PLAN OF REPORT

Part I, Introduction, contains statements with respect to the plan of the report, and the basis of the study. Part II, 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 throughout the United States, including 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 gas utility industry, and comparisons of the service life and net salvage estimates from our studies of other gas utilities. The use of survivor curves to reflect the expected dispersion of retirement provides a consistent method of estimating depreciation for gas plant. Iowa type survivor curves were used to depict the estimated survivor curves for the plant accounts not subject to amortization accounting.

The procedure for estimating service lives consisted of compiling historical data for the plant accounts or depreciable groups, analyzing this history through the use of widely accepted techniques, and forecasting the survivor characteristics for each depreciable group on the basis of interpretations of the historical data analyses and the probable future. The combination of the historical experience and the estimated future yielded estimated survivor curves from which the average service lives were derived.

PART II. ESTIMATION OF SURVIVOR CURVES

PART II. ESTIMATION OF SURVIVOR CURVES

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

SURVIVOR CURVES

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

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

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

Iowa Type Curves

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

The 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.

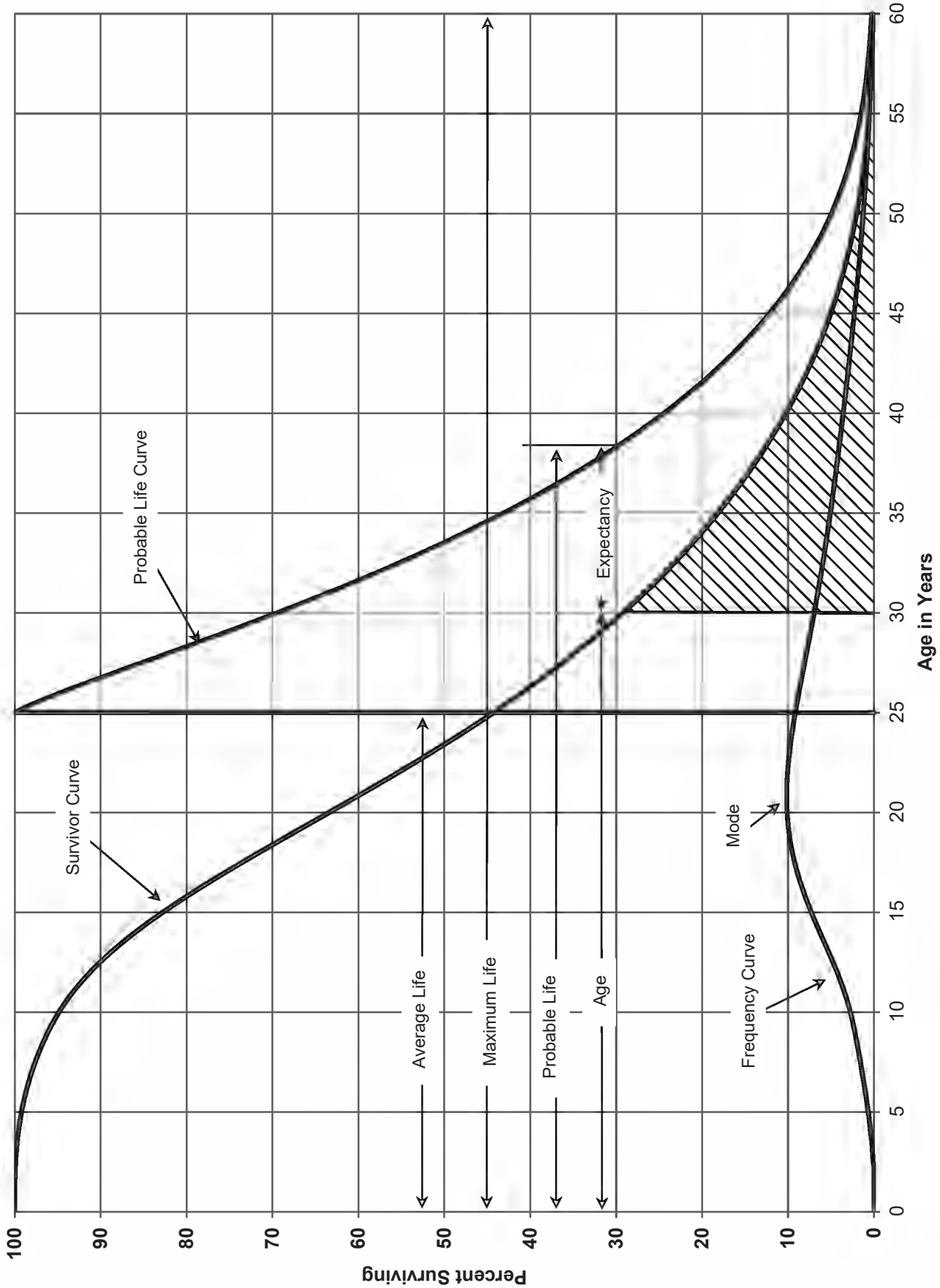

FIGURE 1. TYPICAL SURVIVOR CURVE AND DERIVED CURVES

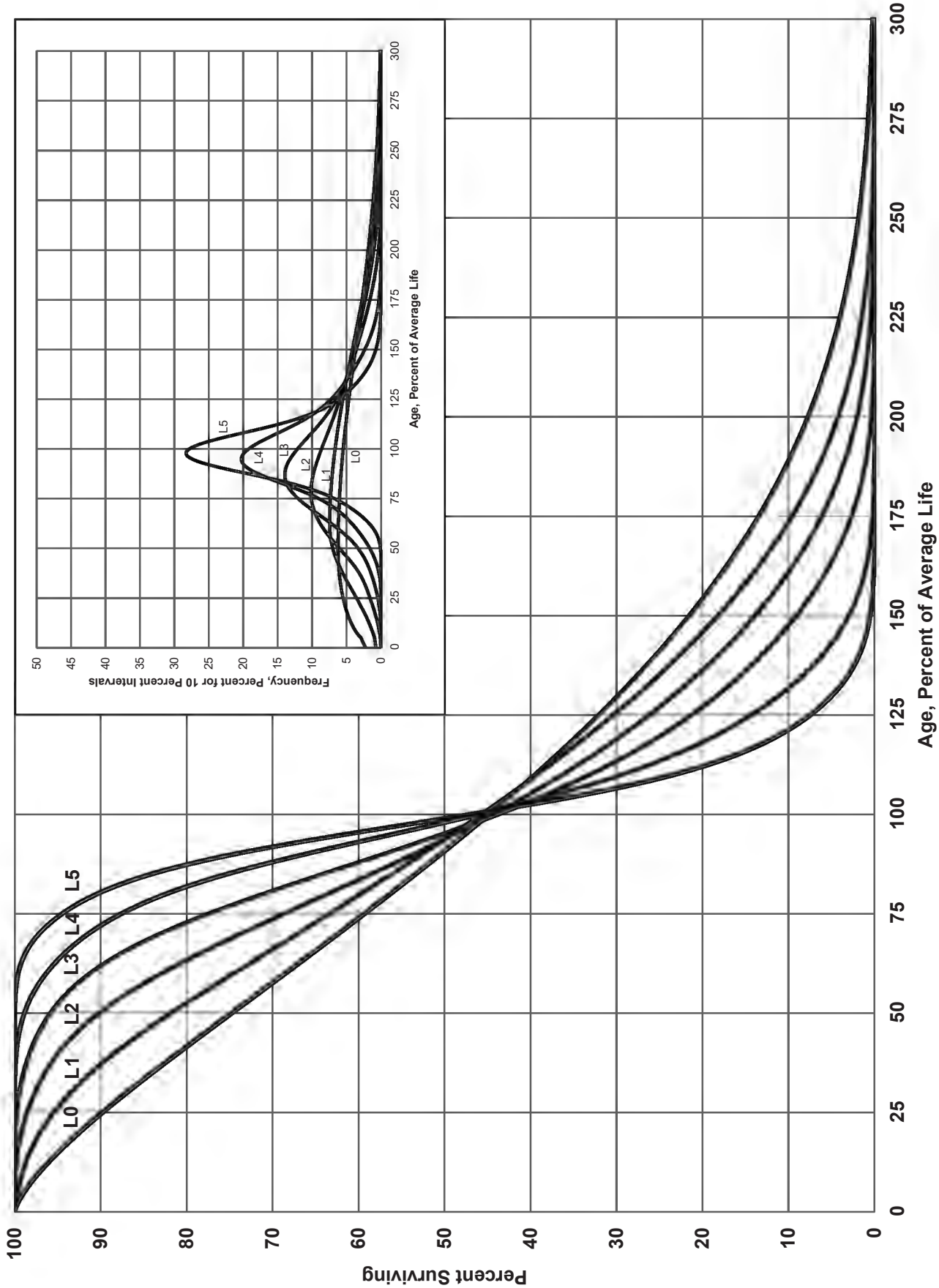

FIGURE 2.. LEFT MODAL OR "L" IOWA TYPE SURVIVOR CURVES

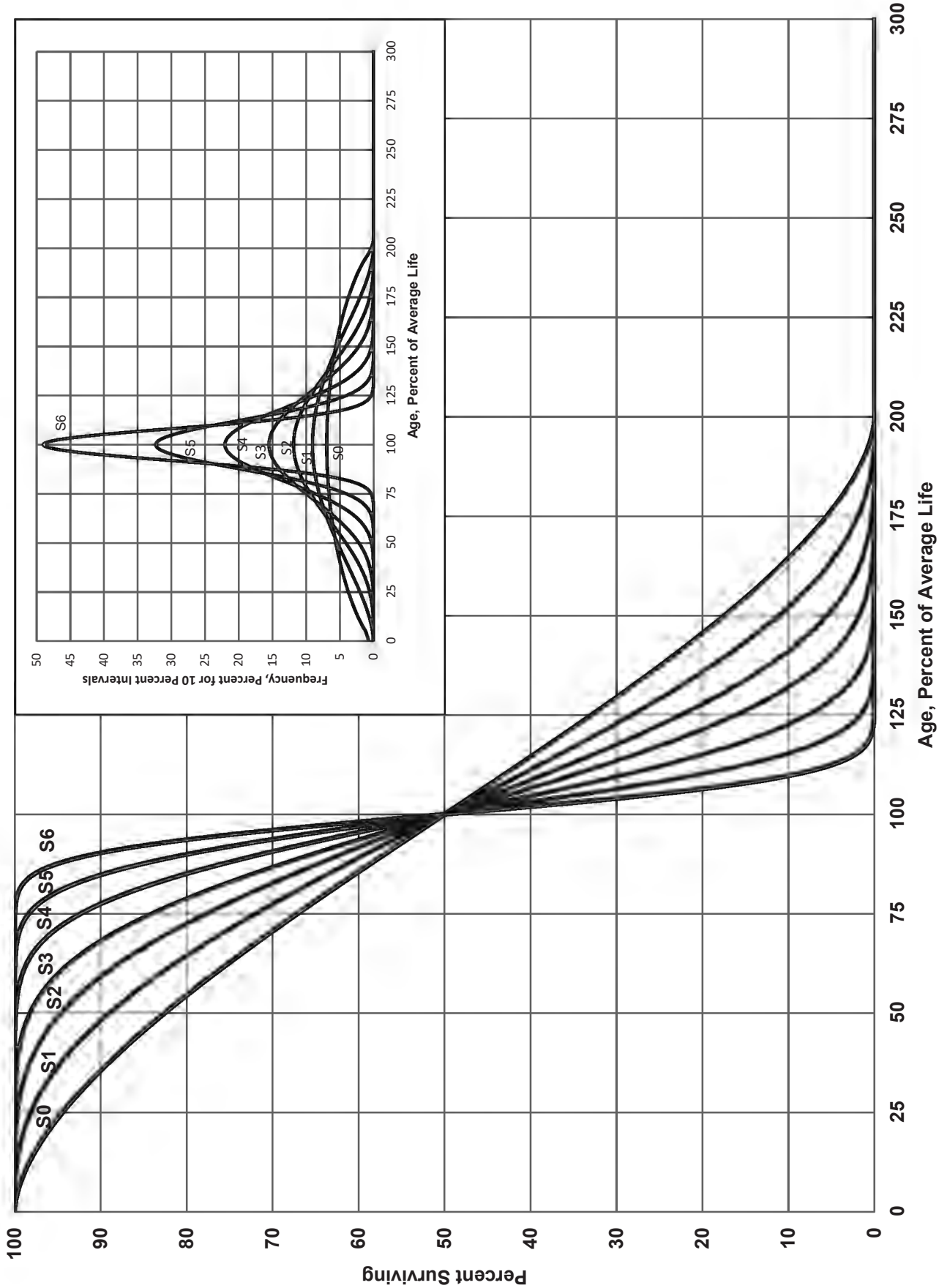

FIGURE 3.. SYMMETRICAL OR "S" IOWA TYPE SURVIVOR CURVES

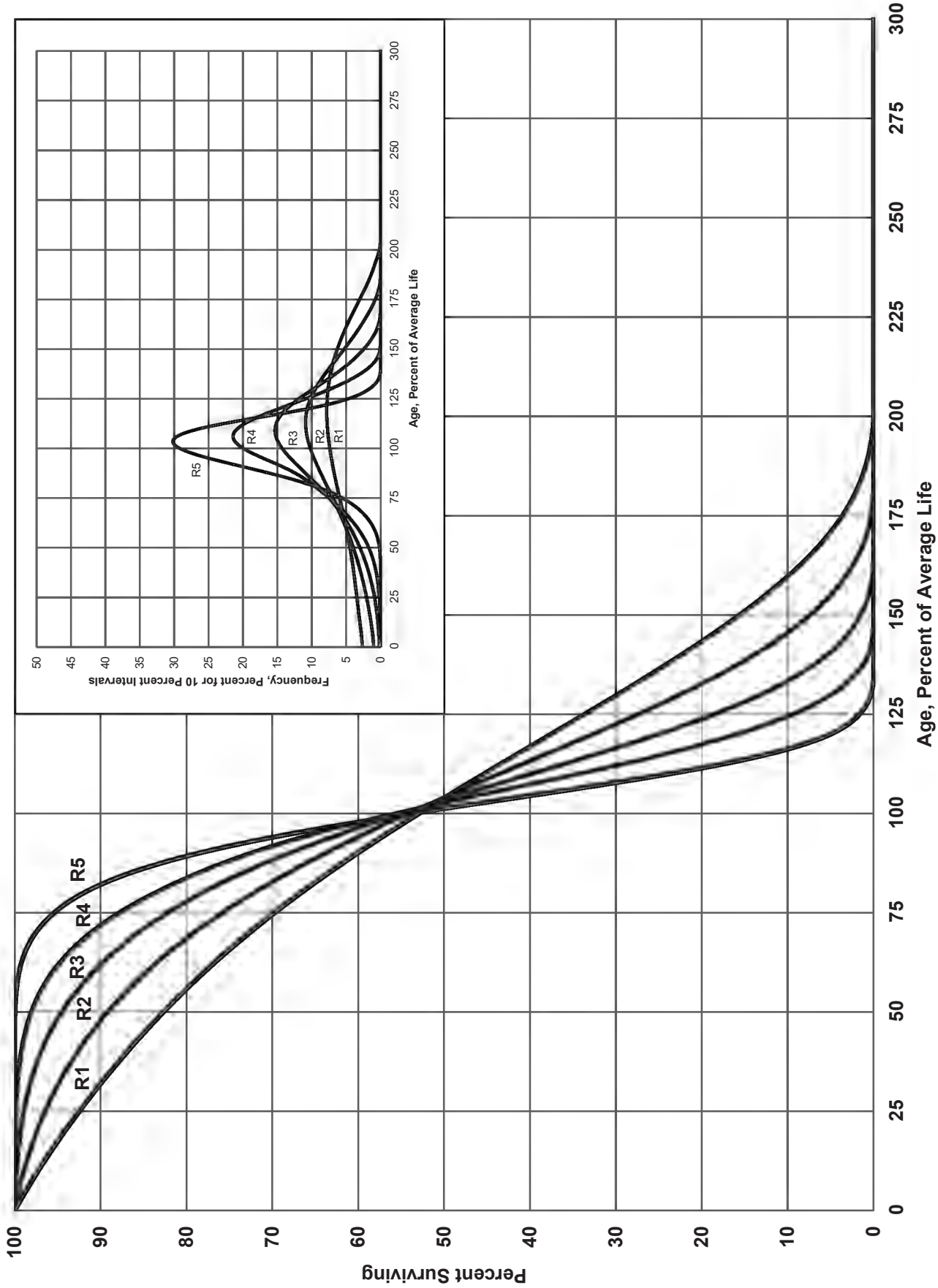

FIGURE 4.. RIGHT MODAL OR "R" IOWA TYPE SURVIVOR CURVES

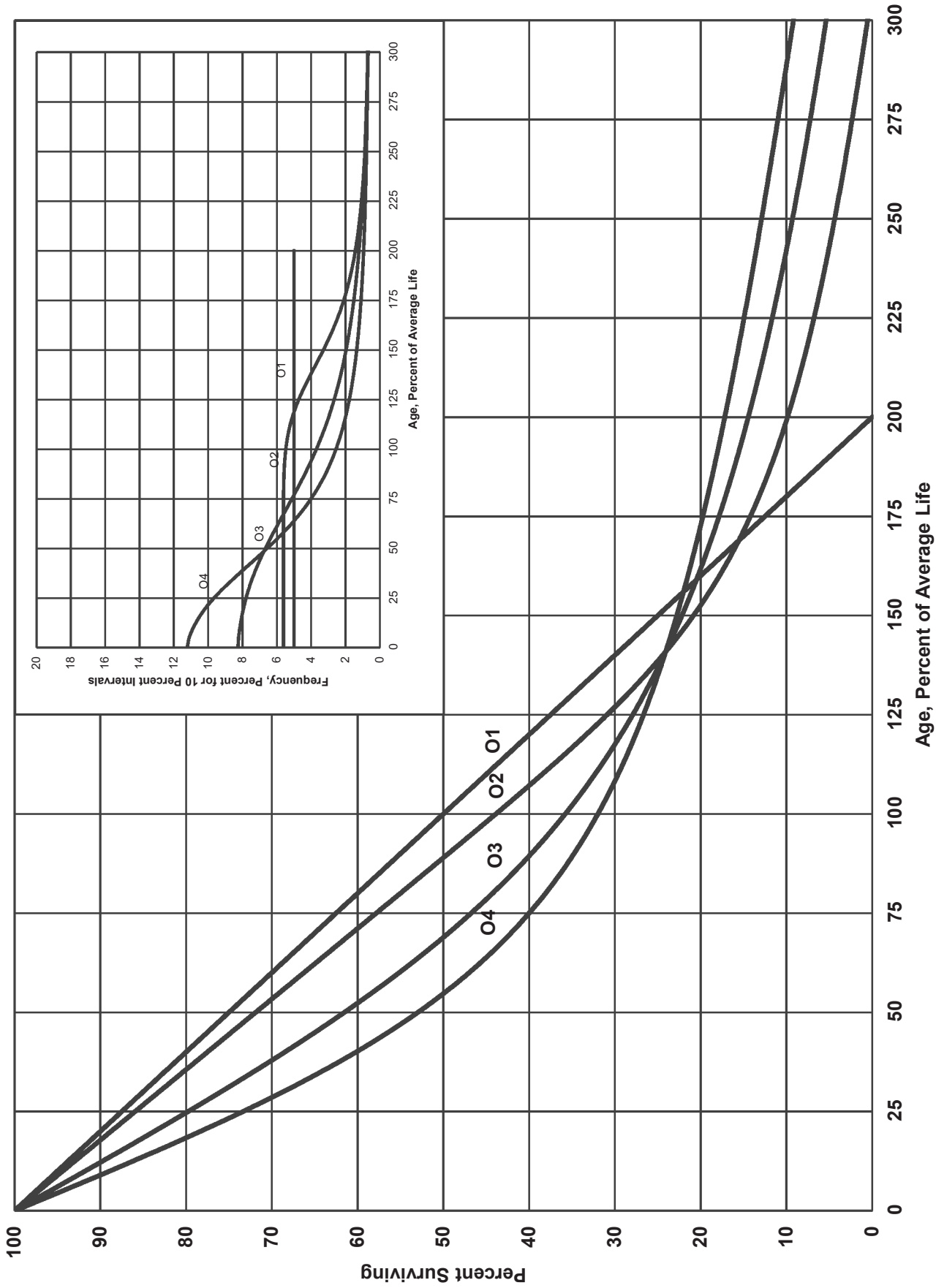

FIGURE 5. ORIGIN MODAL OR "O" IOWA TYPE SURVIVOR CURVES

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. 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, Statistical Analyses of Industrial Property Retirements. Iowa State College, Engineering Experiment Station, Bulletin 125. 1935.
[3]Marston, Anson, Robley Winfrey, and Jean C. Hempstead, Supra Note 1.
[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 2015-2024 for which there were placements during the years 2010-2024. 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 2010 were retired in 2015. 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 2015 retirements of 2010 installations and ending with the 2024 retirements of the 2019 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.

GANNETT FLEMING

SCHEDULE 1. RETIREMENTS FOR EACH YEAR 2015-2024
SUMMARIZED BY AGE INTERVAL

Experience Band 2015-2024

Placement Band 2010-2024

Year Placed	Retirements, Thousands of Dollars During Year										Total During Age Interval	Age Interval
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2010	10	11	12	13	14	16	23	24	25	26	26	13½-14½
2011	11	12	13	15	16	18	20	21	22	19	44	12½-13½
2012	11	12	13	14	16	17	19	21	22	18	64	11½-12½
2013	8	9	10	11	11	13	14	15	16	17	83	10½-11½
2014	9	10	11	12	13	14	16	17	19	20	93	9½-10½
2015	4	9	10	11	12	13	14	15	16	20	105	8½-9½
2016		5	11	12	13	14	15	16	18	20	113	7½-8½
2017			6	12	13	15	16	17	19	19	124	6½-7½
2018				6	13	15	16	17	19	19	131	5½-6½
2019					7	14	16	17	19	20	143	4½-5½
2020						8	18	20	22	23	146	3½-4½
2021							9	20	22	25	150	2½-3½
2022								11	23	25	151	1½-2½
2023									11	24	153	½-1½
2024										13	80	0-½
Total	53	68	86	106	128	157	196	231	273	308	1,606	

GANNETT FLEMING

SCHEDULE 2. OTHER TRANSACTIONS FOR EACH YEAR 2015-2024
SUMMARIZED BY AGE INTERVAL

Experience Band 2015-2024 Placement Band 2010-2024

Year Placed	Acquisitions, Transfers and Sales, Thousands of Dollars During Year										Total During Age Interval	Age Interval
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2010	-	-	-	-	-	-	60[a]	-	-	-	-	13½-14½
2011	-	-	-	-	-	-	-	-	-	-	-	12½-13½
2012	-	-	-	-	-	-	-	-	-	-	-	11½-12½
2013	-	-	-	-	-	-	-	(5)[b]	-	-	60	10½-11½
2014	-	-	-	-	-	-	-	6[a]	-	-	-	9½-10½
2015	-	-	-	-	-	-	-	-	-	-	(5)	8½-9½
2016		-	-	-	-	-	-	-	-	-	6	7½-8½
2017			-	-	-	-	-	-	-	-	-	6½-7½
2018				-	-	-	-	(12)[b]	-	-	-	5½-6½
2019					-	-	-	-	22[a]	-	-	4½-5½
2020						-	-	(19)[b]	-	-	10	3½-4½
2021							-	-	-	-	-	2½-3½
2022								-	-	(102)[c]	(121)	1½-2½
2023									-	-	-	½-1½
2024											-	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 2015 through 2024 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 2020 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

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SCHEDULE 3. PLANT EXPOSED TO RETIREMENT
JANUARY 1 OF EACH YEAR 2015-2024
SUMMARIZED BY AGE INTERVAL

Experience Band 2015-2024

Placement Band 2010-2024

Year Placed	Exposures, Thousands of Dollars — Annual Survivors at the Beginning of the Year										Total at Beginning of Age Interval	Age Interval
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2010	255	245	234	222	209	195	239	216	192	167	167	13½-14½
2011	279	268	256	243	228	212	194	174	153	131	323	12½-13½
2012	307	296	284	271	257	241	224	205	184	162	531	11½-12½
2013	338	330	321	311	300	289	276	262	242	226	823	10½-11½
2014	376	367	357	346	334	321	307	297	280	261	1,097	9½-10½
2015	420[a]	416	407	397	386	374	361	347	332	316	1,503	8½-9½
2016		460[a]	455	444	432	419	405	390	374	356	1,952	7½-8½
2017			510[a]	504	492	479	464	448	431	412	2,463	6½-7½
2018				580[a]	574	561	546	530	501	482	3,057	5½-6½
2019					660[a]	653	639	623	628	609	3,789	4½-5½
2020						750[a]	742	724	685	663	4,332	3½-4½
2021							850[a]	841	821	799	4,955	2½-3½
2022								960[a]	949	926	5,719	1½-2½
2023									1,080[a]	1,069	6,579	½-1½
2024										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

KyPSC Case No. 2025-00125
Attachment JJS-1
Page 25 of 241

For the entire experience band 2015-2024, 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 2015-2024 Placement Band 2010-2024

(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.

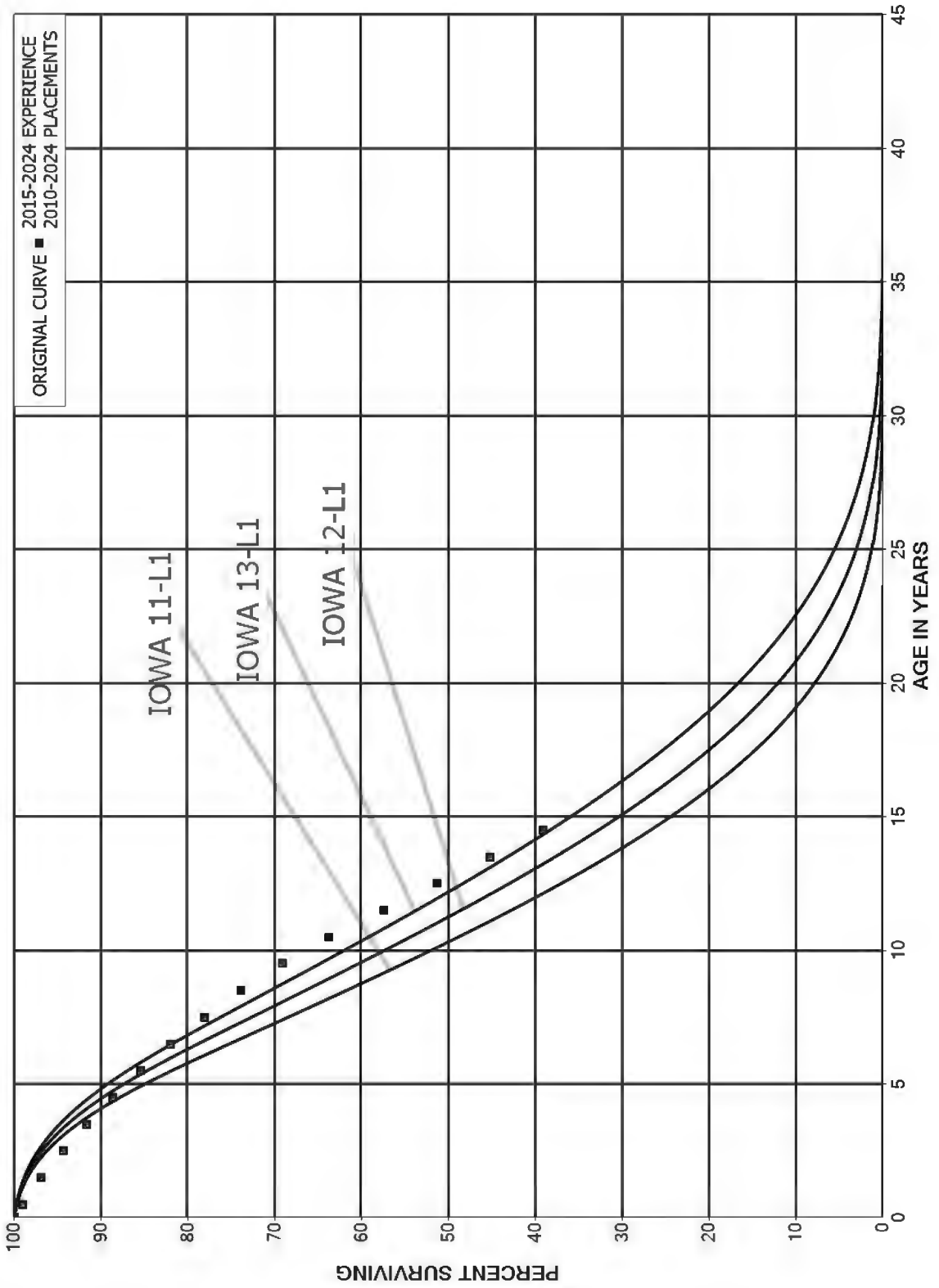
The original survivor curve is plotted from the original life table (column 6, Schedule 4). When the curve terminates at a percent surviving greater than zero, it is called a stub survivor curve. Survivor curves developed from retirement rate studies generally are stub curves.

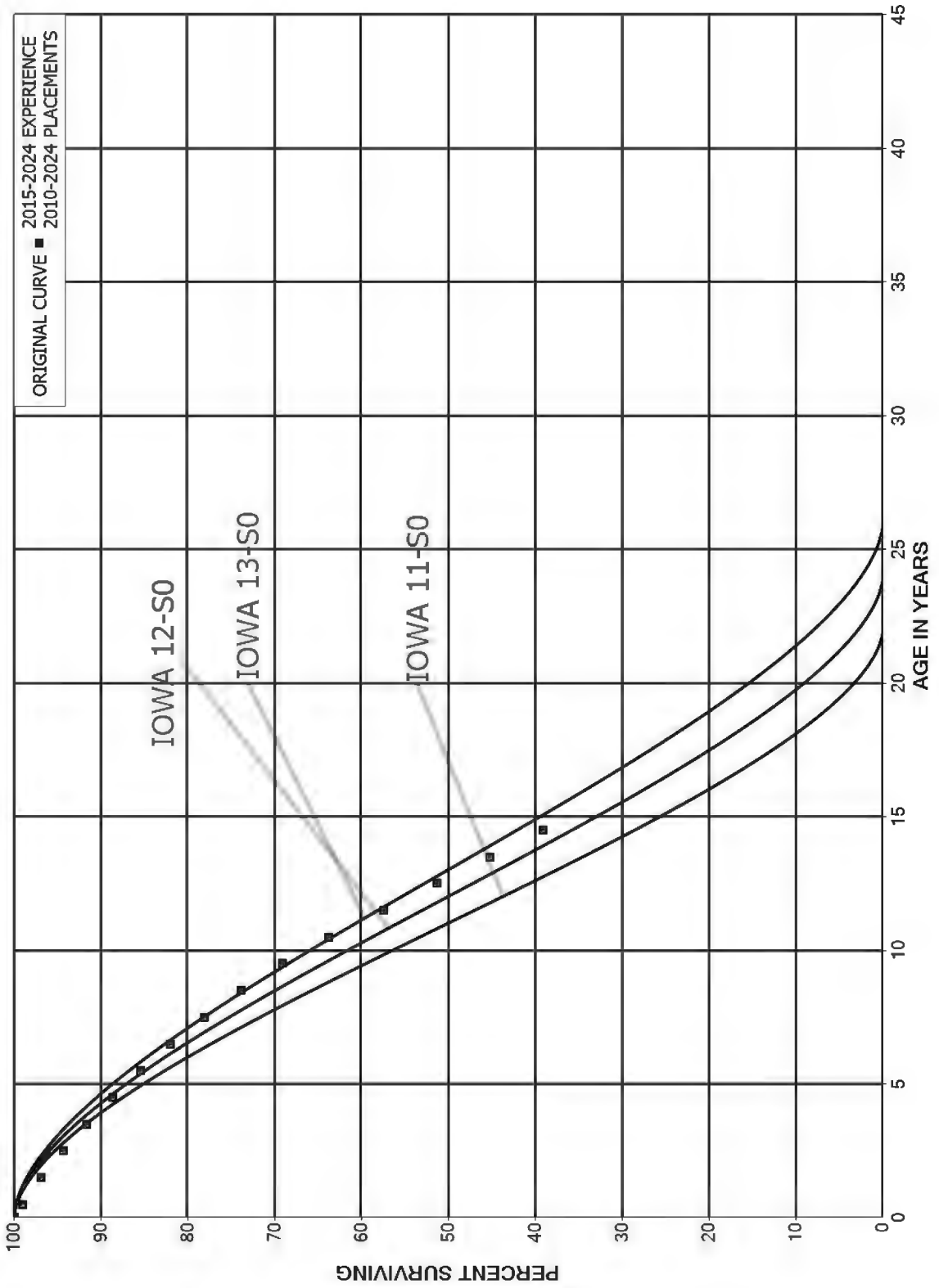
Smoothing the Original Survivor Curve

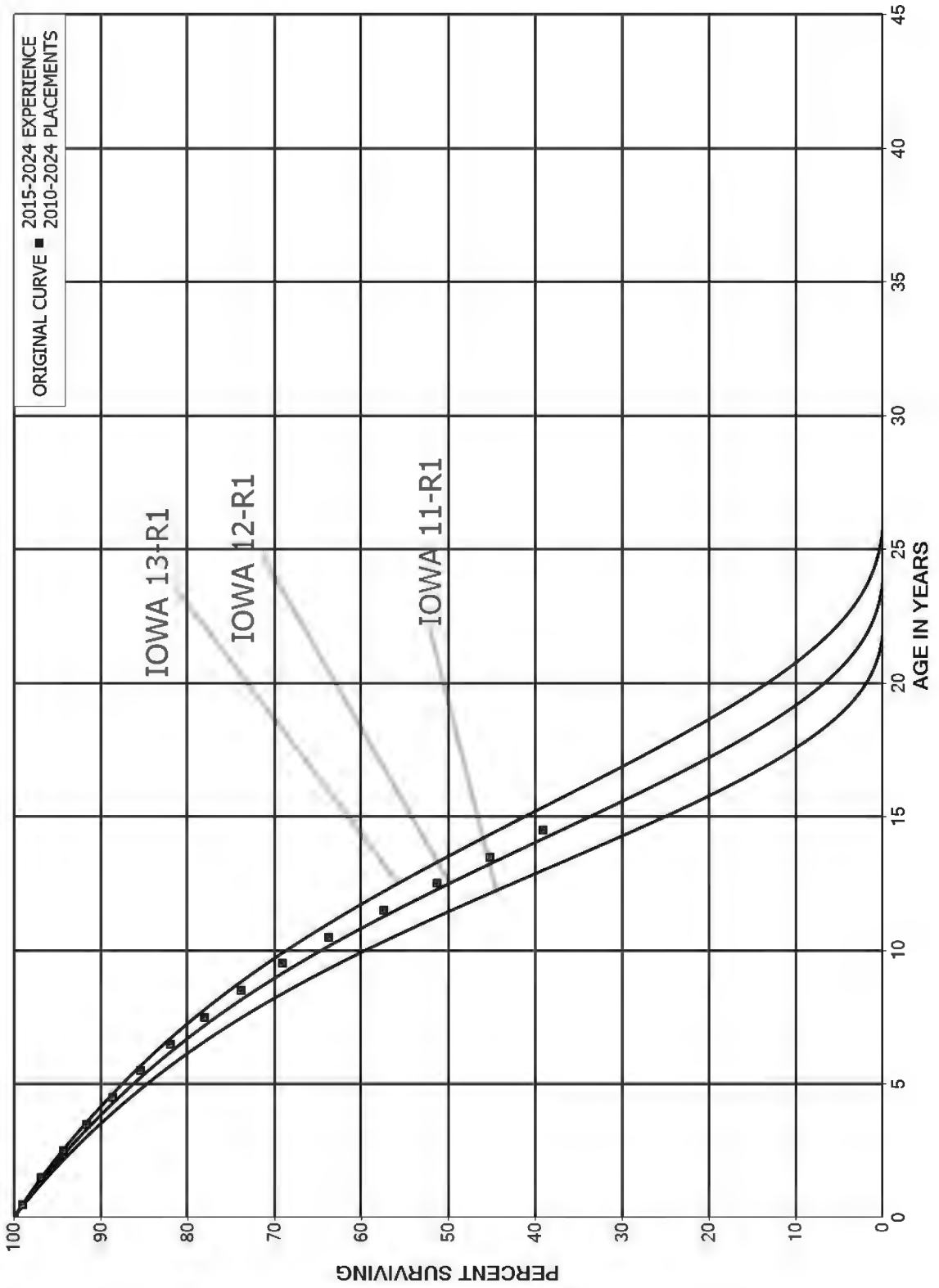
The smoothing of the original survivor curve eliminates any irregularities and serves as the basis for the preliminary extrapolation to zero percent surviving of the original stub curve. Even if the original survivor curve is complete from 100% to zero percent, it is desirable to eliminate any irregularities, 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.

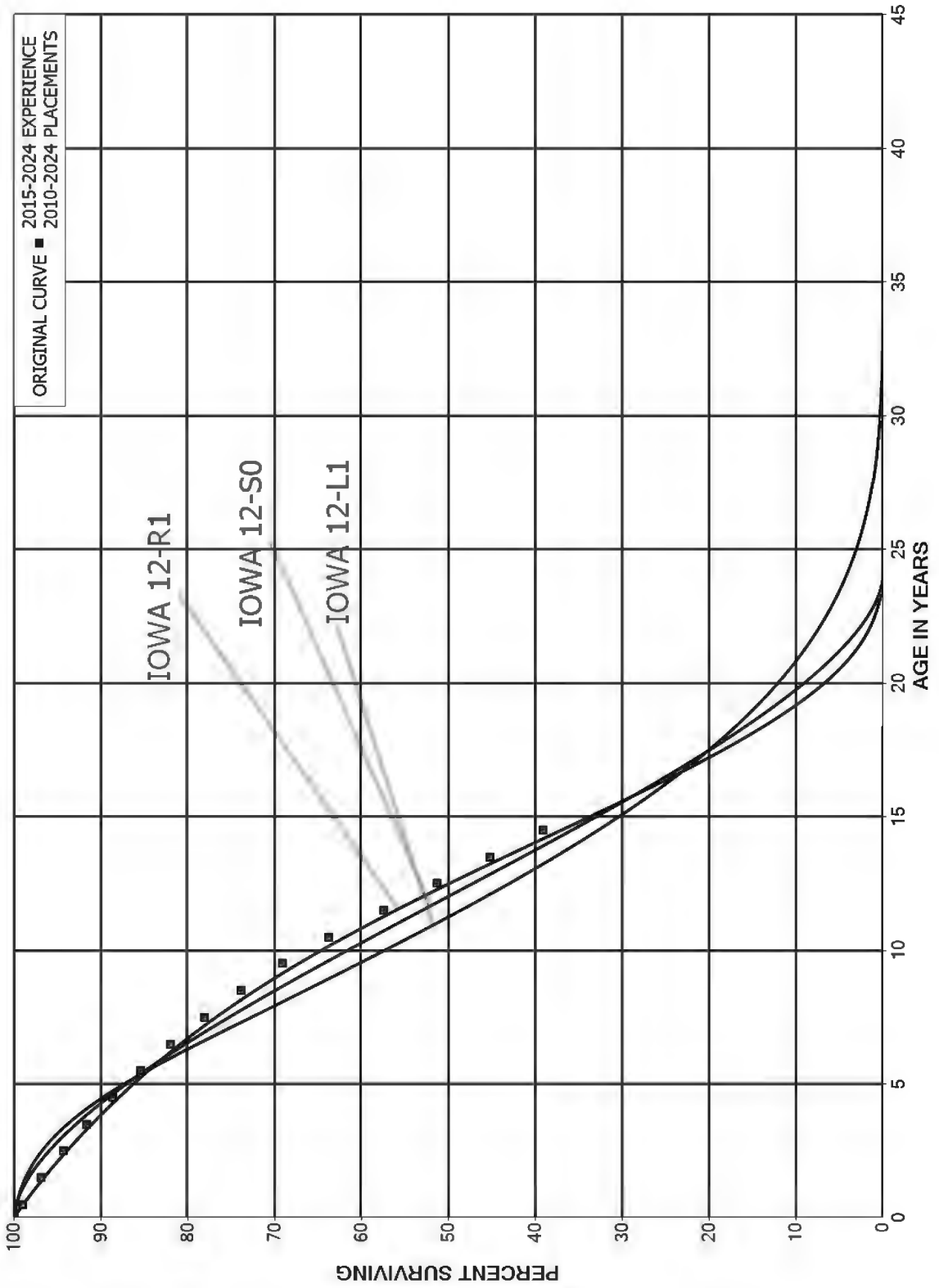
The Iowa type curves are used in this study to smooth those original stub curves which are expressed as percents surviving at ages in years. Each original survivor curve was compared to the Iowa curves using visual and mathematical matching in order to determine the better fitting smooth curves. In Figures 6, 7, and 8, the original curve developed in Schedule 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.


ORIGINAL CURVE ■ 2015-2024 EXPERIENCE
2010-2024 PLACEMENTS
IOWA 11-L1
IOWA 13-L1
IOWA 12-L1
PERCENT SURVIVING
AGE IN YEARS
100
90
80
70
60
50
40
30
20
10
0
0
5
10
15
20
25
30
35
40
45


ORIGINAL CURVE ■ 2015-2024 EXPERIENCE
2010-2024 PLACEMENTS
IOWA 12-S0
IOWA 13-S0
IOWA 11-S0
PERCENT SURVIVING
AGE IN YEARS
100
90
80
70
60
50
40
30
20
10
0
0
5
10
15
20
25
30
35
40
45


ORIGINAL CURVE ■ 2015-2024 EXPERIENCE
2010-2024 PLACEMENTS
IOWA 13-R1
IOWA 12-R1
IOWA 11-R1
PERCENT SURVIVING
AGE IN YEARS
100
90
80
70
60
50
40
30
20
10
0
0
5
10
15
20
25
30
35
40
45


ORIGINAL CURVE ■ 2015-2024 EXPERIENCE
2010-2024 PLACEMENTS
IOWA 12-R1
IOWA 12-S0
IOWA 12-L1
PERCENT SURVIVING
AGE IN YEARS
100
90
80
70
60
50
40
30
20
10
0
0
5
10
15
20
25
30
35
40
45

PART III. SERVICE LIFE CONSIDERATIONS

PART III. SERVICE LIFE CONSIDERATIONS

FIELD TRIPS

In order to be familiar with the operation of the Company and observe representative portions of the plant, a field trip was conducted for the study. A general understanding of the function of the plant and information with respect to the reasons for past retirements and the expected future causes of retirements are obtained during field trips. This knowledge and information were incorporated in the interpretation and extrapolation of the statistical analyses.

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

February 4, 2025
- Erlanger Operations Center
- Wendell Ford Station
- Cold Spring Station
- Riley Road Station
- Oakbrook Station

March 13, 2018
- Erlanger Measuring and Regulating Station
- Erlanger Caverns
- Foster City Gate Station
- Bracken Measuring and Regulating Station
- Arcadia District Regulator Station
- Mineola District Regulator Station
- Warsaw District Regulator Station

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 gas 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 95 percent of depreciable plant. Generally, the information external to the statistics led to little or 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.

DISTRIBUTION PLANT

275.00	Structures and Improvements
276.10	Mains – Cast Iron, Copper and All Valves
276.20	Mains – Steel
276.30	Mains – Plastic
276.50	Mains – Steel Feeder Lines
278.00	Measuring and Regulating Station Equipment – General
278.20	Measuring and Regulating Station Equipment - District
280.10	Services – Cast Iron, Copper and All Valves
280.20	Services – Steel
280.30	Services – Plastic
281.00	Meters
282.00	Meter Installations
285.00	Industrial Measuring and Regulating Station Equipment
287.00	Other Equipment
287.10	Street Lighting Equipment

GENERAL PLANT

292.10	Transportation Equipment – Trailers
296.00	Power Operated Equipment

The combined analyses for Account 276.20, Mains – Steel and Account 276.50 – Mains – Steel Feeder Lines, and the analyses for Account 280.30, Services – Plastic, are used to illustrate the manner in which the study was conducted for the groups in the preceding list. The combined Accounts 276.20 and 276.50 represents 32 percent, and Account 280.30 represents 24 percent, of the total depreciable plant. Aged plant accounting data have been compiled for the years 1956 through 2024 for the mains

accounts and 1972-2024 for the gas services. 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 gas 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 the combined Account 276.20 and 276.50 is based on the statistical indications for the period 1956-2024 and 1995-2024. The Iowa 65-R2.5 is an excellent fit of the original survivor curve. The 65 year service life is within the typical service life range of 55 to 70 years for steel mains. The 65-year life reflects the Company's continued practices of heavy retirements after age 60. The previous estimate was the Iowa 65-R2.5.

The survivor curve estimate for Account 280.30, Services – Plastic, is the 50-R2.5 and is based on the statistical indication for the periods 1972 through 2024 and 2005 through 2024. The 50-R2.5 is a good fit of the significant portion of the original survivor curve as set forth on page VII-61 consistent with management outlook for a continuation of historical experience, and within the typical service life range of 40 to 55 years for plastic services.

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

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 gas 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 1980 through 2024. Cost of removal and gross 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 gross salvage data, expectations with respect to future removal requirements and markets for retired equipment and materials.

The analyses of historical cost of removal and gross 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 1980 through 2024 contributed significantly toward the net salvage estimates for 17 plant accounts, representing 96 percent of the depreciable plant, as follows:

DISTRIBUTION PLANT
- 276.10 Mains – Cast Iron, Copper and All Valves
- 276.20 Mains – Steel
- 276.30 Mains – Plastic
- 276.50 Mains – Steel Feeder Lines
- 278.00 Measuring and Regulating Station Equipment – General
- 278.10 Measuring and Regulating Station Equipment – Electronic

278.20 Measuring and Regulating Station Equipment – District
280.10 Services – Cast Iron, Copper and All Valves
280.20 Services – Steel
280.30 Services – Plastic
281.00 Meters
282.00 Meter Installations
283.00 House Regulators
284.00 House Regulator Installations
285.00 Industrial Measuring and Regulating Station Equipment
285.10 Industrial Measuring and Regulating Station Equipment - Electronic

GENERAL PLANT
292.10 Transportation Equipment - Trailers

The combined analyses of all subaccounts in Account 276.10, Mains - Cast Iron, Copper and All Valves through 276.50, Mains – Steel Feeder Lines, 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 1980 through 2024 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 1980-1982 through 2022-2024 periods were computed to smooth the annual amounts.

Cost of removal was high during the early 1990s and in a few other years 1998, 2006, 2013 and 2014. Also, cost of removal has been high in the most recent five years. The high removal cost in the early 1990s related to practices during that time. The high removal in 2006, 2013 and 2014 related to the location of the mains which required additional labor hours. The high cost of removal in the most recent five years relates to the higher percentage of older cast iron being retired. Cost of removal for the most recent five years averaged negative 93 percent.

Gross salvage has diminished drastically since 1999. The most recent five-year average of 0 percent gross salvage reflects recent trends of minimal salvage value for mains.

The net salvage percent based on the overall period 1980 through 2024 is 36 percent negative net salvage. The range of estimates made by other gas companies for mains is negative 15 to negative 40 percent. The net salvage estimate for mains is negative 25 percent, is within the range of estimates for other gas companies and reflects the recent experience for negative net salvage with not continue once cast iron is completely retired.

The net salvage percents for the remaining accounts were based on judgment incorporating estimates of previous studies of this and other gas 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 September, 30, 2024, 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 September 30, 2024, 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 gas plant in service. The accounts and their amortization periods are as follows:

Account		Amortization Period, Years
Office Furniture and Equipment		
291.10	Electric Data Processing	5
291.50	Data Processing Equipment	15
294.00	Tools, Shop and Garage Equipment	25
297.00	Communication Equipment	15

For the purpose of calculating annual amortization amounts as of September 30, 2024, 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 net salvage and for the change of the composition of property in service. The annual accrual rates were calculated in accordance with the straight line remaining life method of depreciation, using the average service life procedure based on estimates which reflect considerations of current historical evidence and expected future conditions.

The annual depreciation accrual rates are applicable specifically to the gas plant in service as of September 30, 2024. For most plant accounts, the application of such rates to future balances that reflect additions subsequent to September 30, 2024, 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 gas plant as of September 30, 2024. These results are presented on pages VI-4 and VI-5 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 gas 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 gas utilities. The results of the statistical analysis of service life are

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

For each depreciable group analyzed by the retirement rate method, a chart depicting the original and estimated survivor curves followed by a tabular presentation of the original life table(s) plotted on the chart. The survivor curves estimated for the depreciable groups are shown as dark smooth curves on the charts. Each smooth survivor curve is denoted by a numeral followed by the curve type designation. The numeral used is the average life derived from the entire curve from 100 percent to zero percent surviving. The titles of the chart indicate the group, the symbol used to plot the points of the original life table, and the experience and placement bands of the life tables which where plotted. The experience band indicates the range of years for which retirements were used to develop the stub survivor curve. The placements indicate, for the related experience band, the range of years of installations which appear in the experience.

The analyses of salvage data are presented in the section titled, “Net Salvage Statistics.” The tabulations present annual cost of removal and gross 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 September 30, 2024 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
GAS PLANT

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, NET SALVAGE PERCENT, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF SEPTEMBER 30, 2024

	ACCOUNT	SURVIVOR CURVE	NET SALVAGE PERCENT	ORIGINAL COST AS OF SEPTEMBER 30, 2024	BOOK DEPRECIATION 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								
274.10	RIGHTS OF WAY	70-R4	0	7,267,252.04	856,861	6,410,391	107,810	1.48	59.5
275.00	STRUCTURES AND IMPROVEMENTS	55-R2	(5)	9,921,529.90	441,149	9,976,458	195,325	1.97	51.1
	MAINS								
276.10	CAST IRON, COPPER AND ALL VALVES	50-R3	(25)	2,013,973.09	1,908,680	608,786	79,808	3.96	7.6
276.20	STEEL	65-R2.5	(25)	86,159,189.75	44,856,112	62,842,875	1,573,180	1.83	39.9
276.30	PLASTIC	70-R3	(25)	205,997,019.18	62,460,381	195,035,893	3,471,517	1.69	56.2
276.50	STEEL FEEDER LINES	65-R2.5	(25)	209,453,966.78	13,591,057	248,226,402	4,401,095	2.10	56.4
	TOTAL MAINS			503,624,148.80	122,816,231	506,713,956	9,525,600	1.89	
278.00	MEASURING AND REGULATING STATION EQUIPMENT - GENERAL	45-S0	(30)	105,813,458.45	4,719,891	132,837,605	3,191,034	3.02	41.6
278.10	MEASURING AND REGULATING STATION EQUIPMENT - ELECTRONIC	25-S2	(30)	2,001,551.64	748,004	1,854,014	98,932	4.94	18.7
278.20	MEASURING AND REGULATING STATION EQUIPMENT - DISTRICT	55-R1	(25)	2,129,559.01	823,368	1,838,580	41,530	1.95	44.3
279.00	MEASURING AND REGULATING STATION EQUIPMENT - CITY GATE	45-R2	(30)	1,637,716.61	13,336	2,115,696	51,337	3.13	41.2
	SERVICES								
280.10	CAST IRON, COPPER AND ALL VALVES	38-R1.5	(40)	25,112.44	4,883	30,274	1,191	4.74	25.4
280.20	STEEL	41-R2	(40)	6,182,972.75	1,518,580	7,137,582	279,023	4.51	25.6
280.30	PLASTIC	50-R2.5	(40)	225,769,793.78	68,969,416	247,108,295	6,247,924	2.77	39.6
	TOTAL SERVICES			231,977,878.97	70,492,879	254,276,151	6,528,138	2.81	
281.00	METERS	20-L0.5	(3)	21,950,481.48	2,967,331	19,641,665	1,180,788	5.38	16.6
281.02	METERS - UoF	15-S2.5	0	985,276.44	199,334	785,942	59,854	6.07	13.1
282.00	METER INSTALLATIONS	28-S0.5	0	16,234,949.68	3,371,240	12,863,710	668,104	4.12	19.3
283.00	HOUSE REGULATORS	45-R2	0	7,810,037.37	3,305,385	4,504,652	145,729	1.87	30.9
284.00	HOUSE REGULATOR INSTALLATIONS	55-R4	0	6,140,616.40	3,225,410	2,915,207	79,162	1.29	36.8
285.00	INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT	45-R2.5	(10)	455,026.89	459,023	41,506	1,667	0.37	24.9
285.10	INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT - ELECTRONIC	25-R2.5	(10)	64,790.82	62,149	9,121	1,002	1.55	9.1
287.00	OTHER EQUIPMENT	20-R3	0	54,779.43	22,499	32,280	4,477	8.17	7.2
287.10	STREET LIGHTING EQUIPMENT	35-S2.5	0	28,290.11	23,935	4,355	381	1.35	11.4
	TOTAL DISTRIBUTION PLANT			**918,097,344.04**	**214,548,024**	**956,821,289**	**21,880,870**	**2.38**	**43.7**
	GENERAL PLANT								
291.10	OFFICE FURNITURE AND EQUIPMENT - ELECTRONIC DATA PROCESSING	5-SQ	0	743,775.34	623,814	119,961	66,701	8.97	1.8
291.15	OFFICE FURNITURE AND EQUIPMENT - DATA PROCESSING EQUIPMENT	15-SQ	0	475,362.11	290,159	185,203	18,070	3.80	10.2
292.10	TRANSPORTATION EQUIPMENT - TRAILERS	15-R1.5	5	69,948.25	57,595	8,855	672	0.96	13.2
294.00	TOOLS, SHOP AND GARAGE EQUIPMENT	25-SQ	0	2,289,306.35	1,036,941	1,252,365	53,604	2.34	23.4
296.00	POWER OPERATED EQUIPMENT	11-R2.5	10	179,974.77	99,947	62,031	10,722	5.96	5.8
297.00	COMMUNICATION EQUIPMENT	15-SQ	0	13,393,549.90	4,329,047	9,064,503	845,685	6.31	10.7
	TOTAL GENERAL PLANT			**17,151,916.72**	**6,437,504**	**10,692,918**	**995,454**	**5.80**	**10.7**
	TOTAL DEPRECIABLE PLANT			**935,249,260.76**	**220,985,528**	**967,514,207**	**22,876,324**	**2.45**	

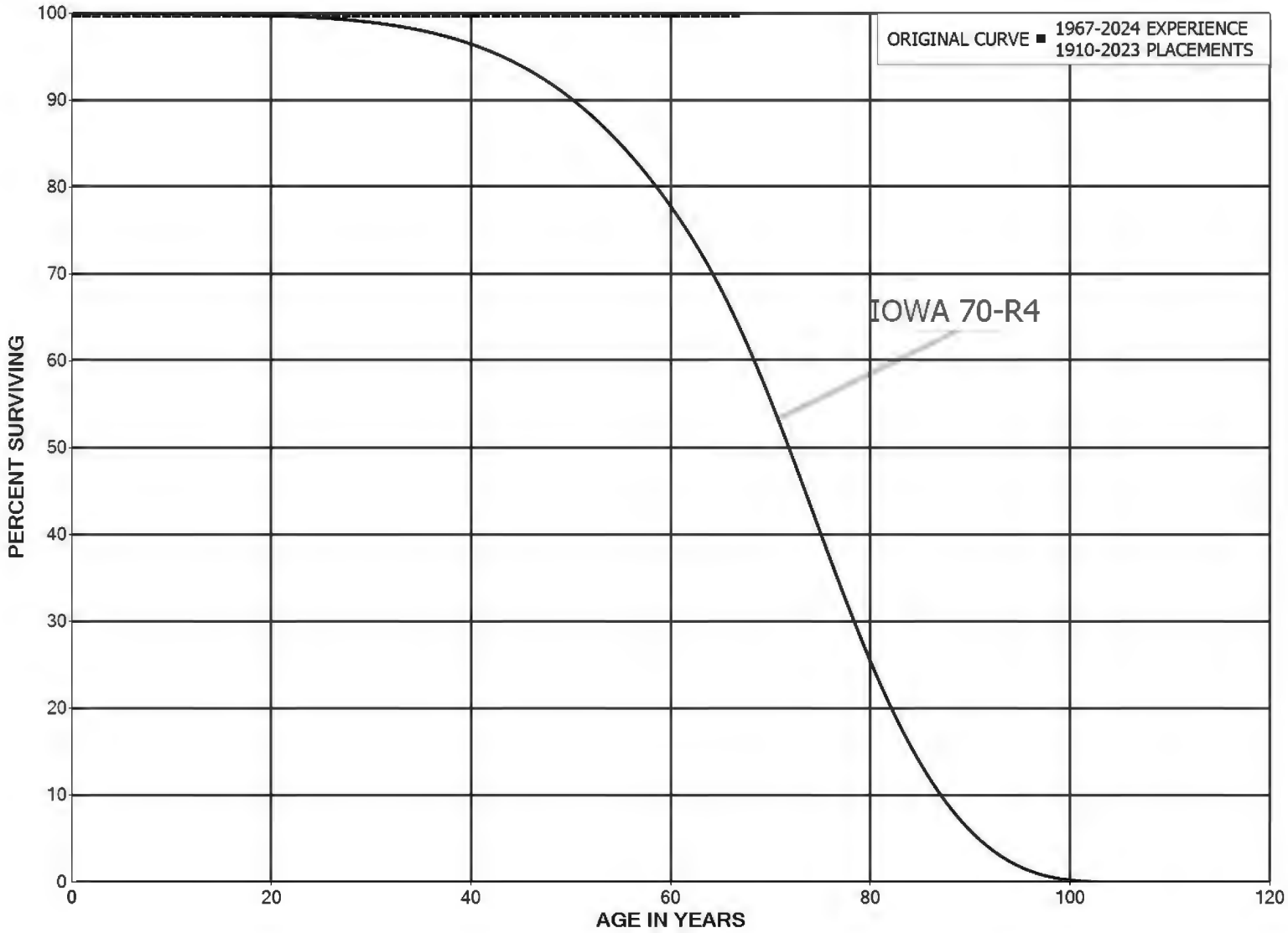
DUKE ENERGY KENTUCKY
GAS PLANT

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, NET SALVAGE PERCENT, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AS OF SEPTEMBER 30, 2024

ACCOUNT		SURVIVOR CURVE	NET SALVAGE PERCENT	ORIGINAL COST AS OF SEPTEMBER 30, 2024	BOOK DEPRECIATION 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)
	NONDEPRECIABLE AND ACCOUNTS NOT STUDIED								
203.00	MISCELLANEOUS INTANGIBLE PLANT			15,166,510.53	12,015,916				
203.03	MISCELLANEOUS INTANGIBLE PLANT - 3-YEAR			553,460.85	231,053				
203.10	MISCELLANEOUS INTANGIBLE PLANT - 10-YEAR			2,779,551.66	1,886,366				
203.15	MISCELLANEOUS INTANGIBLE PLANT - 15-YEAR			5,936,072.95	1,620,904				
203.60	MISCELLANEOUS INTANGIBLE PLANT - 60-YEAR			1,236,178.48	162,599				
204.10	RIGHTS OF WAY			0.00	11				
205.00	STRUCTURES AND IMPROVEMENTS			0.00	(3,659,749)				
211.00	LIQUIFIED PETROLEUM GAS EQUIPMENT			0.00	(4,511,801)				
274.00	LAND AND LAND RIGHTS			9,599,902.63	4				
	TOTAL NONDEPRECIABLE AND ACCOUNTS NOT STUDIED			**35,271,677.10**	**7,745,303**				
	TOTAL GAS PLANT			**970,520,937.86**	**228,730,830**				

PART VII. SERVICE LIFE STATISTICS

DUKE ENERGY KENTUCKY
GAS PLANT
ACCOUNT 274.10 RIGHTS OF WAY
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 274.10 RIGHTS OF WAY

ORIGINAL LIFE TABLE

PLACEMENT BAND 1910-2023 EXPERIENCE BAND 1967-2024

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	7,024,456		0.0000	1.0000	100.00
0.5	7,025,527		0.0000	1.0000	100.00
1.5	6,486,815	152	0.0000	1.0000	100.00
2.5	6,349,151		0.0000	1.0000	100.00
3.5	5,884,662		0.0000	1.0000	100.00
4.5	1,001,190		0.0000	1.0000	100.00
5.5	1,007,143		0.0000	1.0000	100.00
6.5	1,008,252		0.0000	1.0000	100.00
7.5	1,010,198		0.0000	1.0000	100.00
8.5	1,010,506		0.0000	1.0000	100.00
9.5	1,025,637		0.0000	1.0000	100.00
10.5	1,025,818		0.0000	1.0000	100.00
11.5	1,053,459		0.0000	1.0000	100.00
12.5	1,053,332		0.0000	1.0000	100.00
13.5	1,055,159		0.0000	1.0000	100.00
14.5	1,056,501		0.0000	1.0000	100.00
15.5	1,056,501		0.0000	1.0000	100.00
16.5	1,046,338		0.0000	1.0000	100.00
17.5	1,046,338		0.0000	1.0000	100.00
18.5	994,978		0.0000	1.0000	100.00
19.5	992,304		0.0000	1.0000	100.00
20.5	992,304		0.0000	1.0000	100.00
21.5	992,829		0.0000	1.0000	100.00
22.5	992,829		0.0000	1.0000	100.00
23.5	992,829		0.0000	1.0000	100.00
24.5	992,829		0.0000	1.0000	100.00
25.5	992,829		0.0000	1.0000	100.00
26.5	992,829		0.0000	1.0000	100.00
27.5	992,829		0.0000	1.0000	100.00
28.5	967,637		0.0000	1.0000	100.00
29.5	966,728		0.0000	1.0000	100.00
30.5	861,629		0.0000	1.0000	100.00
31.5	851,864		0.0000	1.0000	100.00
32.5	670,867		0.0000	1.0000	100.00
33.5	646,944		0.0000	1.0000	100.00
34.5	609,850		0.0000	1.0000	100.00
35.5	539,936		0.0000	1.0000	100.00
36.5	524,591		0.0000	1.0000	100.00
37.5	503,021		0.0000	1.0000	100.00
38.5	500,421		0.0000	1.0000	100.00

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 274.10 RIGHTS OF WAY

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1910-2023 EXPERIENCE BAND 1967-2024

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	490,382		0.0000	1.0000	100.00
40.5	487,357		0.0000	1.0000	100.00
41.5	480,397		0.0000	1.0000	100.00
42.5	435,943		0.0000	1.0000	100.00
43.5	430,830		0.0000	1.0000	100.00
44.5	414,945		0.0000	1.0000	100.00
45.5	414,003		0.0000	1.0000	100.00
46.5	410,272		0.0000	1.0000	100.00
47.5	388,164		0.0000	1.0000	100.00
48.5	379,582		0.0000	1.0000	100.00
49.5	351,162		0.0000	1.0000	100.00
50.5	334,201		0.0000	1.0000	100.00
51.5	327,267		0.0000	1.0000	100.00
52.5	291,658		0.0000	1.0000	100.00
53.5	273,707		0.0000	1.0000	100.00
54.5	264,087		0.0000	1.0000	100.00
55.5	260,606		0.0000	1.0000	100.00
56.5	255,519		0.0000	1.0000	100.00
57.5	242,796		0.0000	1.0000	100.00
58.5	241,725		0.0000	1.0000	100.00
59.5	106,736		0.0000	1.0000	100.00
60.5	104,745		0.0000	1.0000	100.00
61.5	102,930		0.0000	1.0000	100.00
62.5	83,857		0.0000	1.0000	100.00
63.5	76,838		0.0000	1.0000	100.00
64.5	75,729		0.0000	1.0000	100.00
65.5	73,783		0.0000	1.0000	100.00
66.5	73,475		0.0000	1.0000	100.00
67.5	58,344		0.0000	1.0000	100.00
68.5	58,163		0.0000	1.0000	100.00
69.5	30,522		0.0000	1.0000	100.00
70.5	8,738		0.0000	1.0000	100.00
71.5	6,911		0.0000	1.0000	100.00
72.5	5,569		0.0000	1.0000	100.00
73.5	6,247		0.0000	1.0000	100.00
74.5	15,071		0.0000	1.0000	100.00
75.5	15,071		0.0000	1.0000	100.00
76.5	15,071		0.0000	1.0000	100.00
77.5	15,071		0.0000	1.0000	100.00
78.5	15,071		0.0000	1.0000	100.00

DUKE ENERGY KENTUCKY
GAS PLANT

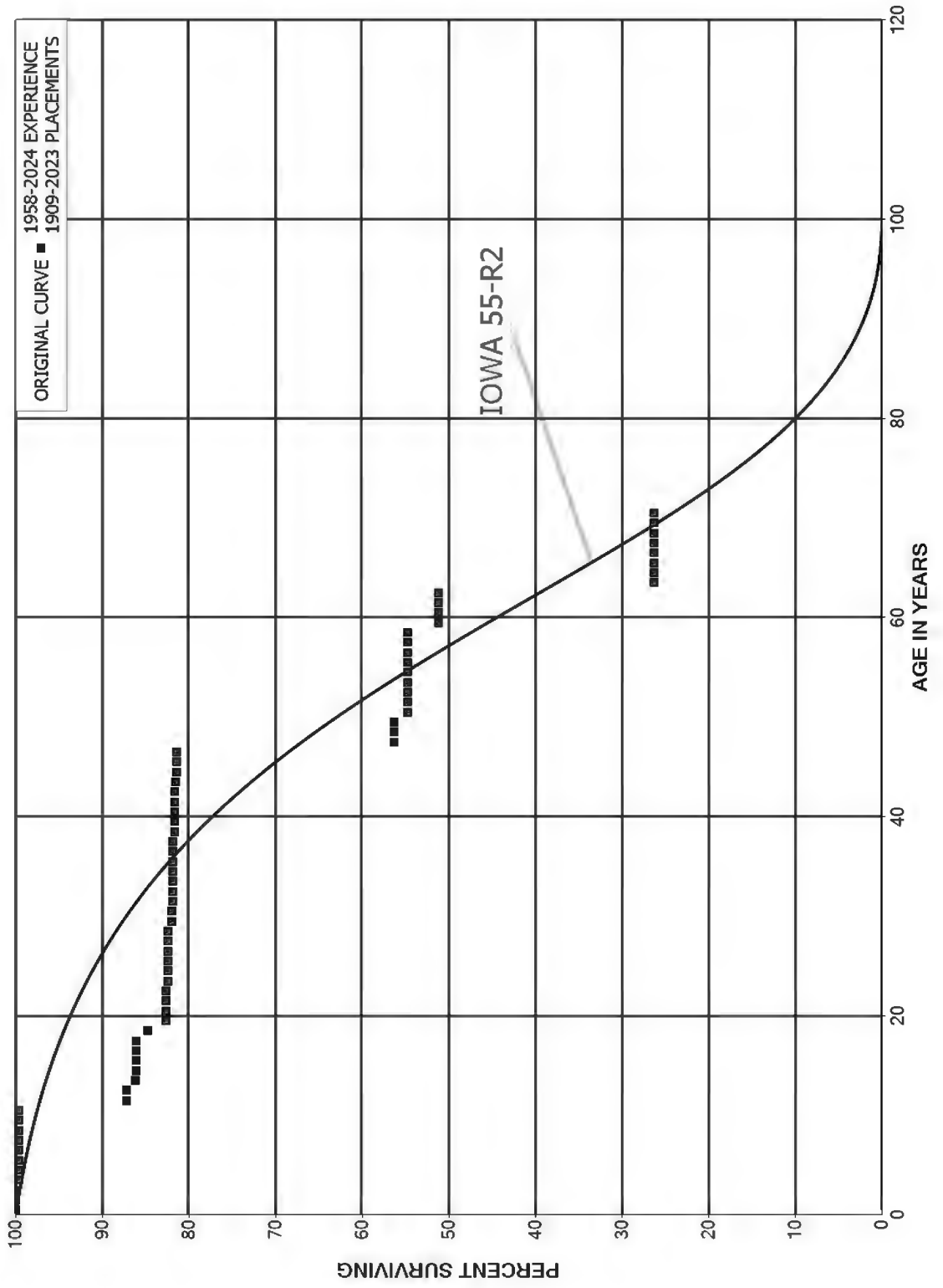
ACCOUNT 274.10 RIGHTS OF WAY

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1910-2023 EXPERIENCE BAND 1967-2024

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	16,692		0.0000	1.0000	100.00
80.5	16,692		0.0000	1.0000	100.00
81.5	16,692		0.0000	1.0000	100.00
82.5	16,692		0.0000	1.0000	100.00
83.5	16,692		0.0000	1.0000	100.00
84.5	16,692		0.0000	1.0000	100.00
85.5	16,692		0.0000	1.0000	100.00
86.5	16,692		0.0000	1.0000	100.00
87.5	16,692		0.0000	1.0000	100.00
88.5	27,328		0.0000	1.0000	100.00
89.5	27,328		0.0000	1.0000	100.00
90.5	27,328		0.0000	1.0000	100.00
91.5	21,759		0.0000	1.0000	100.00
92.5	21,759		0.0000	1.0000	100.00
93.5	21,759		0.0000	1.0000	100.00
94.5	21,759		0.0000	1.0000	100.00
95.5	21,759		0.0000	1.0000	100.00
96.5	21,759		0.0000	1.0000	100.00
97.5	21,759		0.0000	1.0000	100.00
98.5	21,759		0.0000	1.0000	100.00
99.5	21,080		0.0000	1.0000	100.00
100.5	12,257		0.0000	1.0000	100.00
101.5	12,257		0.0000	1.0000	100.00
102.5	12,257		0.0000	1.0000	100.00
103.5	12,257		0.0000	1.0000	100.00
104.5	12,257		0.0000	1.0000	100.00
105.5	10,635		0.0000	1.0000	100.00
106.5	10,635		0.0000	1.0000	100.00
107.5	10,635		0.0000	1.0000	100.00
108.5	10,635		0.0000	1.0000	100.00
109.5	10,635		0.0000	1.0000	100.00
110.5	10,635		0.0000	1.0000	100.00
111.5	10,635		0.0000	1.0000	100.00
112.5	10,635		0.0000	1.0000	100.00
113.5	10,635		0.0000	1.0000	100.00
114.5					100.00

DUKE ENERGY KENTUCKY
GAS PLANT
ACCOUNT 275.00 STRUCTURES AND IMPROVEMENTS
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 275.00 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1909-2023 EXPERIENCE BAND 1958-2024

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	10,455,250		0.0000	1.0000	100.00
0.5	10,455,250		0.0000	1.0000	100.00
1.5	10,240,152		0.0000	1.0000	100.00
2.5	4,830,027	17,034	0.0035	0.9965	100.00
3.5	4,560,233		0.0000	1.0000	99.65
4.5	2,972,698		0.0000	1.0000	99.65
5.5	1,834,623		0.0000	1.0000	99.65
6.5	583,565		0.0000	1.0000	99.65
7.5	583,565		0.0000	1.0000	99.65
8.5	419,259	246	0.0006	0.9994	99.65
9.5	197,292		0.0000	1.0000	99.59
10.5	197,292	24,504	0.1242	0.8758	99.59
11.5	172,789		0.0000	1.0000	87.22
12.5	159,662	1,847	0.0116	0.9884	87.22
13.5	157,815	323	0.0020	0.9980	86.21
14.5	157,492		0.0000	1.0000	86.03
15.5	157,492		0.0000	1.0000	86.03
16.5	157,775		0.0000	1.0000	86.03
17.5	157,775	2,372	0.0150	0.9850	86.03
18.5	155,402	3,875	0.0249	0.9751	84.74
19.5	151,528		0.0000	1.0000	82.63
20.5	151,528		0.0000	1.0000	82.63
21.5	147,978		0.0000	1.0000	82.63
22.5	148,085	325	0.0022	0.9978	82.63
23.5	147,959		0.0000	1.0000	82.45
24.5	121,806		0.0000	1.0000	82.45
25.5	118,121		0.0000	1.0000	82.45
26.5	118,121		0.0000	1.0000	82.45
27.5	118,121		0.0000	1.0000	82.45
28.5	118,905	661	0.0056	0.9944	82.45
29.5	118,398		0.0000	1.0000	81.99
30.5	120,849	283	0.0023	0.9977	81.99
31.5	120,566		0.0000	1.0000	81.80
32.5	120,566		0.0000	1.0000	81.80
33.5	120,566		0.0000	1.0000	81.80
34.5	120,566		0.0000	1.0000	81.80
35.5	111,002		0.0000	1.0000	81.80
36.5	111,002		0.0000	1.0000	81.80
37.5	111,002	199	0.0018	0.9982	81.80
38.5	110,802		0.0000	1.0000	81.65

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 275.00 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1909-2023 EXPERIENCE BAND 1958-2024

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	110,802		0.0000	1.0000	81.65
40.5	110,802		0.0000	1.0000	81.65
41.5	110,802		0.0000	1.0000	81.65
42.5	110,802	123	0.0011	0.9989	81.65
43.5	109,457	155	0.0014	0.9986	81.56
44.5	87,219		0.0000	1.0000	81.44
45.5	87,219		0.0000	1.0000	81.44
46.5	87,219	26,903	0.3084	0.6916	81.44
47.5	60,316		0.0000	1.0000	56.32
48.5	66,052		0.0000	1.0000	56.32
49.5	52,920	1,510	0.0285	0.9715	56.32
50.5	47,988		0.0000	1.0000	54.72
51.5	47,988		0.0000	1.0000	54.72
52.5	47,779		0.0000	1.0000	54.72
53.5	7,445		0.0000	1.0000	54.72
54.5	7,445		0.0000	1.0000	54.72
55.5	7,445		0.0000	1.0000	54.72
56.5	7,445		0.0000	1.0000	54.72
57.5	7,445		0.0000	1.0000	54.72
58.5	7,445	482	0.0647	0.9353	54.72
59.5	6,963		0.0000	1.0000	51.18
60.5	6,963		0.0000	1.0000	51.18
61.5	6,963		0.0000	1.0000	51.18
62.5	6,963	3,387	0.4864	0.5136	51.18
63.5	3,576		0.0000	1.0000	26.28
64.5	3,576		0.0000	1.0000	26.28
65.5	3,576		0.0000	1.0000	26.28
66.5	3,576		0.0000	1.0000	26.28
67.5	3,576		0.0000	1.0000	26.28
68.5	3,576		0.0000	1.0000	26.28
69.5	3,576		0.0000	1.0000	26.28
70.5	3,576		0.0000	1.0000	26.28
71.5	3,395		0.0000	1.0000	26.28
72.5	3,395		0.0000	1.0000	26.28
73.5	3,395		0.0000	1.0000	26.28
74.5	3,395		0.0000	1.0000	26.28
75.5	3,395		0.0000	1.0000	26.28
76.5	3,395		0.0000	1.0000	26.28
77.5	3,395		0.0000	1.0000	26.28
78.5	3,395		0.0000	1.0000	26.28

DUKE ENERGY KENTUCKY
GAS PLANT

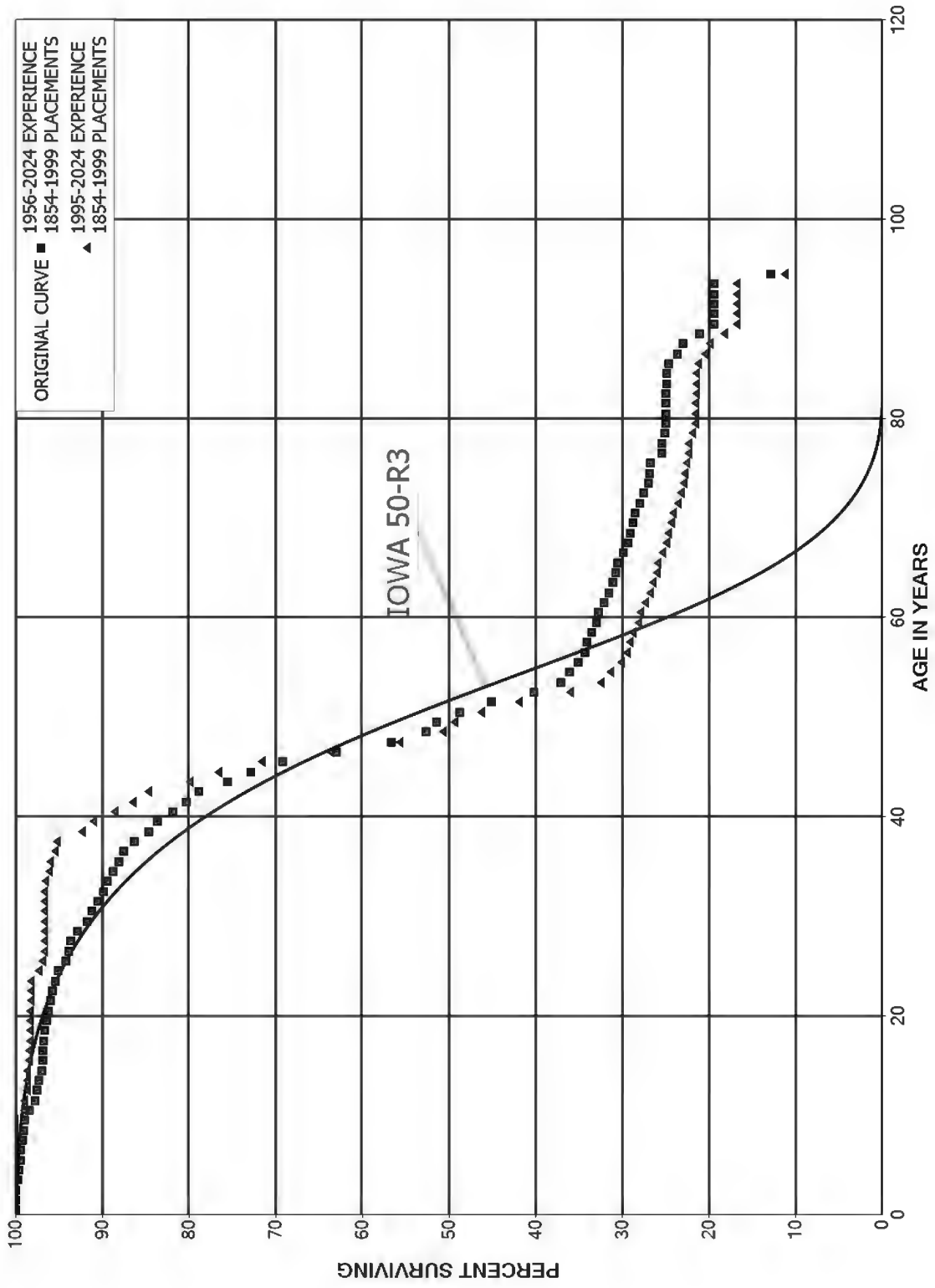
ACCOUNT 275.00 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1909-2023 EXPERIENCE BAND 1958-2024

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	3,395		0.0000	1.0000	26.28
80.5	3,395		0.0000	1.0000	26.28
81.5	3,395		0.0000	1.0000	26.28
82.5	3,395		0.0000	1.0000	26.28
83.5	3,395		0.0000	1.0000	26.28
84.5	3,395		0.0000	1.0000	26.28
85.5	3,395		0.0000	1.0000	26.28
86.5	3,395		0.0000	1.0000	26.28
87.5	3,395		0.0000	1.0000	26.28
88.5	3,395		0.0000	1.0000	26.28
89.5	3,288		0.0000	1.0000	26.28
90.5	3,288		0.0000	1.0000	26.28
91.5	3,288		0.0000	1.0000	26.28
92.5	3,288		0.0000	1.0000	26.28
93.5	3,288		0.0000	1.0000	26.28
94.5	3,288		0.0000	1.0000	26.28
95.5	3,288		0.0000	1.0000	26.28
96.5	3,288		0.0000	1.0000	26.28
97.5	838		0.0000	1.0000	26.28
98.5	838		0.0000	1.0000	26.28
99.5	838		0.0000	1.0000	26.28
100.5	838		0.0000	1.0000	26.28
101.5	838		0.0000	1.0000	26.28
102.5	838		0.0000	1.0000	26.28
103.5	838		0.0000	1.0000	26.28
104.5	838		0.0000	1.0000	26.28
105.5	838		0.0000	1.0000	26.28
106.5	838		0.0000	1.0000	26.28
107.5	838		0.0000	1.0000	26.28
108.5	838		0.0000	1.0000	26.28
109.5	838	838	1.0000		26.28
110.5					

DUKE ENERGY KENTUCKY
GAS PLANT
ACCOUNT 276.10 MAINS - CAST IRON, COPPER AND ALL VALVES
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 276.10 MAINS - CAST IRON, COPPER AND ALL VALVES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1854-1999 EXPERIENCE BAND 1956-2024

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	3,442,698		0.0000	1.0000	100.00
0.5	3,967,137		0.0000	1.0000	100.00
1.5	4,325,822	4,021	0.0009	0.9991	100.00
2.5	4,563,553	9,029	0.0020	0.9980	99.91
3.5	4,697,950	4,888	0.0010	0.9990	99.71
4.5	5,028,256	11,877	0.0024	0.9976	99.61
5.5	5,223,221	736	0.0001	0.9999	99.37
6.5	5,336,676	12,478	0.0023	0.9977	99.36
7.5	5,425,837	4,556	0.0008	0.9992	99.12
8.5	5,510,000	8,052	0.0015	0.9985	99.04
9.5	5,431,542	26,078	0.0048	0.9952	98.90
10.5	5,415,093	40,713	0.0075	0.9925	98.42
11.5	5,341,565	9,982	0.0019	0.9981	97.68
12.5	5,324,563	13,964	0.0026	0.9974	97.50
13.5	5,320,967	14,185	0.0027	0.9973	97.24
14.5	5,329,489	5,330	0.0010	0.9990	96.98
15.5	5,350,546	3,171	0.0006	0.9994	96.89
16.5	5,349,403	7,087	0.0013	0.9987	96.83
17.5	5,368,297	4,058	0.0008	0.9992	96.70
18.5	5,374,382	14,480	0.0027	0.9973	96.63
19.5	5,381,671	9,135	0.0017	0.9983	96.37
20.5	5,332,859	17,355	0.0033	0.9967	96.20
21.5	5,320,531	9,289	0.0017	0.9983	95.89
22.5	5,312,800	18,585	0.0035	0.9965	95.72
23.5	5,267,261	16,145	0.0031	0.9969	95.39
24.5	5,254,211	51,481	0.0098	0.9902	95.10
25.5	5,199,321	16,253	0.0031	0.9969	94.16
26.5	5,115,270	16,065	0.0031	0.9969	93.87
27.5	5,079,488	38,985	0.0077	0.9923	93.58
28.5	4,993,350	60,238	0.0121	0.9879	92.86
29.5	4,921,498	33,033	0.0067	0.9933	91.74
30.5	4,825,528	35,325	0.0073	0.9927	91.12
31.5	4,773,508	33,735	0.0071	0.9929	90.45
32.5	4,727,636	20,447	0.0043	0.9957	89.82
33.5	4,646,222	38,322	0.0082	0.9918	89.43
34.5	4,520,130	30,306	0.0067	0.9933	88.69
35.5	4,470,294	30,409	0.0068	0.9932	88.09
36.5	4,399,847	58,364	0.0133	0.9867	87.50
37.5	4,324,734	86,551	0.0200	0.9800	86.33
38.5	4,191,062	50,864	0.0121	0.9879	84.61

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 276.10 MAINS - CAST IRON, COPPER AND ALL VALVES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1854-1999 EXPERIENCE BAND 1956-2024

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	4,110,496	85,269	0.0207	0.9793	83.58
40.5	4,109,303	80,955	0.0197	0.9803	81.85
41.5	4,090,815	71,829	0.0176	0.9824	80.23
42.5	3,979,355	166,870	0.0419	0.9581	78.82
43.5	3,708,912	129,644	0.0350	0.9650	75.52
44.5	3,499,561	175,768	0.0502	0.9498	72.88
45.5	3,273,865	294,362	0.0899	0.9101	69.22
46.5	2,923,325	295,868	0.1012	0.8988	63.00
47.5	2,605,132	184,764	0.0709	0.9291	56.62
48.5	2,417,775	55,788	0.0231	0.9769	52.60
49.5	2,336,736	119,563	0.0512	0.9488	51.39
50.5	2,187,127	163,943	0.0750	0.9250	48.76
51.5	2,006,632	218,727	0.1090	0.8910	45.11
52.5	1,774,995	137,396	0.0774	0.9226	40.19
53.5	1,626,419	42,274	0.0260	0.9740	37.08
54.5	1,576,615	48,192	0.0306	0.9694	36.11
55.5	1,522,798	30,322	0.0199	0.9801	35.01
56.5	1,475,535	12,959	0.0088	0.9912	34.31
57.5	1,460,911	20,701	0.0142	0.9858	34.01
58.5	1,432,670	25,172	0.0176	0.9824	33.53
59.5	1,400,686	11,215	0.0080	0.9920	32.94
60.5	1,385,178	24,964	0.0180	0.9820	32.68
61.5	1,321,140	23,319	0.0177	0.9823	32.09
62.5	1,284,672	17,238	0.0134	0.9866	31.52
63.5	1,235,957	15,569	0.0126	0.9874	31.10
64.5	1,197,915	8,749	0.0073	0.9927	30.71
65.5	1,134,332	25,236	0.0222	0.9778	30.48
66.5	1,053,839	16,900	0.0160	0.9840	29.80
67.5	952,733	9,855	0.0103	0.9897	29.33
68.5	894,276	9,835	0.0110	0.9890	29.02
69.5	791,078	6,321	0.0080	0.9920	28.70
70.5	706,585	13,368	0.0189	0.9811	28.48
71.5	616,056	10,302	0.0167	0.9833	27.94
72.5	573,092	10,100	0.0176	0.9824	27.47
73.5	466,126	2,695	0.0058	0.9942	26.99
74.5	394,188	1,973	0.0050	0.9950	26.83
75.5	331,913	16,118	0.0486	0.9514	26.69
76.5	281,586	443	0.0016	0.9984	25.40
77.5	255,775	2,445	0.0096	0.9904	25.36
78.5	247,419	1,720	0.0070	0.9930	25.12

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 276.10 MAINS - CAST IRON, COPPER AND ALL VALVES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1854-1999 EXPERIENCE BAND 1956-2024

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	240,672	287	0.0012	0.9988	24.94
80.5	235,321	8	0.0000	1.0000	24.91
81.5	234,746	13	0.0001	0.9999	24.91
82.5	232,722	1,058	0.0045	0.9955	24.91
83.5	226,485	98	0.0004	0.9996	24.80
84.5	220,950	1,548	0.0070	0.9930	24.79
85.5	215,623	8,323	0.0386	0.9614	24.61
86.5	203,609	5,664	0.0278	0.9722	23.66
87.5	185,092	15,698	0.0848	0.9152	23.00
88.5	161,934	12,580	0.0777	0.9223	21.05
89.5	146,359		0.0000	1.0000	19.42
90.5	143,031		0.0000	1.0000	19.42
91.5	140,904		0.0000	1.0000	19.42
92.5	140,347		0.0000	1.0000	19.42
93.5	133,156	44,790	0.3364	0.6636	19.42
94.5	85,137	5,909	0.0694	0.9306	12.89
95.5	75,651		0.0000	1.0000	11.99
96.5	70,158	823	0.0117	0.9883	11.99
97.5	71,681		0.0000	1.0000	11.85
98.5	74,076		0.0000	1.0000	11.85
99.5	76,588		0.0000	1.0000	11.85
100.5	78,310		0.0000	1.0000	11.85
101.5	80,663	639	0.0079	0.9921	11.85
102.5	80,024	2,319	0.0290	0.9710	11.76
103.5	77,705	3,297	0.0424	0.9576	11.42
104.5	74,408	1,206	0.0162	0.9838	10.93
105.5	73,202	1,012	0.0138	0.9862	10.75
106.5	72,190		0.0000	1.0000	10.61
107.5	71,614		0.0000	1.0000	10.61
108.5	71,584		0.0000	1.0000	10.61
109.5	54,859		0.0000	1.0000	10.61
110.5	9,035		0.0000	1.0000	10.61
111.5	9,035		0.0000	1.0000	10.61
112.5	9,035		0.0000	1.0000	10.61
113.5	9,035		0.0000	1.0000	10.61
114.5	9,035		0.0000	1.0000	10.61
115.5	8,473		0.0000	1.0000	10.61
116.5	8,473		0.0000	1.0000	10.61
117.5	8,473		0.0000	1.0000	10.61
118.5	8,473		0.0000	1.0000	10.61

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 276.10 MAINS - CAST IRON, COPPER AND ALL VALVES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1854-1999 EXPERIENCE BAND 1956-2024

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5	8,473		0.0000	1.0000	10.61
120.5	8,473		0.0000	1.0000	10.61
121.5	8,473		0.0000	1.0000	10.61
122.5	8,473		0.0000	1.0000	10.61
123.5	8,473		0.0000	1.0000	10.61
124.5	8,473		0.0000	1.0000	10.61
125.5	8,473		0.0000	1.0000	10.61
126.5	8,473		0.0000	1.0000	10.61
127.5	8,473		0.0000	1.0000	10.61
128.5	8,473		0.0000	1.0000	10.61
129.5	8,473		0.0000	1.0000	10.61
130.5	8,473		0.0000	1.0000	10.61
131.5	8,473		0.0000	1.0000	10.61
132.5	8,473		0.0000	1.0000	10.61
133.5	8,473		0.0000	1.0000	10.61
134.5	8,473		0.0000	1.0000	10.61
135.5	8,473		0.0000	1.0000	10.61
136.5	8,473		0.0000	1.0000	10.61
137.5	8,473		0.0000	1.0000	10.61
138.5	8,473		0.0000	1.0000	10.61
139.5	8,473		0.0000	1.0000	10.61
140.5	8,473		0.0000	1.0000	10.61
141.5	8,473		0.0000	1.0000	10.61
142.5	8,473		0.0000	1.0000	10.61
143.5	8,473		0.0000	1.0000	10.61
144.5	8,473		0.0000	1.0000	10.61
145.5	8,473		0.0000	1.0000	10.61
146.5	8,473		0.0000	1.0000	10.61
147.5	8,473		0.0000	1.0000	10.61
148.5	8,473		0.0000	1.0000	10.61
149.5	8,473		0.0000	1.0000	10.61
150.5	8,473		0.0000	1.0000	10.61
151.5	8,473		0.0000	1.0000	10.61
152.5	8,473		0.0000	1.0000	10.61
153.5	8,473		0.0000	1.0000	10.61
154.5	8,473		0.0000	1.0000	10.61
155.5	8,473		0.0000	1.0000	10.61
156.5	8,473		0.0000	1.0000	10.61
157.5	8,473		0.0000	1.0000	10.61
158.5	8,473		0.0000	1.0000	10.61

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 276.10 MAINS - CAST IRON, COPPER AND ALL VALVES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1854-1999 EXPERIENCE BAND 1956-2024

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
159.5	8,473		0.0000	1.0000	10.61
160.5	8,473		0.0000	1.0000	10.61
161.5	8,473		0.0000	1.0000	10.61
162.5	8,473		0.0000	1.0000	10.61
163.5	7,834		0.0000	1.0000	10.61
164.5	7,131		0.0000	1.0000	10.61
165.5	6,179		0.0000	1.0000	10.61
166.5	4,973		0.0000	1.0000	10.61
167.5	3,767		0.0000	1.0000	10.61
168.5	2,511		0.0000	1.0000	10.61
169.5	1,205		0.0000	1.0000	10.61
170.5					10.61

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 276.10 MAINS - CAST IRON, COPPER AND ALL VALVES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1854-1999 EXPERIENCE BAND 1995-2024

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	116,922		0.0000	1.0000	100.00
0.5	129,655		0.0000	1.0000	100.00
1.5	146,379		0.0000	1.0000	100.00
2.5	279,214		0.0000	1.0000	100.00
3.5	319,098		0.0000	1.0000	100.00
4.5	408,559		0.0000	1.0000	100.00
5.5	521,041		0.0000	1.0000	100.00
6.5	448,623		0.0000	1.0000	100.00
7.5	514,285		0.0000	1.0000	100.00
8.5	569,299		0.0000	1.0000	100.00
9.5	516,210	6,147	0.0119	0.9881	100.00
10.5	549,840		0.0000	1.0000	98.81
11.5	522,404	1,569	0.0030	0.9970	98.81
12.5	566,453		0.0000	1.0000	98.51
13.5	620,949		0.0000	1.0000	98.51
14.5	726,809	1,697	0.0023	0.9977	98.51
15.5	788,832		0.0000	1.0000	98.28
16.5	882,515	1,176	0.0013	0.9987	98.28
17.5	909,159		0.0000	1.0000	98.15
18.5	881,161		0.0000	1.0000	98.15
19.5	925,909		0.0000	1.0000	98.15
20.5	925,814	1,296	0.0014	0.9986	98.15
21.5	936,679		0.0000	1.0000	98.01
22.5	962,883		0.0000	1.0000	98.01
23.5	972,323	8,403	0.0086	0.9914	98.01
24.5	982,666	4,930	0.0050	0.9950	97.17
25.5	968,274	1,644	0.0017	0.9983	96.68
26.5	958,510		0.0000	1.0000	96.52
27.5	923,133		0.0000	1.0000	96.52
28.5	883,425		0.0000	1.0000	96.52
29.5	906,382		0.0000	1.0000	96.52
30.5	854,532	383	0.0004	0.9996	96.52
31.5	930,718	104	0.0001	0.9999	96.47
32.5	962,489	527	0.0005	0.9995	96.46
33.5	966,925	4,300	0.0044	0.9956	96.41
34.5	909,214	1,610	0.0018	0.9982	95.98
35.5	1,042,465	6,160	0.0059	0.9941	95.81
36.5	1,350,544	2,832	0.0021	0.9979	95.24
37.5	1,780,743	52,802	0.0297	0.9703	95.04
38.5	2,027,897	30,751	0.0152	0.9848	92.23

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 276.10 MAINS - CAST IRON, COPPER AND ALL VALVES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1854-1999 EXPERIENCE BAND 1995-2024

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	2,412,774	65,288	0.0271	0.9729	90.83
40.5	2,595,239	62,734	0.0242	0.9758	88.37
41.5	2,675,903	53,055	0.0198	0.9802	86.23
42.5	2,697,233	154,826	0.0574	0.9426	84.52
43.5	2,684,845	109,553	0.0408	0.9592	79.67
44.5	2,638,953	172,064	0.0652	0.9348	76.42
45.5	2,599,035	288,660	0.1111	0.8889	71.44
46.5	2,326,614	294,903	0.1268	0.8732	63.50
47.5	2,077,196	184,025	0.0886	0.9114	55.45
48.5	1,906,476	51,396	0.0270	0.9730	50.54
49.5	1,842,843	117,258	0.0636	0.9364	49.18
50.5	1,711,238	160,837	0.0940	0.9060	46.05
51.5	1,534,899	215,925	0.1407	0.8593	41.72
52.5	1,314,969	132,484	0.1008	0.8992	35.85
53.5	1,197,134	38,721	0.0323	0.9677	32.24
54.5	1,174,165	45,194	0.0385	0.9615	31.20
55.5	1,136,690	28,360	0.0249	0.9751	30.00
56.5	1,113,920	11,780	0.0106	0.9894	29.25
57.5	1,138,872	13,866	0.0122	0.9878	28.94
58.5	1,144,815	24,488	0.0214	0.9786	28.59
59.5	1,120,576	8,820	0.0079	0.9921	27.98
60.5	1,114,681	21,454	0.0192	0.9808	27.75
61.5	1,061,057	23,224	0.0219	0.9781	27.22
62.5	1,026,613	14,272	0.0139	0.9861	26.62
63.5	998,994	14,447	0.0145	0.9855	26.25
64.5	970,300	6,845	0.0071	0.9929	25.88
65.5	914,994	18,175	0.0199	0.9801	25.69
66.5	860,098	15,435	0.0179	0.9821	25.18
67.5	761,677	7,328	0.0096	0.9904	24.73
68.5	705,881	7,893	0.0112	0.9888	24.49
69.5	604,711	5,647	0.0093	0.9907	24.22
70.5	521,783	11,798	0.0226	0.9774	23.99
71.5	432,917	7,999	0.0185	0.9815	23.45
72.5	392,256	5,806	0.0148	0.9852	23.02
73.5	289,584	1,383	0.0048	0.9952	22.68
74.5	218,958	1,288	0.0059	0.9941	22.57
75.5	157,368	1,632	0.0104	0.9896	22.43
76.5	121,526	117	0.0010	0.9990	22.20
77.5	96,617	1,833	0.0190	0.9810	22.18
78.5	88,903	1,582	0.0178	0.9822	21.76

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 276.10 MAINS - CAST IRON, COPPER AND ALL VALVES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1854-1999 EXPERIENCE BAND 1995-2024

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	194,285	287	0.0015	0.9985	21.37
80.5	234,759	8	0.0000	1.0000	21.34
81.5	234,184	13	0.0001	0.9999	21.34
82.5	232,161	1,058	0.0046	0.9954	21.34
83.5	225,923	98	0.0004	0.9996	21.24
84.5	220,388	1,548	0.0070	0.9930	21.23
85.5	215,623	8,323	0.0386	0.9614	21.08
86.5	203,609	5,664	0.0278	0.9722	20.27
87.5	185,092	15,698	0.0848	0.9152	19.71
88.5	161,934	12,580	0.0777	0.9223	18.03
89.5	146,359		0.0000	1.0000	16.63
90.5	143,031		0.0000	1.0000	16.63
91.5	140,904		0.0000	1.0000	16.63
92.5	140,347		0.0000	1.0000	16.63
93.5	133,156	44,790	0.3364	0.6636	16.63
94.5	83,859	5,909	0.0705	0.9295	11.04
95.5	72,967		0.0000	1.0000	10.26
96.5	65,570	823	0.0125	0.9875	10.26
97.5	64,681		0.0000	1.0000	10.13
98.5	64,664		0.0000	1.0000	10.13
99.5	64,664		0.0000	1.0000	10.13
100.5	63,774		0.0000	1.0000	10.13
101.5	63,717		0.0000	1.0000	10.13
102.5	63,717		0.0000	1.0000	10.13
103.5	63,717		0.0000	1.0000	10.13
104.5	63,717		0.0000	1.0000	10.13
105.5	63,717		0.0000	1.0000	10.13
106.5	63,717		0.0000	1.0000	10.13
107.5	63,141		0.0000	1.0000	10.13
108.5	63,111		0.0000	1.0000	10.13
109.5	46,386		0.0000	1.0000	10.13
110.5	562		0.0000	1.0000	10.13
111.5	562		0.0000	1.0000	10.13
112.5	562		0.0000	1.0000	10.13
113.5	562		0.0000	1.0000	10.13
114.5	562		0.0000	1.0000	10.13
115.5					10.13
116.5					
117.5					
118.5					

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 276.10 MAINS - CAST IRON, COPPER AND ALL VALVES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1854-1999 EXPERIENCE BAND 1995-2024

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
119.5					
120.5					
121.5					
122.5					
123.5					
124.5					
125.5					
126.5					
127.5					
128.5					
129.5					
130.5					
131.5					
132.5					
133.5	639		0.0000		
134.5	1,342		0.0000		
135.5	2,294		0.0000		
136.5	3,500		0.0000		
137.5	4,706		0.0000		
138.5	5,962		0.0000		
139.5	7,268		0.0000		
140.5	8,473		0.0000		
141.5	8,473		0.0000		
142.5	8,473		0.0000		
143.5	8,473		0.0000		
144.5	8,473		0.0000		
145.5	8,473		0.0000		
146.5	8,473		0.0000		
147.5	8,473		0.0000		
148.5	8,473		0.0000		
149.5	8,473		0.0000		
150.5	8,473		0.0000		
151.5	8,473		0.0000		
152.5	8,473		0.0000		
153.5	8,473		0.0000		
154.5	8,473		0.0000		
155.5	8,473		0.0000		
156.5	8,473		0.0000		
157.5	8,473		0.0000		
158.5	8,473		0.0000		

DUKE ENERGY KENTUCKY
GAS PLANT

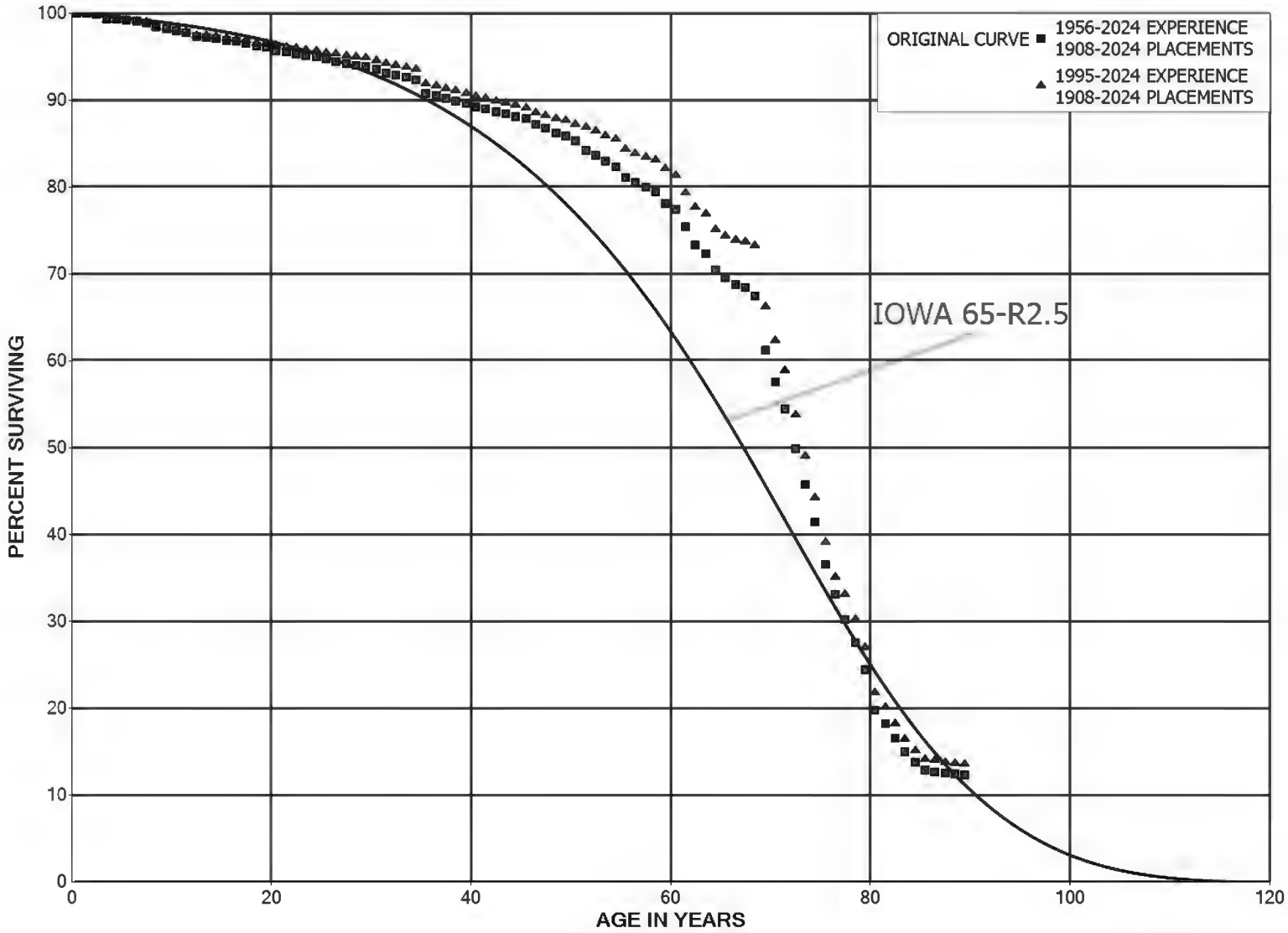
ACCOUNT 276.10 MAINS - CAST IRON, COPPER AND ALL VALVES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1854-1999 EXPERIENCE BAND 1995-2024

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
159.5	8,473		0.0000		
160.5	8,473		0.0000		
161.5	8,473		0.0000		
162.5	8,473		0.0000		
163.5	7,834		0.0000		
164.5	7,131		0.0000		
165.5	6,179		0.0000		
166.5	4,973		0.0000		
167.5	3,767		0.0000		
168.5	2,511		0.0000		
169.5	1,205		0.0000		
170.5					

DUKE ENERGY KENTUCKY
GAS PLANT
ACCOUNTS 276.20 AND 276.50 MAINS AND FEEDER LINES - STEEL
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNTS 276.20 AND 276.50 MAINS AND FEEDER LINES - STEEL

ORIGINAL LIFE TABLE

PLACEMENT BAND 1908-2024 EXPERIENCE BAND 1956-2024

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	313,957,947		0.0000	1.0000	100.00
0.5	309,877,157	173,314	0.0006	0.9994	100.00
1.5	277,661,776	255,088	0.0009	0.9991	99.94
2.5	254,842,994	1,434,259	0.0056	0.9944	99.85
3.5	218,994,685	123,482	0.0006	0.9994	99.29
4.5	166,767,793	116,766	0.0007	0.9993	99.23
5.5	149,440,394	160,117	0.0011	0.9989	99.16
6.5	116,548,983	203,504	0.0017	0.9983	99.06
7.5	114,665,900	543,710	0.0047	0.9953	98.89
8.5	112,317,471	314,842	0.0028	0.9972	98.42
9.5	110,713,919	228,520	0.0021	0.9979	98.14
10.5	110,351,724	299,697	0.0027	0.9973	97.94
11.5	109,802,690	411,944	0.0038	0.9962	97.67
12.5	105,924,312	112,914	0.0011	0.9989	97.31
13.5	105,322,993	193,186	0.0018	0.9982	97.20
14.5	103,868,867	230,475	0.0022	0.9978	97.02
15.5	100,182,889	86,551	0.0009	0.9991	96.81
16.5	93,827,791	254,210	0.0027	0.9973	96.72
17.5	90,243,316	267,180	0.0030	0.9970	96.46
18.5	87,720,231	84,588	0.0010	0.9990	96.18
19.5	83,854,602	373,546	0.0045	0.9955	96.08
20.5	82,329,626	155,350	0.0019	0.9981	95.66
21.5	79,466,651	156,224	0.0020	0.9980	95.48
22.5	77,030,149	184,377	0.0024	0.9976	95.29
23.5	73,250,539	109,922	0.0015	0.9985	95.06
24.5	72,536,197	121,159	0.0017	0.9983	94.92
25.5	70,890,220	241,763	0.0034	0.9966	94.76
26.5	70,119,522	195,063	0.0028	0.9972	94.44
27.5	69,874,082	132,272	0.0019	0.9981	94.17
28.5	69,561,985	122,718	0.0018	0.9982	93.99
29.5	69,364,878	236,446	0.0034	0.9966	93.83
30.5	68,678,895	287,275	0.0042	0.9958	93.51
31.5	67,197,700	184,999	0.0028	0.9972	93.12
32.5	63,862,641	200,635	0.0031	0.9969	92.86
33.5	57,435,197	160,718	0.0028	0.9972	92.57
34.5	48,394,869	818,544	0.0169	0.9831	92.31
35.5	40,624,598	124,873	0.0031	0.9969	90.75
36.5	35,464,283	121,004	0.0034	0.9966	90.47
37.5	31,542,486	98,122	0.0031	0.9969	90.16
38.5	28,987,306	99,478	0.0034	0.9966	89.88

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNTS 276.20 AND 276.50 MAINS AND FEEDER LINES - STEEL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1908-2024 EXPERIENCE BAND 1956-2024

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	27,208,563	110,961	0.0041	0.9959	89.57
40.5	26,236,058	89,586	0.0034	0.9966	89.21
41.5	24,610,928	80,594	0.0033	0.9967	88.90
42.5	22,769,555	68,348	0.0030	0.9970	88.61
43.5	21,495,896	55,012	0.0026	0.9974	88.35
44.5	19,148,371	67,071	0.0035	0.9965	88.12
45.5	17,733,129	122,075	0.0069	0.9931	87.81
46.5	16,775,230	100,638	0.0060	0.9940	87.21
47.5	16,132,804	87,765	0.0054	0.9946	86.68
48.5	15,794,723	64,789	0.0041	0.9959	86.21
49.5	14,766,867	101,151	0.0068	0.9932	85.86
50.5	13,254,915	164,703	0.0124	0.9876	85.27
51.5	12,836,596	88,810	0.0069	0.9931	84.21
52.5	11,552,982	97,980	0.0085	0.9915	83.63
53.5	10,250,254	75,899	0.0074	0.9926	82.92
54.5	9,233,229	138,015	0.0149	0.9851	82.30
55.5	8,304,823	54,615	0.0066	0.9934	81.07
56.5	7,017,260	53,611	0.0076	0.9924	80.54
57.5	6,551,376	44,645	0.0068	0.9932	79.93
58.5	6,100,398	98,504	0.0161	0.9839	79.38
59.5	4,088,500	37,120	0.0091	0.9909	78.10
60.5	3,772,747	96,746	0.0256	0.9744	77.39
61.5	3,290,544	93,055	0.0283	0.9717	75.41
62.5	3,158,898	41,494	0.0131	0.9869	73.27
63.5	2,900,513	74,719	0.0258	0.9742	72.31
64.5	2,500,907	34,487	0.0138	0.9862	70.45
65.5	2,223,032	23,099	0.0104	0.9896	69.48
66.5	1,916,808	10,598	0.0055	0.9945	68.75
67.5	1,697,362	23,026	0.0136	0.9864	68.37
68.5	1,630,643	152,282	0.0934	0.9066	67.45
69.5	453,878	26,788	0.0590	0.9410	61.15
70.5	407,859	22,594	0.0554	0.9446	57.54
71.5	181,802	15,036	0.0827	0.9173	54.35
72.5	163,508	13,411	0.0820	0.9180	49.86
73.5	149,310	14,252	0.0955	0.9045	45.77
74.5	132,180	15,710	0.1189	0.8811	41.40
75.5	113,752	10,731	0.0943	0.9057	36.48
76.5	102,167	8,934	0.0874	0.9126	33.04
77.5	92,186	8,166	0.0886	0.9114	30.15
78.5	81,930	9,079	0.1108	0.8892	27.48

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNTS 276.20 AND 276.50 MAINS AND FEEDER LINES - STEEL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1908-2024 EXPERIENCE BAND 1956-2024

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	72,834	14,062	0.1931	0.8069	24.43
80.5	58,600	4,628	0.0790	0.9210	19.72
81.5	53,889	4,924	0.0914	0.9086	18.16
82.5	47,209	4,573	0.0969	0.9031	16.50
83.5	42,134	3,397	0.0806	0.9194	14.90
84.5	38,737	2,595	0.0670	0.9330	13.70
85.5	36,142	419	0.0116	0.9884	12.78
86.5	35,723	447	0.0125	0.9875	12.63
87.5	35,276	326	0.0093	0.9907	12.48
88.5	34,950	169	0.0048	0.9952	12.36
89.5	34,509	506	0.0147	0.9853	12.30
90.5	34,003	437	0.0129	0.9871	12.12
91.5	32,976	577	0.0175	0.9825	11.96
92.5	32,399	743	0.0229	0.9771	11.75
93.5	26,638	573	0.0215	0.9785	11.49
94.5	26,058	6,739	0.2586	0.7414	11.24
95.5	17,218	620	0.0360	0.9640	8.33
96.5	11,217	481	0.0429	0.9571	8.03
97.5	5,150	1,453	0.2821	0.7179	7.69
98.5	3,524	28	0.0080	0.9920	5.52
99.5	3,402	55	0.0161	0.9839	5.47
100.5	1,078	7	0.0065	0.9935	5.39
101.5	994	10	0.0096	0.9904	5.35
102.5	983	1	0.0010	0.9990	5.30
103.5	875	1	0.0012	0.9988	5.29
104.5	874		0.0000	1.0000	5.29
105.5	857		0.0000	1.0000	5.29
106.5	857		0.0000	1.0000	5.29
107.5	281		0.0000	1.0000	5.29
108.5	281		0.0000	1.0000	5.29
109.5	281		0.0000	1.0000	5.29
110.5	281		0.0000	1.0000	5.29
111.5	281		0.0000	1.0000	5.29
112.5	281		0.0000	1.0000	5.29
113.5	281		0.0000	1.0000	5.29
114.5					5.29

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNTS 276.20 AND 276.50 MAINS AND FEEDER LINES - STEEL

ORIGINAL LIFE TABLE

PLACEMENT BAND 1908-2024 EXPERIENCE BAND 1995-2024

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	243,239,334		0.0000	1.0000	100.00
0.5	238,192,398	156,469	0.0007	0.9993	100.00
1.5	207,422,033	883	0.0000	1.0000	99.93
2.5	187,974,583	1,359,612	0.0072	0.9928	99.93
3.5	158,889,422	26,379	0.0002	0.9998	99.21
4.5	116,009,186	50,542	0.0004	0.9996	99.19
5.5	106,644,846	44,892	0.0004	0.9996	99.15
6.5	79,072,073	85,819	0.0011	0.9989	99.11
7.5	81,416,408	464,606	0.0057	0.9943	99.00
8.5	81,730,034	206,796	0.0025	0.9975	98.44
9.5	82,023,709	106,745	0.0013	0.9987	98.19
10.5	82,890,863	236,487	0.0029	0.9971	98.06
11.5	84,179,718	299,263	0.0036	0.9964	97.78
12.5	82,252,132	69,157	0.0008	0.9992	97.43
13.5	83,008,054	98,759	0.0012	0.9988	97.35
14.5	84,164,116	183,346	0.0022	0.9978	97.24
15.5	81,969,106	33,386	0.0004	0.9996	97.02
16.5	76,589,509	97,886	0.0013	0.9987	96.98
17.5	73,747,993	240,002	0.0033	0.9967	96.86
18.5	71,536,223	46,511	0.0007	0.9993	96.54
19.5	68,707,931	160,914	0.0023	0.9977	96.48
20.5	68,827,277	117,838	0.0017	0.9983	96.26
21.5	65,865,581	109,752	0.0017	0.9983	96.09
22.5	64,719,745	154,282	0.0024	0.9976	95.93
23.5	62,246,942	84,533	0.0014	0.9986	95.70
24.5	62,513,131	116,021	0.0019	0.9981	95.57
25.5	61,713,202	99,816	0.0016	0.9984	95.39
26.5	62,310,392	82,001	0.0013	0.9987	95.24
27.5	62,490,088	100,929	0.0016	0.9984	95.12
28.5	62,635,192	101,781	0.0016	0.9984	94.96
29.5	64,453,998	190,682	0.0030	0.9970	94.81
30.5	64,107,901	221,015	0.0034	0.9966	94.53
31.5	62,955,772	145,491	0.0023	0.9977	94.20
32.5	59,768,680	146,956	0.0025	0.9975	93.98
33.5	53,718,125	140,926	0.0026	0.9974	93.75
34.5	45,124,234	795,373	0.0176	0.9824	93.51
35.5	37,681,030	109,646	0.0029	0.9971	91.86
36.5	32,898,167	98,169	0.0030	0.9970	91.59
37.5	29,161,024	84,891	0.0029	0.9971	91.32
38.5	26,672,650	82,425	0.0031	0.9969	91.05

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNTS 276.20 AND 276.50 MAINS AND FEEDER LINES - STEEL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1908-2024 EXPERIENCE BAND 1995-2024

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	26,228,053	101,059	0.0039	0.9961	90.77
40.5	25,270,277	79,201	0.0031	0.9969	90.42
41.5	23,812,860	77,607	0.0033	0.9967	90.14
42.5	21,979,243	62,291	0.0028	0.9972	89.84
43.5	20,712,966	52,197	0.0025	0.9975	89.59
44.5	18,373,454	62,933	0.0034	0.9966	89.36
45.5	16,963,676	97,794	0.0058	0.9942	89.06
46.5	16,010,702	75,072	0.0047	0.9953	88.54
47.5	15,388,029	46,917	0.0030	0.9970	88.13
48.5	15,094,853	46,566	0.0031	0.9969	87.86
49.5	14,086,279	71,549	0.0051	0.9949	87.59
50.5	12,604,461	50,043	0.0040	0.9960	87.14
51.5	12,301,763	59,786	0.0049	0.9951	86.80
52.5	11,054,437	65,181	0.0059	0.9941	86.38
53.5	9,785,010	39,884	0.0041	0.9959	85.87
54.5	8,804,066	127,385	0.0145	0.9855	85.52
55.5	7,886,444	40,260	0.0051	0.9949	84.28
56.5	6,613,295	36,425	0.0055	0.9945	83.85
57.5	6,164,596	25,258	0.0041	0.9959	83.39
58.5	5,733,005	68,831	0.0120	0.9880	83.05
59.5	3,751,108	32,598	0.0087	0.9913	82.05
60.5	3,439,876	84,901	0.0247	0.9753	81.34
61.5	2,969,672	65,866	0.0222	0.9778	79.33
62.5	2,865,215	25,663	0.0090	0.9910	77.57
63.5	2,642,671	60,390	0.0229	0.9771	76.87
64.5	2,265,528	25,333	0.0112	0.9888	75.12
65.5	2,051,910	11,093	0.0054	0.9946	74.28
66.5	1,817,772	6,793	0.0037	0.9963	73.88
67.5	1,615,516	9,803	0.0061	0.9939	73.60
68.5	1,566,412	149,682	0.0956	0.9044	73.15
69.5	403,144	23,363	0.0580	0.9420	66.16
70.5	372,858	20,714	0.0556	0.9444	62.33
71.5	156,824	13,774	0.0878	0.9122	58.87
72.5	142,372	12,646	0.0888	0.9112	53.70
73.5	130,520	12,813	0.0982	0.9018	48.93
74.5	116,686	13,441	0.1152	0.8848	44.12
75.5	103,129	10,396	0.1008	0.8992	39.04
76.5	91,879	5,351	0.0582	0.9418	35.10
77.5	89,037	7,666	0.0861	0.9139	33.06
78.5	80,872	8,680	0.1073	0.8927	30.21

DUKE ENERGY KENTUCKY
GAS PLANT

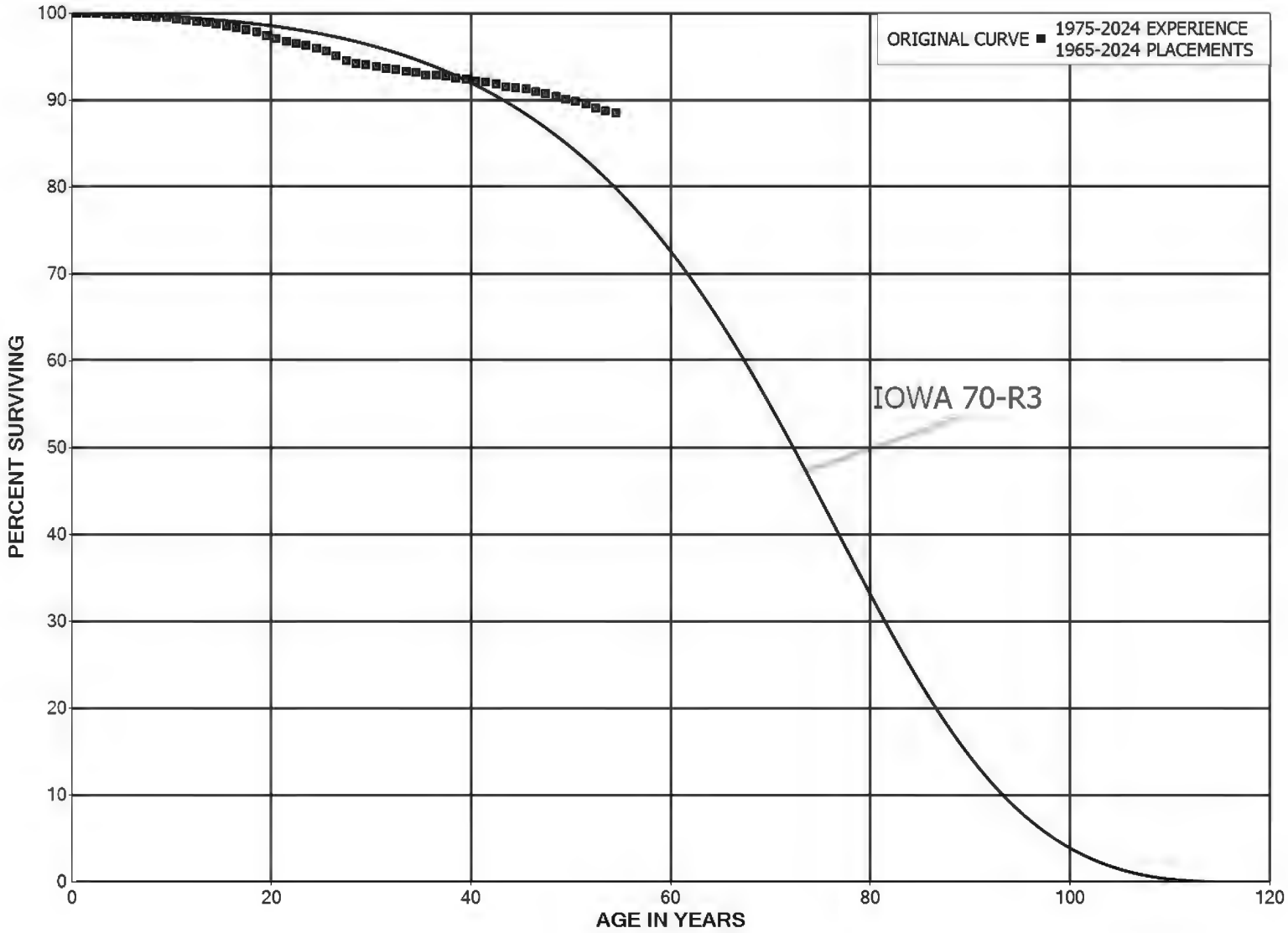
ACCOUNTS 276.20 AND 276.50 MAINS AND FEEDER LINES - STEEL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1908-2024 EXPERIENCE BAND 1995-2024

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	72,553	14,062	0.1938	0.8062	26.97
80.5	58,319	4,628	0.0794	0.9206	21.74
81.5	53,608	4,924	0.0918	0.9082	20.02
82.5	46,928	4,573	0.0974	0.9026	18.18
83.5	41,853	3,397	0.0812	0.9188	16.41
84.5	38,737	2,595	0.0670	0.9330	15.08
85.5	36,142	419	0.0116	0.9884	14.07
86.5	35,723	447	0.0125	0.9875	13.90
87.5	35,276	326	0.0093	0.9907	13.73
88.5	34,950	169	0.0048	0.9952	13.60
89.5	34,509	506	0.0147	0.9853	13.54
90.5	34,003	437	0.0129	0.9871	13.34
91.5	32,976	577	0.0175	0.9825	13.17
92.5	32,399	743	0.0229	0.9771	12.94
93.5	26,638	573	0.0215	0.9785	12.64
94.5	26,058	6,739	0.2586	0.7414	12.37
95.5	17,218	620	0.0360	0.9640	9.17
96.5	11,217	481	0.0429	0.9571	8.84
97.5	5,150	1,453	0.2821	0.7179	8.46
98.5	3,524	28	0.0080	0.9920	6.07
99.5	3,402	55	0.0161	0.9839	6.03
100.5	1,078	7	0.0065	0.9935	5.93
101.5	994	10	0.0096	0.9904	5.89
102.5	983	1	0.0010	0.9990	5.83
103.5	875	1	0.0012	0.9988	5.83
104.5	874		0.0000	1.0000	5.82
105.5	857		0.0000	1.0000	5.82
106.5	857		0.0000	1.0000	5.82
107.5	281		0.0000	1.0000	5.82
108.5	281		0.0000	1.0000	5.82
109.5	281		0.0000	1.0000	5.82
110.5	281		0.0000	1.0000	5.82
111.5	281		0.0000	1.0000	5.82
112.5	281		0.0000	1.0000	5.82
113.5	281		0.0000	1.0000	5.82
114.5					5.82

DUKE ENERGY KENTUCKY
GAS PLANT
ACCOUNT 276.30 MAINS - PLASTIC
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 276.30 MAINS - PLASTIC

ORIGINAL LIFE TABLE

PLACEMENT BAND 1965-2024 EXPERIENCE BAND 1975-2024

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	209,724,750	2,446	0.0000	1.0000	100.00
0.5	203,593,832	26,510	0.0001	0.9999	100.00
1.5	187,766,749	118,263	0.0006	0.9994	99.99
2.5	178,284,936	80,928	0.0005	0.9995	99.92
3.5	170,080,128	39,879	0.0002	0.9998	99.88
4.5	160,133,669	108,322	0.0007	0.9993	99.85
5.5	152,804,002	190,125	0.0012	0.9988	99.79
6.5	147,769,933	78,408	0.0005	0.9995	99.66
7.5	146,969,105	87,722	0.0006	0.9994	99.61
8.5	143,955,751	110,324	0.0008	0.9992	99.55
9.5	142,513,838	259,442	0.0018	0.9982	99.47
10.5	140,579,814	137,917	0.0010	0.9990	99.29
11.5	138,879,504	190,833	0.0014	0.9986	99.20
12.5	135,615,798	177,518	0.0013	0.9987	99.06
13.5	133,328,789	253,491	0.0019	0.9981	98.93
14.5	128,453,776	259,687	0.0020	0.9980	98.74
15.5	113,274,259	240,731	0.0021	0.9979	98.54
16.5	101,754,758	231,802	0.0023	0.9977	98.33
17.5	94,248,689	271,093	0.0029	0.9971	98.11
18.5	83,026,357	323,725	0.0039	0.9961	97.83
19.5	72,114,949	295,943	0.0041	0.9959	97.44
20.5	56,560,766	164,472	0.0029	0.9971	97.04
21.5	46,388,165	119,924	0.0026	0.9974	96.76
22.5	35,494,797	96,798	0.0027	0.9973	96.51
23.5	29,093,389	103,895	0.0036	0.9964	96.25
24.5	25,768,103	92,051	0.0036	0.9964	95.91
25.5	23,154,746	120,912	0.0052	0.9948	95.56
26.5	19,614,411	104,694	0.0053	0.9947	95.06
27.5	15,384,061	59,936	0.0039	0.9961	94.56
28.5	11,892,482	19,127	0.0016	0.9984	94.19
29.5	8,895,790	20,176	0.0023	0.9977	94.04
30.5	5,165,667	11,340	0.0022	0.9978	93.82
31.5	2,808,070	3,049	0.0011	0.9989	93.62
32.5	1,565,424	4,493	0.0029	0.9971	93.52
33.5	1,390,843	1,047	0.0008	0.9992	93.25
34.5	1,331,125	4,621	0.0035	0.9965	93.18
35.5	1,256,070	781	0.0006	0.9994	92.85
36.5	1,243,279	813	0.0007	0.9993	92.80
37.5	1,184,179	2,358	0.0020	0.9980	92.74
38.5	1,154,365	1,537	0.0013	0.9987	92.55

DUKE ENERGY KENTUCKY
GAS PLANT

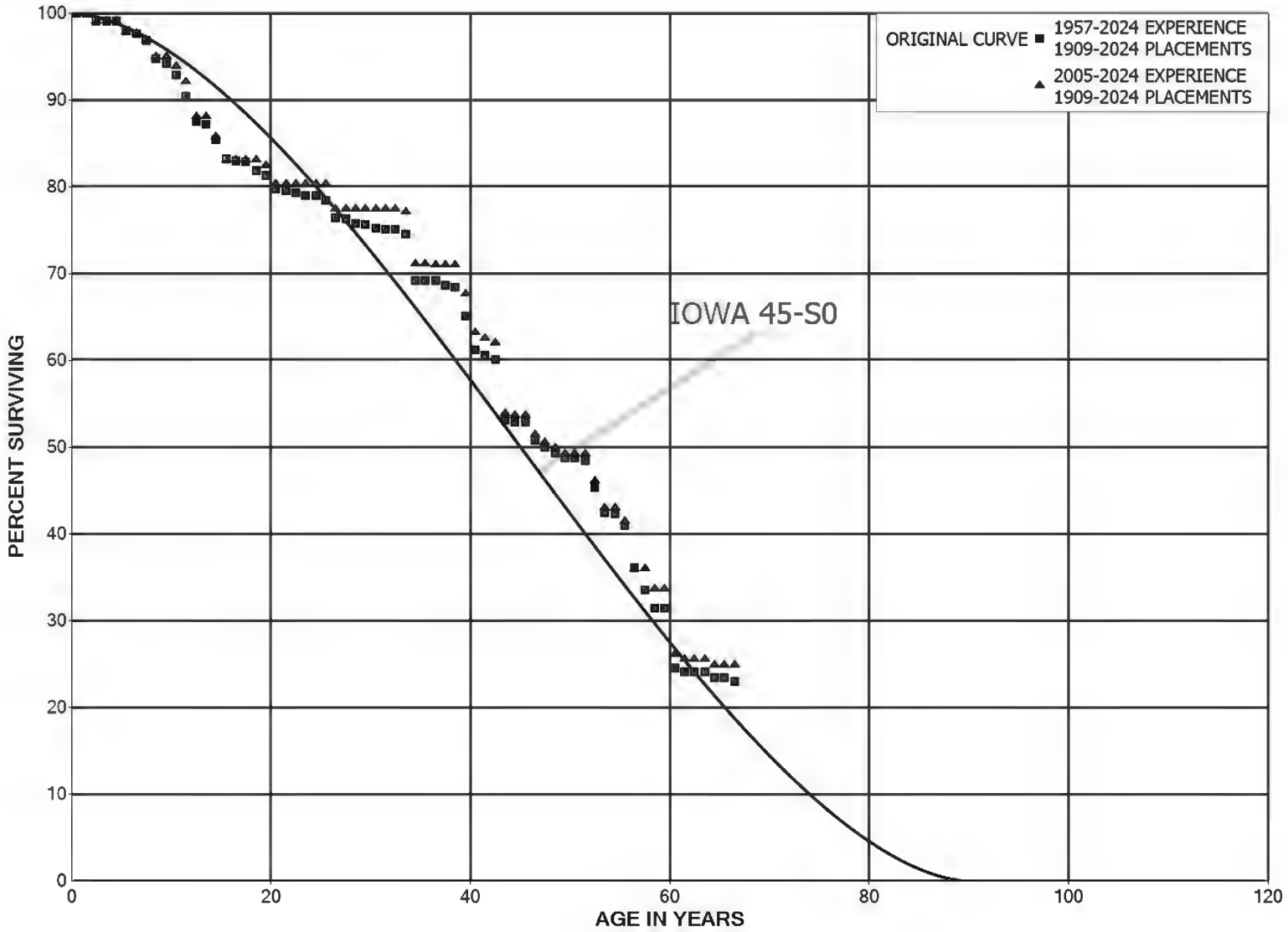
ACCOUNT 276.30 MAINS - PLASTIC

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1965-2024 EXPERIENCE BAND 1975-2024

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	1,152,828	3,058	0.0027	0.9973	92.43
40.5	1,109,800	1,993	0.0018	0.9982	92.18
41.5	1,098,620	2,390	0.0022	0.9978	92.02
42.5	1,096,230	3,160	0.0029	0.9971	91.82
43.5	1,057,976	2,224	0.0021	0.9979	91.55
44.5	894,897	1,241	0.0014	0.9986	91.36
45.5	796,098	2,042	0.0026	0.9974	91.23
46.5	735,505	2,012	0.0027	0.9973	91.00
47.5	726,094	2,488	0.0034	0.9966	90.75
48.5	696,274	2,520	0.0036	0.9964	90.44
49.5	629,297	2,056	0.0033	0.9967	90.11
50.5	570,453	2,237	0.0039	0.9961	89.82
51.5	454,736	1,797	0.0040	0.9960	89.46
52.5	274,747	1,034	0.0038	0.9962	89.11
53.5	106,467	278	0.0026	0.9974	88.78
54.5	6,799	105	0.0154	0.9846	88.54
55.5	6,695	9	0.0013	0.9987	87.18
56.5	1,048	6	0.0055	0.9945	87.07
57.5	1,043	15	0.0146	0.9854	86.59
58.5	1,027	2	0.0019	0.9981	85.33
59.5					85.16

DUKE ENERGY KENTUCKY
GAS PLANT
ACCOUNT 278.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 278.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE

PLACEMENT BAND 1909-2024 EXPERIENCE BAND 1957-2024

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	109,213,850		0.0000	1.0000	100.00
0.5	91,776,747	1,626	0.0000	1.0000	100.00
1.5	69,639,337	621,995	0.0089	0.9911	100.00
2.5	57,813,155	8,061	0.0001	0.9999	99.11
3.5	52,476,253	20,123	0.0004	0.9996	99.09
4.5	28,530,065	331,436	0.0116	0.9884	99.05
5.5	12,212,923	37,365	0.0031	0.9969	97.90
6.5	9,515,723	79,774	0.0084	0.9916	97.60
7.5	8,564,513	182,484	0.0213	0.9787	96.78
8.5	7,389,780	45,224	0.0061	0.9939	94.72
9.5	6,144,185	86,169	0.0140	0.9860	94.14
10.5	5,879,724	150,659	0.0256	0.9744	92.82
11.5	5,234,008	170,072	0.0325	0.9675	90.44
12.5	4,793,316	21,081	0.0044	0.9956	87.51
13.5	4,379,104	86,749	0.0198	0.9802	87.12
14.5	4,287,643	113,640	0.0265	0.9735	85.39
15.5	3,886,651	9,945	0.0026	0.9974	83.13
16.5	3,628,232	5,777	0.0016	0.9984	82.92
17.5	3,254,549	38,590	0.0119	0.9881	82.79
18.5	2,879,453	16,638	0.0058	0.9942	81.80
19.5	2,759,246	55,344	0.0201	0.9799	81.33
20.5	2,626,453	6,376	0.0024	0.9976	79.70
21.5	1,832,534	5,625	0.0031	0.9969	79.51
22.5	1,779,297	6,389	0.0036	0.9964	79.26
23.5	1,714,613	733	0.0004	0.9996	78.98
24.5	1,677,837	12,602	0.0075	0.9925	78.95
25.5	1,618,904	41,074	0.0254	0.9746	78.35
26.5	1,541,302	2,216	0.0014	0.9986	76.36
27.5	1,516,606	11,047	0.0073	0.9927	76.25
28.5	1,505,721	1,435	0.0010	0.9990	75.70
29.5	1,486,616	8,790	0.0059	0.9941	75.63
30.5	1,424,029	2,006	0.0014	0.9986	75.18
31.5	1,370,891		0.0000	1.0000	75.07
32.5	1,350,171	10,683	0.0079	0.9921	75.07
33.5	1,253,156	89,282	0.0712	0.9288	74.48
34.5	1,155,561		0.0000	1.0000	69.17
35.5	1,013,345	778	0.0008	0.9992	69.17
36.5	940,379	6,888	0.0073	0.9927	69.12
37.5	839,613	2,393	0.0028	0.9972	68.61
38.5	759,755	37,398	0.0492	0.9508	68.42

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 278.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1909-2024 EXPERIENCE BAND 1957-2024

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	673,378	40,392	0.0600	0.9400	65.05
40.5	601,553	6,162	0.0102	0.9898	61.15
41.5	588,097	4,194	0.0071	0.9929	60.52
42.5	553,354	64,694	0.1169	0.8831	60.09
43.5	475,403	2,140	0.0045	0.9955	53.07
44.5	468,317		0.0000	1.0000	52.83
45.5	443,992	17,826	0.0401	0.9599	52.83
46.5	403,997	6,334	0.0157	0.9843	50.71
47.5	394,136	5,100	0.0129	0.9871	49.91
48.5	378,812	4,121	0.0109	0.9891	49.26
49.5	332,190		0.0000	1.0000	48.73
50.5	306,046	2,313	0.0076	0.9924	48.73
51.5	288,491	18,316	0.0635	0.9365	48.36
52.5	194,850	12,610	0.0647	0.9353	45.29
53.5	83,761	111	0.0013	0.9987	42.36
54.5	78,953	2,467	0.0312	0.9688	42.30
55.5	74,026	8,946	0.1208	0.8792	40.98
56.5	61,762	4,287	0.0694	0.9306	36.03
57.5	57,475	3,579	0.0623	0.9377	33.53
58.5	53,322	0	0.0000	1.0000	31.44
59.5	51,693	11,398	0.2205	0.7795	31.44
60.5	40,295	778	0.0193	0.9807	24.51
61.5	37,111		0.0000	1.0000	24.03
62.5	37,111		0.0000	1.0000	24.03
63.5	34,085	951	0.0279	0.9721	24.03
64.5	32,357		0.0000	1.0000	23.36
65.5	16,230	323	0.0199	0.9801	23.36
66.5	15,734		0.0000	1.0000	22.90
67.5	15,734		0.0000	1.0000	22.90
68.5	15,734		0.0000	1.0000	22.90
69.5	12,469		0.0000	1.0000	22.90
70.5	12,469	131	0.0105	0.9895	22.90
71.5	6,019		0.0000	1.0000	22.66
72.5	6,019		0.0000	1.0000	22.66
73.5	6,019		0.0000	1.0000	22.66
74.5	6,019	2,000	0.3323	0.6677	22.66
75.5	878	288	0.3281	0.6719	15.13
76.5	590		0.0000	1.0000	10.17
77.5	552		0.0000	1.0000	10.17
78.5	552		0.0000	1.0000	10.17

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 278.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1909-2024 EXPERIENCE BAND 1957-2024

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	552		0.0000	1.0000	10.17
80.5	552		0.0000	1.0000	10.17
81.5	552		0.0000	1.0000	10.17
82.5	552		0.0000	1.0000	10.17
83.5	552		0.0000	1.0000	10.17
84.5	552		0.0000	1.0000	10.17
85.5	552		0.0000	1.0000	10.17
86.5	552		0.0000	1.0000	10.17
87.5	552		0.0000	1.0000	10.17
88.5	552	230	0.4167	0.5833	10.17
89.5					5.93

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 278.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE

PLACEMENT BAND 1909-2024 EXPERIENCE BAND 2005-2024

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	106,117,217		0.0000	1.0000	100.00
0.5	88,742,423		0.0000	1.0000	100.00
1.5	66,728,642	620,252	0.0093	0.9907	100.00
2.5	54,956,703		0.0000	1.0000	99.07
3.5	49,703,178		0.0000	1.0000	99.07
4.5	26,478,338	316,649	0.0120	0.9880	99.07
5.5	10,217,990	22,604	0.0022	0.9978	97.89
6.5	7,608,587	66,257	0.0087	0.9913	97.67
7.5	6,685,330	131,516	0.0197	0.9803	96.82
8.5	5,561,011		0.0000	1.0000	94.91
9.5	4,381,398	51,260	0.0117	0.9883	94.91
10.5	4,176,098	77,133	0.0185	0.9815	93.80
11.5	3,655,040	157,088	0.0430	0.9570	92.07
12.5	3,266,235	575	0.0002	0.9998	88.11
13.5	2,970,855	80,221	0.0270	0.9730	88.10
14.5	2,894,146	88,149	0.0305	0.9695	85.72
15.5	2,635,784		0.0000	1.0000	83.11
16.5	2,479,282		0.0000	1.0000	83.11
17.5	2,129,247		0.0000	1.0000	83.11
18.5	1,961,182	16,638	0.0085	0.9915	83.11
19.5	1,873,095	48,467	0.0259	0.9741	82.40
20.5	1,850,394		0.0000	1.0000	80.27
21.5	1,072,233		0.0000	1.0000	80.27
22.5	1,056,460		0.0000	1.0000	80.27
23.5	1,013,874		0.0000	1.0000	80.27
24.5	1,040,490		0.0000	1.0000	80.27
25.5	1,096,391	39,837	0.0363	0.9637	80.27
26.5	1,055,173		0.0000	1.0000	77.35
27.5	1,038,551		0.0000	1.0000	77.35
28.5	1,054,822		0.0000	1.0000	77.35
29.5	1,053,246		0.0000	1.0000	77.35
30.5	1,023,749		0.0000	1.0000	77.35
31.5	996,718		0.0000	1.0000	77.35
32.5	1,085,521	4,703	0.0043	0.9957	77.35
33.5	1,138,212	88,803	0.0780	0.9220	77.02
34.5	1,052,496		0.0000	1.0000	71.01
35.5	921,089	778	0.0008	0.9992	71.01
36.5	857,991		0.0000	1.0000	70.95
37.5	764,112		0.0000	1.0000	70.95
38.5	687,221	31,948	0.0465	0.9535	70.95

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 278.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1909-2024 EXPERIENCE BAND 2005-2024

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	613,088	40,392	0.0659	0.9341	67.65
40.5	541,264	6,162	0.0114	0.9886	63.20
41.5	530,214	4,194	0.0079	0.9921	62.48
42.5	495,471	64,694	0.1306	0.8694	61.98
43.5	431,944	1,845	0.0043	0.9957	53.89
44.5	425,930		0.0000	1.0000	53.66
45.5	417,731	17,826	0.0427	0.9573	53.66
46.5	378,687	6,334	0.0167	0.9833	51.37
47.5	366,263	5,100	0.0139	0.9861	50.51
48.5	354,606	4,121	0.0116	0.9884	49.81
49.5	312,200		0.0000	1.0000	49.23
50.5	286,056		0.0000	1.0000	49.23
51.5	277,132	17,915	0.0646	0.9354	49.23
52.5	183,892	12,524	0.0681	0.9319	46.04
53.5	72,890		0.0000	1.0000	42.91
54.5	68,193	2,467	0.0362	0.9638	42.91
55.5	68,406	8,946	0.1308	0.8692	41.36
56.5	56,143		0.0000	1.0000	35.95
57.5	56,181	3,579	0.0637	0.9363	35.95
58.5	52,028	0	0.0000	1.0000	33.66
59.5	50,399	11,398	0.2262	0.7738	33.66
60.5	39,002	778	0.0199	0.9801	26.05
61.5	35,817		0.0000	1.0000	25.53
62.5	35,817		0.0000	1.0000	25.53
63.5	32,791	951	0.0290	0.9710	25.53
64.5	31,063		0.0000	1.0000	24.79
65.5	14,936		0.0000	1.0000	24.79
66.5	14,763		0.0000	1.0000	24.79
67.5	14,763		0.0000	1.0000	24.79
68.5	14,763		0.0000	1.0000	24.79
69.5	12,050		0.0000	1.0000	24.79
70.5	12,050		0.0000	1.0000	24.79
71.5	5,731		0.0000	1.0000	24.79
72.5	5,731		0.0000	1.0000	24.79
73.5	5,731		0.0000	1.0000	24.79
74.5	5,731	2,000	0.3490	0.6510	24.79
75.5	590		0.0000	1.0000	16.14
76.5	590		0.0000	1.0000	16.14
77.5	552		0.0000	1.0000	16.14
78.5	552		0.0000	1.0000	16.14

DUKE ENERGY KENTUCKY
GAS PLANT

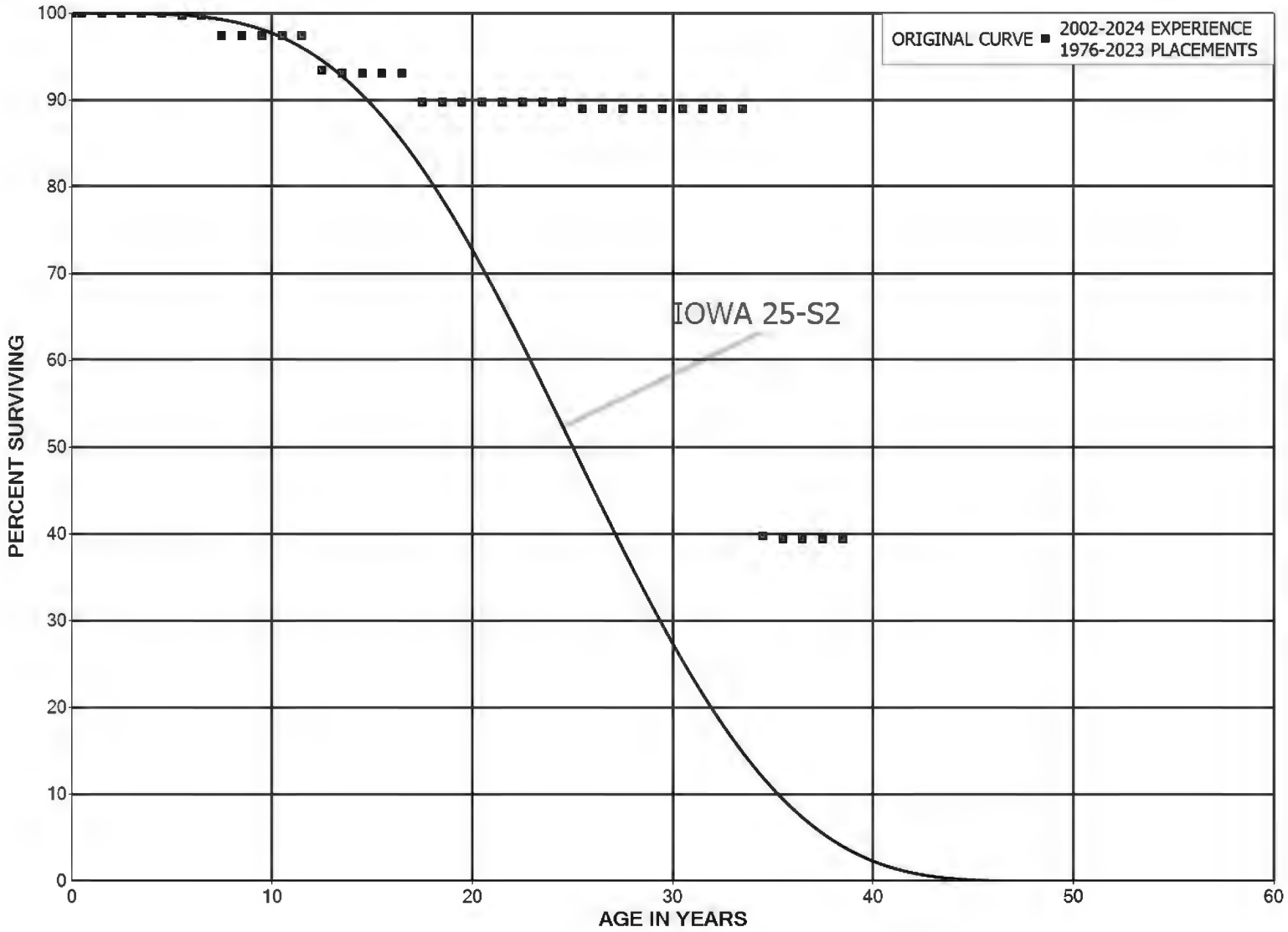
ACCOUNT 278.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1909-2024 EXPERIENCE BAND 2005-2024

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	552		0.0000	1.0000	16.14
80.5	552		0.0000	1.0000	16.14
81.5	552		0.0000	1.0000	16.14
82.5	552		0.0000	1.0000	16.14
83.5	552		0.0000	1.0000	16.14
84.5	552		0.0000	1.0000	16.14
85.5	552		0.0000	1.0000	16.14
86.5	552		0.0000	1.0000	16.14
87.5	552		0.0000	1.0000	16.14
88.5	552	230	0.4167	0.5833	16.14
89.5					9.41

DUKE ENERGY KENTUCKY
GAS PLANT
ACCOUNT 278.10 MEASURING AND REGULATING STATION EQUIPMENT - ELECTRONIC
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 278.10 MEASURING AND REGULATING STATION EQUIPMENT - ELECTRONIC

ORIGINAL LIFE TABLE

PLACEMENT BAND 1976-2023 EXPERIENCE BAND 2002-2024

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	2,186,379		0.0000	1.0000	100.00
0.5	2,186,379		0.0000	1.0000	100.00
1.5	1,581,190		0.0000	1.0000	100.00
2.5	1,581,190		0.0000	1.0000	100.00
3.5	1,656,683		0.0000	1.0000	100.00
4.5	1,087,550	3,399	0.0031	0.9969	100.00
5.5	1,112,236		0.0000	1.0000	99.69
6.5	911,686	21,259	0.0233	0.9767	99.69
7.5	888,208		0.0000	1.0000	97.36
8.5	888,208		0.0000	1.0000	97.36
9.5	515,056		0.0000	1.0000	97.36
10.5	464,528		0.0000	1.0000	97.36
11.5	464,528	18,723	0.0403	0.9597	97.36
12.5	420,974	1,844	0.0044	0.9956	93.44
13.5	437,574		0.0000	1.0000	93.03
14.5	411,590		0.0000	1.0000	93.03
15.5	497,223		0.0000	1.0000	93.03
16.5	468,876	16,626	0.0355	0.9645	93.03
17.5	452,249		0.0000	1.0000	89.73
18.5	400,679		0.0000	1.0000	89.73
19.5	353,628		0.0000	1.0000	89.73
20.5	341,633		0.0000	1.0000	89.73
21.5	326,086		0.0000	1.0000	89.73
22.5	321,859		0.0000	1.0000	89.73
23.5	321,859		0.0000	1.0000	89.73
24.5	321,859	2,919	0.0091	0.9909	89.73
25.5	328,262		0.0000	1.0000	88.92
26.5	318,052		0.0000	1.0000	88.92
27.5	289,421		0.0000	1.0000	88.92
28.5	261,336		0.0000	1.0000	88.92
29.5	257,537		0.0000	1.0000	88.92
30.5	203,487		0.0000	1.0000	88.92
31.5	203,487		0.0000	1.0000	88.92
32.5	203,487		0.0000	1.0000	88.92
33.5	203,487	112,480	0.5528	0.4472	88.92
34.5	91,006	798	0.0088	0.9912	39.77
35.5	90,209		0.0000	1.0000	39.42
36.5	62,526		0.0000	1.0000	39.42
37.5	31,473		0.0000	1.0000	39.42
38.5	9,322		0.0000	1.0000	39.42

DUKE ENERGY KENTUCKY
GAS PLANT

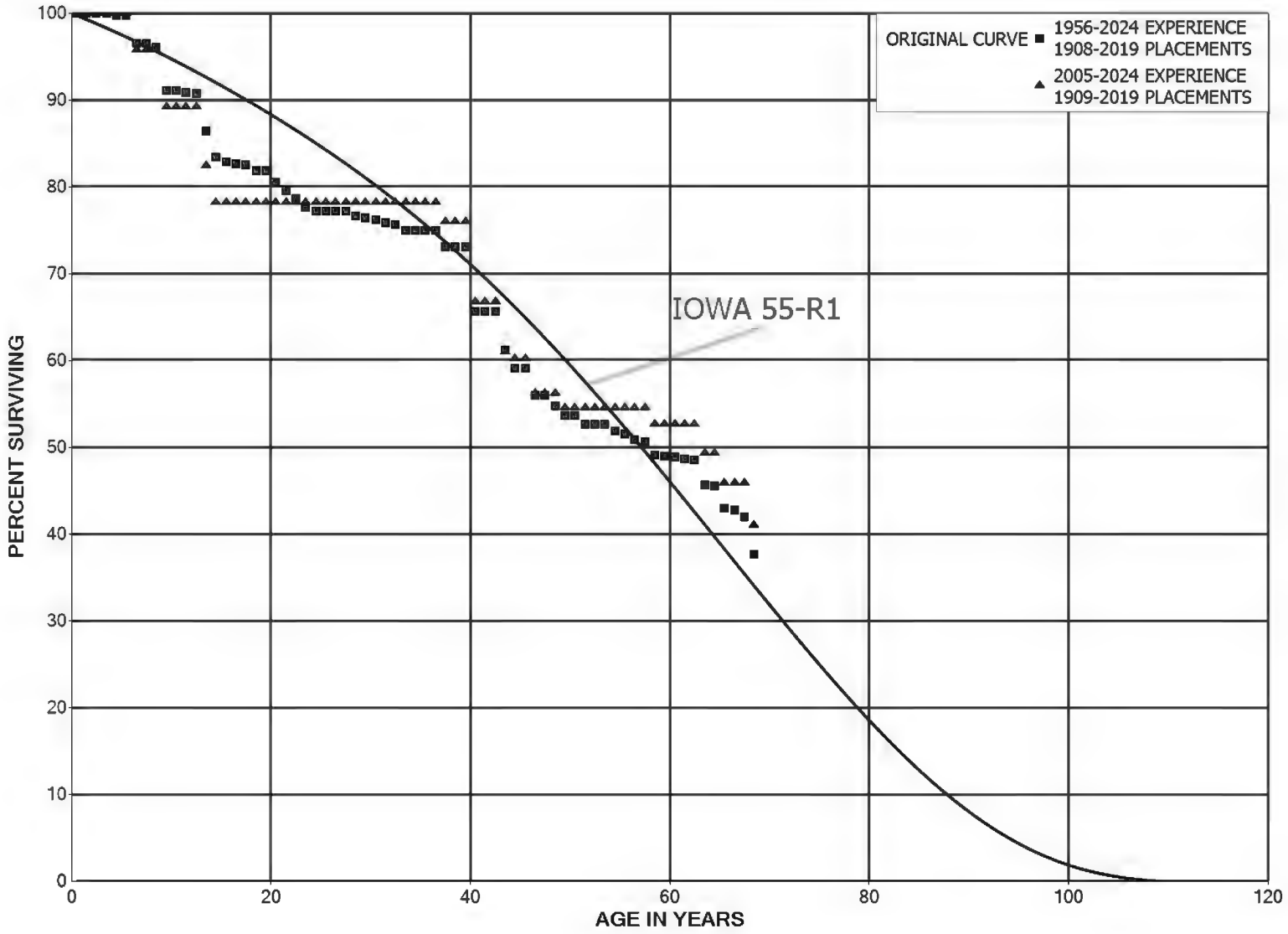
ACCOUNT 278.10 MEASURING AND REGULATING STATION EQUIPMENT - ELECTRONIC

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1976-2023 EXPERIENCE BAND 2002-2024

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	9,322		0.0000	1.0000	39.42
40.5	9,322		0.0000	1.0000	39.42
41.5	9,322		0.0000	1.0000	39.42
42.5	9,322		0.0000	1.0000	39.42
43.5	9,322		0.0000	1.0000	39.42
44.5	9,322		0.0000	1.0000	39.42
45.5	9,322		0.0000	1.0000	39.42
46.5	9,322		0.0000	1.0000	39.42
47.5	9,322		0.0000	1.0000	39.42
48.5					39.42

DUKE ENERGY KENTUCKY
GAS PLANT
ACCOUNT 278.20 MEASURING AND REGULATING STATION EQUIPMENT - DISTRICT
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 278.20 MEASURING AND REGULATING STATION EQUIPMENT - DISTRICT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1908-2019 EXPERIENCE BAND 1956-2024

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	2,538,858		0.0000	1.0000	100.00
0.5	2,544,548	2,516	0.0010	0.9990	100.00
1.5	2,544,601		0.0000	1.0000	99.90
2.5	2,563,451		0.0000	1.0000	99.90
3.5	2,585,690	3,499	0.0014	0.9986	99.90
4.5	2,589,349	413	0.0002	0.9998	99.77
5.5	2,403,391	79,429	0.0330	0.9670	99.75
6.5	2,329,159		0.0000	1.0000	96.45
7.5	2,333,012	8,829	0.0038	0.9962	96.45
8.5	2,324,182	122,700	0.0528	0.9472	96.09
9.5	1,988,384		0.0000	1.0000	91.02
10.5	1,860,318	4,590	0.0025	0.9975	91.02
11.5	1,463,910	982	0.0007	0.9993	90.79
12.5	1,264,376	59,905	0.0474	0.9526	90.73
13.5	1,144,561	39,814	0.0348	0.9652	86.43
14.5	975,120	7,361	0.0075	0.9925	83.42
15.5	912,150	1,849	0.0020	0.9980	82.80
16.5	746,765	836	0.0011	0.9989	82.63
17.5	624,555	5,092	0.0082	0.9918	82.53
18.5	624,920	43	0.0001	0.9999	81.86
19.5	589,476	9,603	0.0163	0.9837	81.86
20.5	554,085	6,997	0.0126	0.9874	80.52
21.5	502,683	5,869	0.0117	0.9883	79.51
22.5	496,815	6,135	0.0123	0.9877	78.58
23.5	490,679	2,397	0.0049	0.9951	77.61
24.5	488,423	623	0.0013	0.9987	77.23
25.5	489,773		0.0000	1.0000	77.13
26.5	490,732		0.0000	1.0000	77.13
27.5	491,215	2,931	0.0060	0.9940	77.13
28.5	476,784	1,516	0.0032	0.9968	76.67
29.5	475,268	1,492	0.0031	0.9969	76.43
30.5	474,189	2,194	0.0046	0.9954	76.19
31.5	471,995	1,149	0.0024	0.9976	75.83
32.5	457,447	4,004	0.0088	0.9912	75.65
33.5	453,443		0.0000	1.0000	74.99
34.5	428,720	316	0.0007	0.9993	74.99
35.5	384,047	104	0.0003	0.9997	74.93
36.5	383,942	9,255	0.0241	0.9759	74.91
37.5	374,687	65	0.0002	0.9998	73.11
38.5	355,448		0.0000	1.0000	73.09

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 278.20 MEASURING AND REGULATING STATION EQUIPMENT - DISTRICT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1908-2019 EXPERIENCE BAND 1956-2024

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	334,237	34,017	0.1018	0.8982	73.09
40.5	292,048	79	0.0003	0.9997	65.65
41.5	281,121	88	0.0003	0.9997	65.64
42.5	269,935	18,063	0.0669	0.9331	65.62
43.5	251,986	8,916	0.0354	0.9646	61.22
44.5	228,632		0.0000	1.0000	59.06
45.5	210,251	10,859	0.0516	0.9484	59.06
46.5	169,292	62	0.0004	0.9996	56.01
47.5	169,519	3,729	0.0220	0.9780	55.99
48.5	147,289	2,963	0.0201	0.9799	54.76
49.5	123,325	100	0.0008	0.9992	53.65
50.5	112,661	2,097	0.0186	0.9814	53.61
51.5	86,862		0.0000	1.0000	52.61
52.5	84,984		0.0000	1.0000	52.61
53.5	80,422	1,211	0.0151	0.9849	52.61
54.5	71,047	410	0.0058	0.9942	51.82
55.5	70,465	907	0.0129	0.9871	51.52
56.5	69,559	267	0.0038	0.9962	50.86
57.5	69,291	2,261	0.0326	0.9674	50.66
58.5	60,058	115	0.0019	0.9981	49.01
59.5	57,607	130	0.0023	0.9977	48.92
60.5	52,999	211	0.0040	0.9960	48.81
61.5	52,788	124	0.0024	0.9976	48.61
62.5	52,664	3,123	0.0593	0.9407	48.50
63.5	44,789	107	0.0024	0.9976	45.62
64.5	44,682	2,520	0.0564	0.9436	45.51
65.5	42,161	217	0.0051	0.9949	42.95
66.5	41,944	806	0.0192	0.9808	42.72
67.5	41,138	4,235	0.1030	0.8970	41.90
68.5	36,903		0.0000	1.0000	37.59
69.5	32,687	134	0.0041	0.9959	37.59
70.5	32,553	39	0.0012	0.9988	37.44
71.5	24,510		0.0000	1.0000	37.39
72.5	9,490		0.0000	1.0000	37.39
73.5	9,490		0.0000	1.0000	37.39
74.5	9,490		0.0000	1.0000	37.39
75.5	8,066		0.0000	1.0000	37.39
76.5	6,663	109	0.0164	0.9836	37.39
77.5	6,554	273	0.0417	0.9583	36.78
78.5	6,280		0.0000	1.0000	35.24

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 278.20 MEASURING AND REGULATING STATION EQUIPMENT - DISTRICT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1908-2019 EXPERIENCE BAND 1956-2024

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	6,280		0.0000	1.0000	35.24
80.5	6,280		0.0000	1.0000	35.24
81.5	6,280		0.0000	1.0000	35.24
82.5	6,280		0.0000	1.0000	35.24
83.5	6,280		0.0000	1.0000	35.24
84.5	6,280		0.0000	1.0000	35.24
85.5	6,278	2,129	0.3390	0.6610	35.24
86.5	2,798		0.0000	1.0000	23.30
87.5	2,798		0.0000	1.0000	23.30
88.5	2,798		0.0000	1.0000	23.30
89.5	2,798		0.0000	1.0000	23.30
90.5	2,798	684	0.2444	0.7556	23.30
91.5	2,115		0.0000	1.0000	17.60
92.5	2,115		0.0000	1.0000	17.60
93.5	2,115		0.0000	1.0000	17.60
94.5	2,115		0.0000	1.0000	17.60
95.5	2,115		0.0000	1.0000	17.60
96.5	2,115		0.0000	1.0000	17.60
97.5	2,115		0.0000	1.0000	17.60
98.5	2,115		0.0000	1.0000	17.60
99.5	2,115		0.0000	1.0000	17.60
100.5	2,115		0.0000	1.0000	17.60
101.5	2,115		0.0000	1.0000	17.60
102.5	2,115		0.0000	1.0000	17.60
103.5	2,115		0.0000	1.0000	17.60
104.5	2,115		0.0000	1.0000	17.60
105.5	2,115		0.0000	1.0000	17.60
106.5	2,115		0.0000	1.0000	17.60
107.5	2,115		0.0000	1.0000	17.60
108.5	2,115		0.0000	1.0000	17.60
109.5	2,115	386	0.1824	0.8176	17.60
110.5	1,729	405	0.2341	0.7659	14.39
111.5	1,324	1,324	1.0000		11.02
112.5					

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 278.20 MEASURING AND REGULATING STATION EQUIPMENT - DISTRICT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1909-2019 EXPERIENCE BAND 2005-2024

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	1,979,425		0.0000	1.0000	100.00
0.5	2,005,622		0.0000	1.0000	100.00
1.5	2,050,370		0.0000	1.0000	100.00
2.5	2,050,370		0.0000	1.0000	100.00
3.5	2,050,370		0.0000	1.0000	100.00
4.5	2,050,370		0.0000	1.0000	100.00
5.5	1,862,240	79,429	0.0427	0.9573	100.00
6.5	1,782,812		0.0000	1.0000	95.73
7.5	1,782,812		0.0000	1.0000	95.73
8.5	1,794,395	122,700	0.0684	0.9316	95.73
9.5	1,458,532		0.0000	1.0000	89.19
10.5	1,330,466		0.0000	1.0000	89.19
11.5	938,648		0.0000	1.0000	89.19
12.5	753,762	57,803	0.0767	0.9233	89.19
13.5	636,049	32,562	0.0512	0.9488	82.35
14.5	498,710		0.0000	1.0000	78.13
15.5	487,459		0.0000	1.0000	78.13
16.5	323,922		0.0000	1.0000	78.13
17.5	201,129		0.0000	1.0000	78.13
18.5	220,520		0.0000	1.0000	78.13
19.5	206,424		0.0000	1.0000	78.13
20.5	197,462		0.0000	1.0000	78.13
21.5	163,564		0.0000	1.0000	78.13
22.5	175,243		0.0000	1.0000	78.13
23.5	206,599		0.0000	1.0000	78.13
24.5	231,313		0.0000	1.0000	78.13
25.5	251,500		0.0000	1.0000	78.13
26.5	301,775		0.0000	1.0000	78.13
27.5	304,032		0.0000	1.0000	78.13
28.5	310,950		0.0000	1.0000	78.13
29.5	331,950		0.0000	1.0000	78.13
30.5	342,514		0.0000	1.0000	78.13
31.5	369,180		0.0000	1.0000	78.13
32.5	357,392		0.0000	1.0000	78.13
33.5	361,953		0.0000	1.0000	78.13
34.5	345,257		0.0000	1.0000	78.13
35.5	301,071		0.0000	1.0000	78.13
36.5	301,071	8,618	0.0286	0.9714	78.13
37.5	292,454		0.0000	1.0000	75.90
38.5	280,034		0.0000	1.0000	75.90

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 278.20 MEASURING AND REGULATING STATION EQUIPMENT - DISTRICT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1909-2019 EXPERIENCE BAND 2005-2024

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	260,750	31,356	0.1203	0.8797	75.90
40.5	225,254		0.0000	1.0000	66.77
41.5	216,455		0.0000	1.0000	66.77
42.5	204,776	17,981	0.0878	0.9122	66.77
43.5	191,547	2,257	0.0118	0.9882	60.91
44.5	177,684		0.0000	1.0000	60.19
45.5	160,017	10,642	0.0665	0.9335	60.19
46.5	117,448		0.0000	1.0000	56.19
47.5	117,448		0.0000	1.0000	56.19
48.5	98,947	2,963	0.0299	0.9701	56.19
49.5	79,200		0.0000	1.0000	54.50
50.5	68,636		0.0000	1.0000	54.50
51.5	56,940		0.0000	1.0000	54.50
52.5	70,081		0.0000	1.0000	54.50
53.5	65,520		0.0000	1.0000	54.50
54.5	57,356		0.0000	1.0000	54.50
55.5	58,607		0.0000	1.0000	54.50
56.5	60,011		0.0000	1.0000	54.50
57.5	60,011	2,049	0.0341	0.9659	54.50
58.5	50,990		0.0000	1.0000	52.64
59.5	48,653		0.0000	1.0000	52.64
60.5	44,175		0.0000	1.0000	52.64
61.5	44,175		0.0000	1.0000	52.64
62.5	44,175	2,833	0.0641	0.9359	52.64
63.5	36,590		0.0000	1.0000	49.27
64.5	36,590	2,520	0.0689	0.9311	49.27
65.5	34,072		0.0000	1.0000	45.87
66.5	35,423		0.0000	1.0000	45.87
67.5	37,551	4,002	0.1066	0.8934	45.87
68.5	33,549		0.0000	1.0000	40.98
69.5	29,333		0.0000	1.0000	40.98
70.5	29,333		0.0000	1.0000	40.98
71.5	21,329		0.0000	1.0000	40.98
72.5	6,308		0.0000	1.0000	40.98
73.5	6,308		0.0000	1.0000	40.98
74.5	6,992		0.0000	1.0000	40.98
75.5	5,569		0.0000	1.0000	40.98
76.5	4,166		0.0000	1.0000	40.98
77.5	4,166		0.0000	1.0000	40.98
78.5	4,166		0.0000	1.0000	40.98

DUKE ENERGY KENTUCKY
GAS PLANT

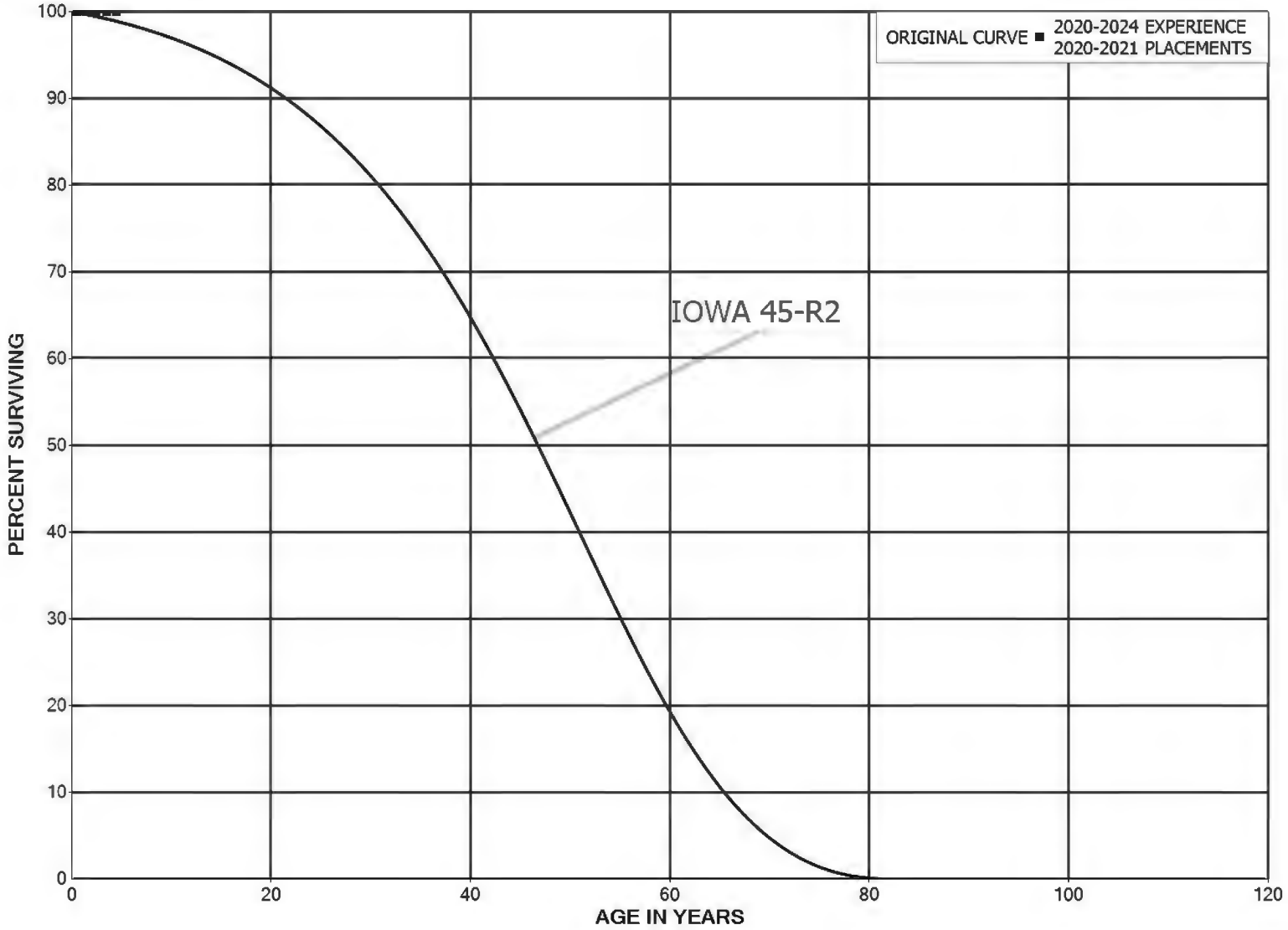
ACCOUNT 278.20 MEASURING AND REGULATING STATION EQUIPMENT - DISTRICT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1909-2019 EXPERIENCE BAND 2005-2024

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	4,166		0.0000	1.0000	40.98
80.5	4,166		0.0000	1.0000	40.98
81.5	4,166		0.0000	1.0000	40.98
82.5	4,166		0.0000	1.0000	40.98
83.5	4,166		0.0000	1.0000	40.98
84.5	4,166		0.0000	1.0000	40.98
85.5	4,164	2,129	0.5112	0.4888	40.98
86.5	684		0.0000	1.0000	20.03
87.5	684		0.0000	1.0000	20.03
88.5	684		0.0000	1.0000	20.03
89.5	684		0.0000	1.0000	20.03
90.5	684	684	1.0000		20.03
91.5					
92.5					
93.5					
94.5	790		0.0000		
95.5	2,115		0.0000		
96.5	2,115		0.0000		
97.5	2,115		0.0000		
98.5	2,115		0.0000		
99.5	2,115		0.0000		
100.5	2,115		0.0000		
101.5	2,115		0.0000		
102.5	2,115		0.0000		
103.5	2,115		0.0000		
104.5	2,115		0.0000		
105.5	2,115		0.0000		
106.5	2,115		0.0000		
107.5	2,115		0.0000		
108.5	2,115		0.0000		
109.5	2,115	386	0.1824		
110.5	1,729	405	0.2341		
111.5	1,324	1,324	1.0000		
112.5					

DUKE ENERGY KENTUCKY
GAS PLANT
ACCOUNT 279.00 MEASURING AND REGULATING STATION EQUIPMENT - CITY GATE
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY
GAS PLANT

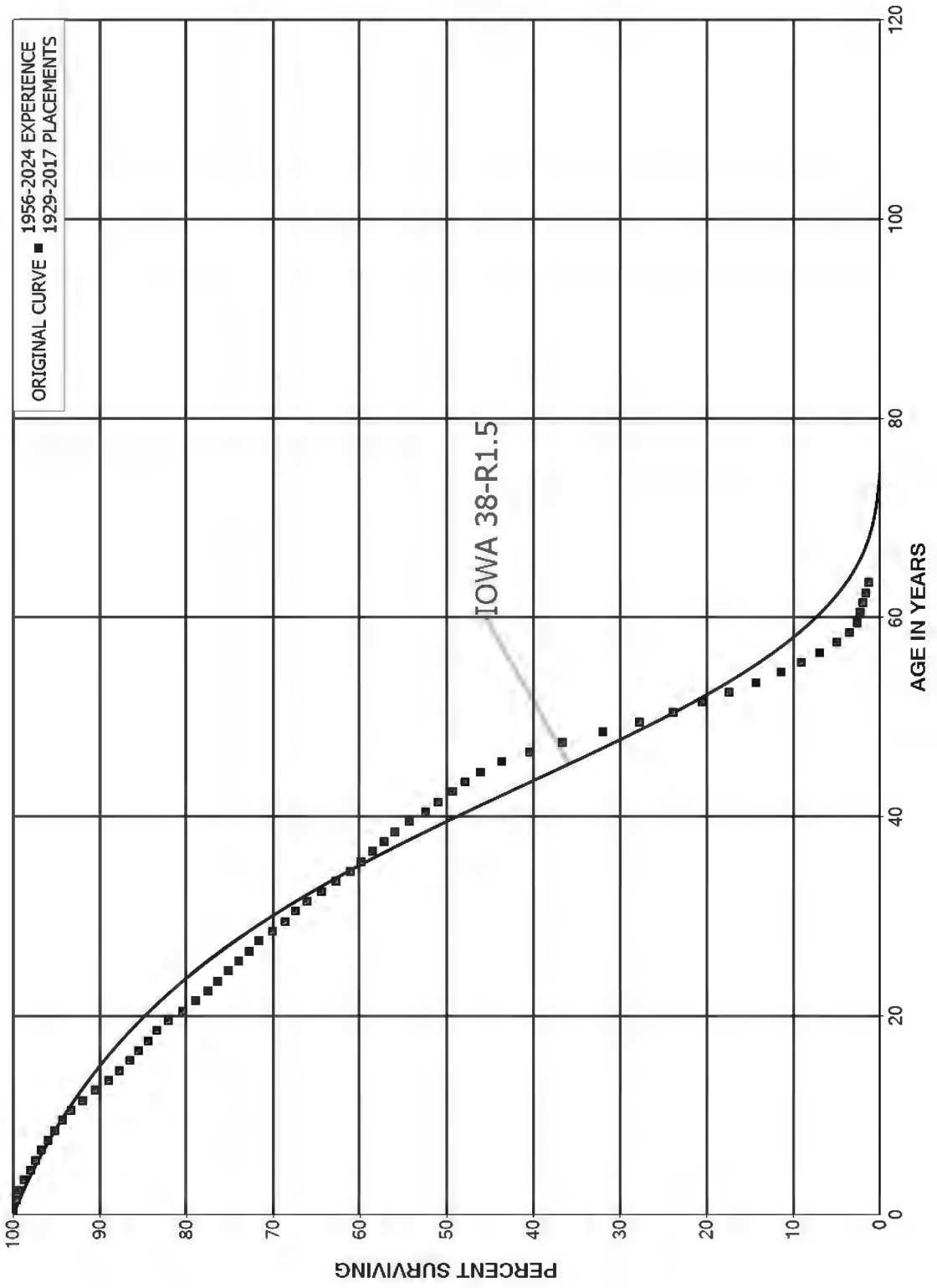
ACCOUNT 279.00 MEASURING AND REGULATING STATION EQUIPMENT - CITY GATE

ORIGINAL LIFE TABLE

PLACEMENT BAND 2020-2021 EXPERIENCE BAND 2020-2024

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	1,637,717		0.0000	1.0000	100.00
0.5	1,637,717		0.0000	1.0000	100.00
1.5	1,637,717		0.0000	1.0000	100.00
2.5	1,637,717		0.0000	1.0000	100.00
3.5	1,614,864		0.0000	1.0000	100.00
4.5					100.00

DUKE ENERGY KENTUCKY
GAS PLANT
ACCOUNT 280.10 SERVICES - CAST IRON, COPPER AND ALL VALVES
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 280.10 SERVICES - CAST IRON, COPPER AND ALL VALVES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1929-2017 EXPERIENCE BAND 1956-2024

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	5,129,453	3,851	0.0008	0.9992	100.00
0.5	4,334,970	15,671	0.0036	0.9964	99.92
1.5	3,688,721	11,945	0.0032	0.9968	99.56
2.5	3,719,972	17,997	0.0048	0.9952	99.24
3.5	3,726,561	29,967	0.0080	0.9920	98.76
4.5	3,324,067	17,694	0.0053	0.9947	97.97
5.5	3,360,123	26,301	0.0078	0.9922	97.45
6.5	3,380,082	24,899	0.0074	0.9926	96.68
7.5	3,399,534	29,314	0.0086	0.9914	95.97
8.5	3,394,209	30,214	0.0089	0.9911	95.14
9.5	3,374,825	35,285	0.0105	0.9895	94.30
10.5	3,343,658	47,397	0.0142	0.9858	93.31
11.5	3,297,158	51,982	0.0158	0.9842	91.99
12.5	3,249,450	55,055	0.0169	0.9831	90.54
13.5	3,194,861	45,288	0.0142	0.9858	89.00
14.5	3,157,360	43,357	0.0137	0.9863	87.74
15.5	3,125,819	38,234	0.0122	0.9878	86.54
16.5	3,068,446	39,580	0.0129	0.9871	85.48
17.5	3,040,050	34,156	0.0112	0.9888	84.38
18.5	3,024,568	50,373	0.0167	0.9833	83.43
19.5	2,981,408	61,403	0.0206	0.9794	82.04
20.5	2,919,586	50,437	0.0173	0.9827	80.35
21.5	2,877,771	52,158	0.0181	0.9819	78.96
22.5	2,825,388	40,804	0.0144	0.9856	77.53
23.5	2,783,867	43,186	0.0155	0.9845	76.41
24.5	2,741,142	47,193	0.0172	0.9828	75.22
25.5	2,694,298	43,675	0.0162	0.9838	73.93
26.5	2,650,417	39,634	0.0150	0.9850	72.73
27.5	2,610,783	56,065	0.0215	0.9785	71.64
28.5	2,554,343	53,143	0.0208	0.9792	70.10
29.5	2,501,079	45,751	0.0183	0.9817	68.65
30.5	2,455,174	49,691	0.0202	0.9798	67.39
31.5	2,405,348	59,465	0.0247	0.9753	66.03
32.5	2,346,162	62,217	0.0265	0.9735	64.39
33.5	2,283,945	58,119	0.0254	0.9746	62.69
34.5	2,225,826	45,329	0.0204	0.9796	61.09
35.5	2,180,343	47,327	0.0217	0.9783	59.85
36.5	2,132,750	49,152	0.0230	0.9770	58.55
37.5	2,083,598	45,899	0.0220	0.9780	57.20
38.5	2,037,518	61,713	0.0303	0.9697	55.94

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 280.10 SERVICES - CAST IRON, COPPER AND ALL VALVES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1929-2017 EXPERIENCE BAND 1956-2024

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	1,975,804	67,290	0.0341	0.9659	54.24
40.5	1,908,514	54,464	0.0285	0.9715	52.40
41.5	1,854,050	57,331	0.0309	0.9691	50.90
42.5	1,796,719	54,566	0.0304	0.9696	49.33
43.5	1,742,153	64,761	0.0372	0.9628	47.83
44.5	1,677,392	86,928	0.0518	0.9482	46.05
45.5	1,590,464	117,390	0.0738	0.9262	43.67
46.5	1,473,074	139,217	0.0945	0.9055	40.44
47.5	1,333,858	171,173	0.1283	0.8717	36.62
48.5	1,162,685	151,541	0.1303	0.8697	31.92
49.5	1,011,144	144,777	0.1432	0.8568	27.76
50.5	866,392	118,489	0.1368	0.8632	23.79
51.5	747,904	114,921	0.1537	0.8463	20.53
52.5	632,982	111,877	0.1767	0.8233	17.38
53.5	521,105	105,227	0.2019	0.7981	14.31
54.5	415,877	86,034	0.2069	0.7931	11.42
55.5	329,844	78,701	0.2386	0.7614	9.06
56.5	251,143	70,282	0.2798	0.7202	6.89
57.5	180,861	53,831	0.2976	0.7024	4.97
58.5	127,030	30,357	0.2390	0.7610	3.49
59.5	96,673	13,422	0.1388	0.8612	2.65
60.5	83,251	13,878	0.1667	0.8333	2.29
61.5	69,382	9,208	0.1327	0.8673	1.90
62.5	60,173	12,180	0.2024	0.7976	1.65
63.5	48,002	8,760	0.1825	0.8175	1.32
64.5	39,242	4,930	0.1256	0.8744	1.08
65.5	34,312	3,881	0.1131	0.8869	0.94
66.5	30,431	6,498	0.2135	0.7865	0.84
67.5	23,933	4,665	0.1949	0.8051	0.66
68.5	19,268	7,473	0.3878	0.6122	0.53
69.5	11,795	2,924	0.2479	0.7521	0.32
70.5	8,871	979	0.1104	0.8896	0.24
71.5	7,892	1,118	0.1416	0.8584	0.22
72.5	6,774	761	0.1124	0.8876	0.19
73.5	6,013	490	0.0814	0.9186	0.17
74.5	5,523	306	0.0553	0.9447	0.15
75.5	5,218	421	0.0807	0.9193	0.14
76.5	4,797	1,280	0.2669	0.7331	0.13
77.5	3,517	595	0.1692	0.8308	0.10
78.5	2,922	1,169	0.4002	0.5998	0.08

DUKE ENERGY KENTUCKY
GAS PLANT

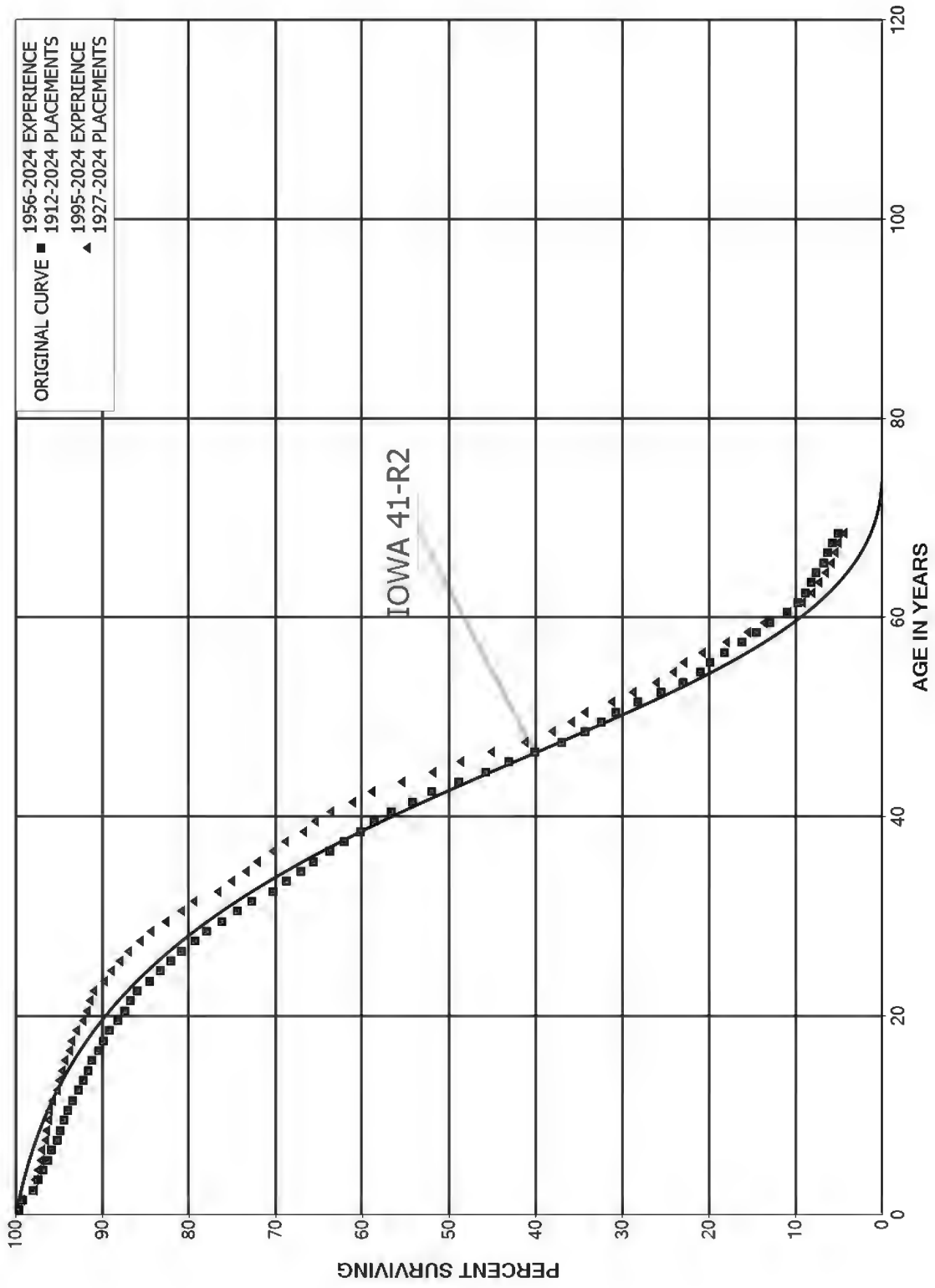
ACCOUNT 280.10 SERVICES - CAST IRON, COPPER AND ALL VALVES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1929-2017 EXPERIENCE BAND 1956-2024

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	1,752	1,648	0.9406	0.0594	0.05
80.5	104	50	0.4770	0.5230	0.00
81.5	54	54	0.9998	0.0002	0.00
82.5	0		0.0000	1.0000	0.00
83.5	0		0.0000	1.0000	0.00
84.5					0.00

DUKE ENERGY KENTUCKY
GAS PLANT
ACCOUNT 280.20 SERVICES - STEEL
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 280.20 SERVICES - STEEL

ORIGINAL LIFE TABLE

PLACEMENT BAND 1912-2024 EXPERIENCE BAND 1956-2024

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	7,754,655	25,803	0.0033	0.9967	100.00
0.5	7,044,720	37,659	0.0053	0.9947	99.67
1.5	6,663,576	83,056	0.0125	0.9875	99.13
2.5	6,492,517	33,230	0.0051	0.9949	97.90
3.5	5,618,845	31,154	0.0055	0.9945	97.40
4.5	4,611,663	26,335	0.0057	0.9943	96.86
5.5	4,598,450	22,260	0.0048	0.9952	96.30
6.5	4,485,969	29,921	0.0067	0.9933	95.84
7.5	4,457,530	16,121	0.0036	0.9964	95.20
8.5	4,441,669	22,768	0.0051	0.9949	94.85
9.5	4,421,285	21,768	0.0049	0.9951	94.37
10.5	4,406,052	25,980	0.0059	0.9941	93.90
11.5	4,387,117	31,137	0.0071	0.9929	93.35
12.5	4,362,345	23,087	0.0053	0.9947	92.69
13.5	4,301,941	27,138	0.0063	0.9937	92.20
14.5	4,265,136	22,158	0.0052	0.9948	91.62
15.5	4,220,796	34,203	0.0081	0.9919	91.14
16.5	4,187,425	24,110	0.0058	0.9942	90.40
17.5	4,161,070	32,700	0.0079	0.9921	89.88
18.5	3,473,777	38,140	0.0110	0.9890	89.17
19.5	3,461,720	31,883	0.0092	0.9908	88.20
20.5	3,448,753	24,087	0.0070	0.9930	87.38
21.5	3,459,228	32,441	0.0094	0.9906	86.77
22.5	3,431,442	59,328	0.0173	0.9827	85.96
23.5	3,374,143	45,747	0.0136	0.9864	84.47
24.5	3,214,936	47,851	0.0149	0.9851	83.33
25.5	3,154,507	48,981	0.0155	0.9845	82.09
26.5	3,089,834	56,763	0.0184	0.9816	80.81
27.5	2,943,527	51,463	0.0175	0.9825	79.33
28.5	2,805,959	61,957	0.0221	0.9779	77.94
29.5	2,650,413	63,490	0.0240	0.9760	76.22
30.5	2,461,493	54,251	0.0220	0.9780	74.39
31.5	2,167,244	72,417	0.0334	0.9666	72.75
32.5	1,986,039	43,701	0.0220	0.9780	70.32
33.5	1,717,927	42,131	0.0245	0.9755	68.78
34.5	1,493,882	33,428	0.0224	0.9776	67.09
35.5	1,289,328	36,685	0.0285	0.9715	65.59
36.5	1,184,041	30,696	0.0259	0.9741	63.72
37.5	1,085,709	33,786	0.0311	0.9689	62.07
38.5	987,009	24,667	0.0250	0.9750	60.14

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 280.20 SERVICES - STEEL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1912-2024 EXPERIENCE BAND 1956-2024

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	908,782	31,270	0.0344	0.9656	58.64
40.5	825,765	35,221	0.0427	0.9573	56.62
41.5	758,750	32,268	0.0425	0.9575	54.20
42.5	705,959	41,542	0.0588	0.9412	51.90
43.5	635,948	40,482	0.0637	0.9363	48.84
44.5	552,456	32,645	0.0591	0.9409	45.73
45.5	486,708	33,695	0.0692	0.9308	43.03
46.5	448,062	34,471	0.0769	0.9231	40.05
47.5	409,141	29,657	0.0725	0.9275	36.97
48.5	375,188	20,677	0.0551	0.9449	34.29
49.5	352,318	17,638	0.0501	0.9499	32.40
50.5	331,440	28,255	0.0852	0.9148	30.78
51.5	300,374	28,635	0.0953	0.9047	28.16
52.5	261,990	26,199	0.1000	0.9000	25.47
53.5	225,316	18,834	0.0836	0.9164	22.92
54.5	199,933	10,715	0.0536	0.9464	21.01
55.5	181,385	15,168	0.0836	0.9164	19.88
56.5	162,336	18,184	0.1120	0.8880	18.22
57.5	139,042	14,615	0.1051	0.8949	16.18
58.5	118,425	12,122	0.1024	0.8976	14.48
59.5	87,732	13,712	0.1563	0.8437	13.00
60.5	70,036	8,084	0.1154	0.8846	10.97
61.5	61,936	5,552	0.0896	0.9104	9.70
62.5	55,019	3,912	0.0711	0.9289	8.83
63.5	50,407	3,785	0.0751	0.9249	8.20
64.5	44,706	5,178	0.1158	0.8842	7.59
65.5	38,237	2,610	0.0683	0.9317	6.71
66.5	31,299	2,424	0.0775	0.9225	6.25
67.5	28,641	3,510	0.1226	0.8774	5.77
68.5	25,115	1,816	0.0723	0.9277	5.06
69.5	24,092	1,145	0.0475	0.9525	4.69
70.5	22,948	1,176	0.0513	0.9487	4.47
71.5	21,771	3,075	0.1412	0.8588	4.24
72.5	18,542	2,581	0.1392	0.8608	3.64
73.5	15,962	5,473	0.3429	0.6571	3.14
74.5	10,488	389	0.0371	0.9629	2.06
75.5	10,099	298	0.0295	0.9705	1.98
76.5	9,648	417	0.0433	0.9567	1.93
77.5	9,230	180	0.0195	0.9805	1.84
78.5	9,050	3,860	0.4265	0.5735	1.81

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 280.20 SERVICES - STEEL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1912-2024 EXPERIENCE BAND 1956-2024

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	5,190	1,573	0.3030	0.6970	1.04
80.5	3,618	275	0.0761	0.9239	0.72
81.5	3,343	522	0.1562	0.8438	0.67
82.5	2,811	408	0.1450	0.8550	0.56
83.5	2,403	115	0.0479	0.9521	0.48
84.5	2,288	169	0.0739	0.9261	0.46
85.5	2,053	70	0.0341	0.9659	0.42
86.5	1,983	203	0.1022	0.8978	0.41
87.5	1,729	22	0.0128	0.9872	0.37
88.5	1,707	178	0.1042	0.8958	0.36
89.5	1,529	64	0.0421	0.9579	0.33
90.5	1,465	4	0.0025	0.9975	0.31
91.5	1,461		0.0000	1.0000	0.31
92.5	1,461	44	0.0304	0.9696	0.31
93.5	1,417		0.0000	1.0000	0.30
94.5					0.30

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 280.20 SERVICES - STEEL

ORIGINAL LIFE TABLE

PLACEMENT BAND 1927-2024 EXPERIENCE BAND 1995-2024

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	4,724,996	22,719	0.0048	0.9952	100.00
0.5	4,120,478	12,968	0.0031	0.9969	99.52
1.5	4,038,651	59,102	0.0146	0.9854	99.21
2.5	4,014,351	5,474	0.0014	0.9986	97.75
3.5	3,412,982	12,163	0.0036	0.9964	97.62
4.5	2,649,038	8,153	0.0031	0.9969	97.27
5.5	2,871,548	3,177	0.0011	0.9989	96.97
6.5	2,890,790	14,646	0.0051	0.9949	96.87
7.5	2,985,337	1,711	0.0006	0.9994	96.38
8.5	3,081,765	7,662	0.0025	0.9975	96.32
9.5	3,149,093	6,171	0.0020	0.9980	96.08
10.5	3,219,739	10,540	0.0033	0.9967	95.89
11.5	3,256,667	18,659	0.0057	0.9943	95.58
12.5	3,283,769	6,601	0.0020	0.9980	95.03
13.5	3,281,412	12,261	0.0037	0.9963	94.84
14.5	3,316,704	11,995	0.0036	0.9964	94.49
15.5	3,321,706	20,272	0.0061	0.9939	94.14
16.5	3,286,102	6,562	0.0020	0.9980	93.57
17.5	3,274,354	19,198	0.0059	0.9941	93.38
18.5	2,601,871	21,961	0.0084	0.9916	92.83
19.5	2,582,950	12,632	0.0049	0.9951	92.05
20.5	2,574,828	9,588	0.0037	0.9963	91.60
21.5	2,571,365	10,541	0.0041	0.9959	91.26
22.5	2,582,777	35,604	0.0138	0.9862	90.89
23.5	2,564,430	22,476	0.0088	0.9912	89.63
24.5	2,440,894	26,634	0.0109	0.9891	88.85
25.5	2,381,400	27,079	0.0114	0.9886	87.88
26.5	2,288,177	35,817	0.0157	0.9843	86.88
27.5	2,177,790	32,464	0.0149	0.9851	85.52
28.5	2,079,857	42,318	0.0203	0.9797	84.24
29.5	1,989,844	42,833	0.0215	0.9785	82.53
30.5	1,830,021	34,429	0.0188	0.9812	80.75
31.5	1,563,307	54,296	0.0347	0.9653	79.23
32.5	1,404,009	28,387	0.0202	0.9798	76.48
33.5	1,167,386	26,388	0.0226	0.9774	74.94
34.5	994,789	17,269	0.0174	0.9826	73.24
35.5	839,600	21,295	0.0254	0.9746	71.97
36.5	793,558	16,284	0.0205	0.9795	70.15
37.5	745,939	22,486	0.0301	0.9699	68.71
38.5	693,017	13,909	0.0201	0.9799	66.63

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 280.20 SERVICES - STEEL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1927-2024 EXPERIENCE BAND 1995-2024

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	648,442	18,170	0.0280	0.9720	65.30
40.5	587,086	23,037	0.0392	0.9608	63.47
41.5	539,696	19,474	0.0361	0.9639	60.98
42.5	513,249	30,354	0.0591	0.9409	58.78
43.5	457,192	29,522	0.0646	0.9354	55.30
44.5	385,563	23,919	0.0620	0.9380	51.73
45.5	328,785	24,478	0.0744	0.9256	48.52
46.5	299,510	25,769	0.0860	0.9140	44.91
47.5	269,396	20,557	0.0763	0.9237	41.04
48.5	246,490	14,018	0.0569	0.9431	37.91
49.5	232,666	10,356	0.0445	0.9555	35.76
50.5	220,494	19,714	0.0894	0.9106	34.16
51.5	199,447	16,262	0.0815	0.9185	31.11
52.5	175,026	15,731	0.0899	0.9101	28.57
53.5	151,420	11,810	0.0780	0.9220	26.01
54.5	136,759	7,179	0.0525	0.9475	23.98
55.5	126,450	11,741	0.0929	0.9071	22.72
56.5	113,204	15,426	0.1363	0.8637	20.61
57.5	94,211	12,657	0.1343	0.8657	17.80
58.5	80,164	9,928	0.1238	0.8762	15.41
59.5	54,028	11,094	0.2053	0.7947	13.50
60.5	39,603	6,215	0.1569	0.8431	10.73
61.5	33,886	3,907	0.1153	0.8847	9.04
62.5	28,870	2,986	0.1034	0.8966	8.00
63.5	26,441	2,703	0.1022	0.8978	7.17
64.5	44,678	5,178	0.1159	0.8841	6.44
65.5	38,209	2,610	0.0683	0.9317	5.69
66.5	31,271	2,424	0.0775	0.9225	5.31
67.5	28,641	3,510	0.1226	0.8774	4.89
68.5	25,115	1,816	0.0723	0.9277	4.29
69.5	24,092	1,145	0.0475	0.9525	3.98
70.5	22,948	1,176	0.0513	0.9487	3.79
71.5	21,771	3,075	0.1412	0.8588	3.60
72.5	18,542	2,581	0.1392	0.8608	3.09
73.5	15,962	5,473	0.3429	0.6571	2.66
74.5	10,488	389	0.0371	0.9629	1.75
75.5	10,099	298	0.0295	0.9705	1.68
76.5	9,648	417	0.0433	0.9567	1.63
77.5	9,230	180	0.0195	0.9805	1.56
78.5	9,050	3,860	0.4265	0.5735	1.53

DUKE ENERGY KENTUCKY
GAS PLANT

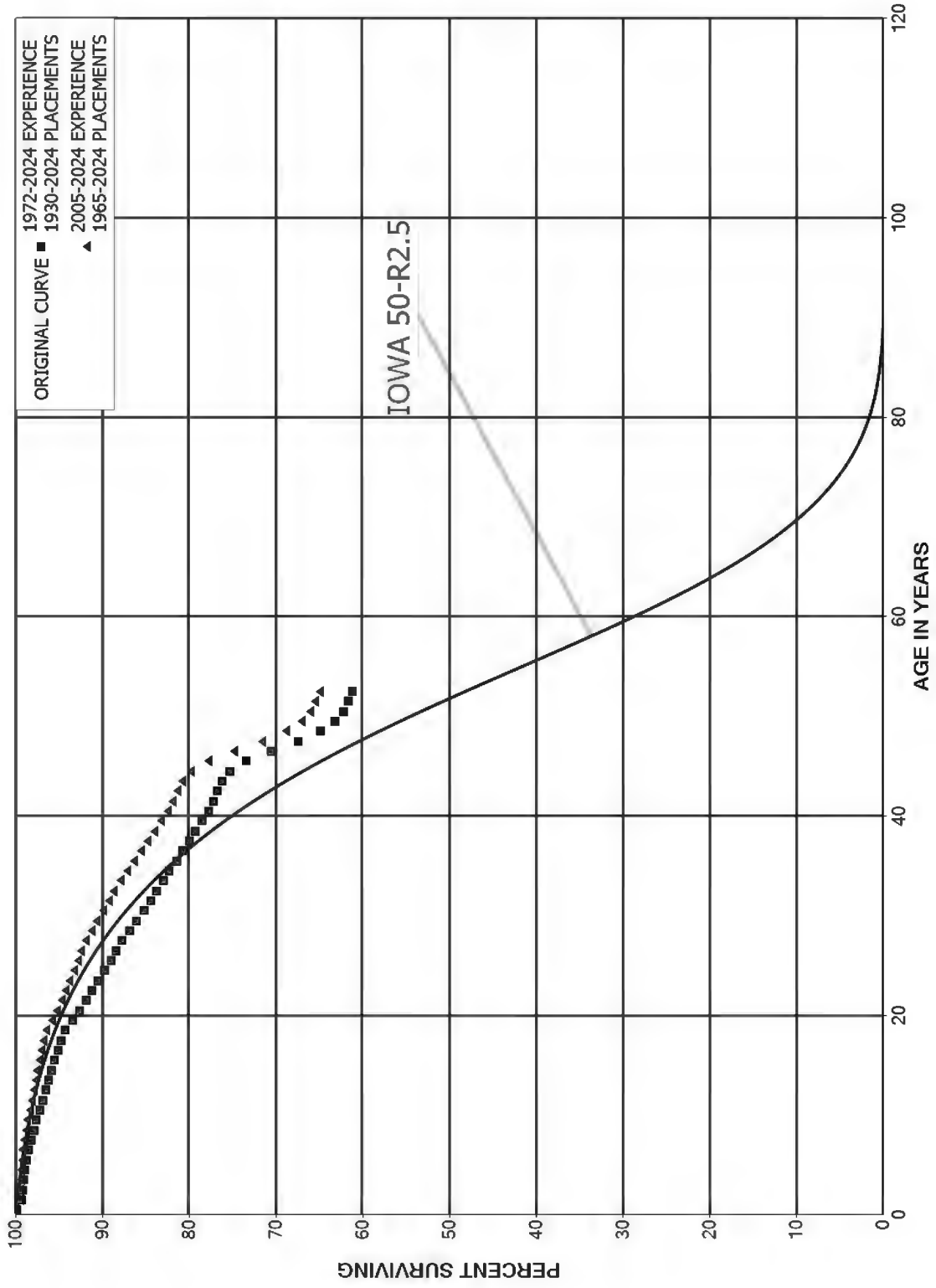
ACCOUNT 280.20 SERVICES - STEEL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1927-2024 EXPERIENCE BAND 1995-2024

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	5,190	1,573	0.3030	0.6970	0.88
80.5	3,618	275	0.0761	0.9239	0.61
81.5	3,343	522	0.1562	0.8438	0.57
82.5	2,811	408	0.1450	0.8550	0.48
83.5	2,403	115	0.0479	0.9521	0.41
84.5	2,288	169	0.0739	0.9261	0.39
85.5	2,053	70	0.0341	0.9659	0.36
86.5	1,983	203	0.1022	0.8978	0.35
87.5	1,729	22	0.0128	0.9872	0.31
88.5	1,707	178	0.1042	0.8958	0.31
89.5	1,529	64	0.0421	0.9579	0.28
90.5	1,465	4	0.0025	0.9975	0.26
91.5	1,461		0.0000	1.0000	0.26
92.5	1,461	44	0.0304	0.9696	0.26
93.5	1,417		0.0000	1.0000	0.26
94.5					0.26

DUKE ENERGY KENTUCKY
GAS PLANT
ACCOUNT 280.30 SERVICES - PLASTIC
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 280.30 SERVICES - PLASTIC

ORIGINAL LIFE TABLE

PLACEMENT BAND 1930-2024 EXPERIENCE BAND 1972-2024

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	234,549,132	388,176	0.0017	0.9983	100.00
0.5	217,983,393	1,183,409	0.0054	0.9946	99.83
1.5	197,395,091	187,935	0.0010	0.9990	99.29
2.5	196,830,502	231,049	0.0012	0.9988	99.20
3.5	186,533,289	250,751	0.0013	0.9987	99.08
4.5	160,916,752	304,227	0.0019	0.9981	98.95
5.5	121,115,510	338,880	0.0028	0.9972	98.76
6.5	120,662,090	381,832	0.0032	0.9968	98.48
7.5	120,433,463	392,008	0.0033	0.9967	98.17
8.5	119,980,906	357,119	0.0030	0.9970	97.85
9.5	119,623,113	440,367	0.0037	0.9963	97.56
10.5	119,144,364	449,790	0.0038	0.9962	97.20
11.5	118,681,548	453,483	0.0038	0.9962	96.84
12.5	118,233,597	360,468	0.0030	0.9970	96.47
13.5	117,873,130	394,284	0.0033	0.9967	96.17
14.5	104,647,852	391,737	0.0037	0.9963	95.85
15.5	78,430,950	333,183	0.0042	0.9958	95.49
16.5	77,114,717	315,340	0.0041	0.9959	95.09
17.5	71,224,932	336,876	0.0047	0.9953	94.70
18.5	33,291,394	318,720	0.0096	0.9904	94.25
19.5	32,962,130	269,947	0.0082	0.9918	93.35
20.5	32,557,391	254,719	0.0078	0.9922	92.58
21.5	30,764,795	224,370	0.0073	0.9927	91.86
22.5	27,676,478	217,044	0.0078	0.9922	91.19
23.5	26,921,426	210,016	0.0078	0.9922	90.47
24.5	26,245,751	223,331	0.0085	0.9915	89.77
25.5	25,174,734	159,343	0.0063	0.9937	89.00
26.5	22,584,221	190,991	0.0085	0.9915	88.44
27.5	20,476,167	202,324	0.0099	0.9901	87.69
28.5	18,796,476	157,547	0.0084	0.9916	86.83
29.5	17,199,261	189,458	0.0110	0.9890	86.10
30.5	15,013,470	127,777	0.0085	0.9915	85.15
31.5	13,010,747	103,010	0.0079	0.9921	84.42
32.5	11,279,347	101,980	0.0090	0.9910	83.76
33.5	9,296,750	84,121	0.0090	0.9910	83.00
34.5	7,224,860	71,718	0.0099	0.9901	82.25
35.5	5,843,509	50,837	0.0087	0.9913	81.43
36.5	4,864,980	44,217	0.0091	0.9909	80.72
37.5	4,079,837	38,494	0.0094	0.9906	79.99
38.5	3,545,241	33,000	0.0093	0.9907	79.23

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 280.30 SERVICES - PLASTIC

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1930-2024 EXPERIENCE BAND 1972-2024

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	3,125,773	28,658	0.0092	0.9908	78.50
40.5	2,848,395	20,437	0.0072	0.9928	77.78
41.5	2,569,143	16,626	0.0065	0.9935	77.22
42.5	2,182,924	15,522	0.0071	0.9929	76.72
43.5	1,784,663	21,854	0.0122	0.9878	76.17
44.5	1,279,485	32,261	0.0252	0.9748	75.24
45.5	923,441	36,161	0.0392	0.9608	73.34
46.5	803,011	34,829	0.0434	0.9566	70.47
47.5	659,499	25,661	0.0389	0.9611	67.42
48.5	580,300	14,949	0.0258	0.9742	64.79
49.5	453,647	6,441	0.0142	0.9858	63.12
50.5	342,037	3,172	0.0093	0.9907	62.23
51.5	214,011	1,755	0.0082	0.9918	61.65
52.5	84,428	978	0.0116	0.9884	61.14
53.5	34,966	438	0.0125	0.9875	60.44
54.5	21,674	164	0.0075	0.9925	59.68
55.5	13,891	164	0.0118	0.9882	59.23
56.5	5,385		0.0000	1.0000	58.53
57.5	4,878		0.0000	1.0000	58.53
58.5	4,436		0.0000	1.0000	58.53
59.5					58.53
60.5					
61.5					
62.5					
63.5					
64.5					
65.5					
66.5					
67.5					
68.5	16		0.0000		
69.5	16		0.0000		
70.5	16	8	0.5000		
71.5	8		0.0000		
72.5	8	8	1.0000		
73.5					

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 280.30 SERVICES - PLASTIC

ORIGINAL LIFE TABLE

PLACEMENT BAND 1965-2024 EXPERIENCE BAND 2005-2024

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	196,402,701	306,788	0.0016	0.9984	100.00
0.5	180,196,742	1,046,462	0.0058	0.9942	99.84
1.5	161,894,639	39,333	0.0002	0.9998	99.26
2.5	164,256,347	36,432	0.0002	0.9998	99.24
3.5	154,891,120	76,966	0.0005	0.9995	99.22
4.5	130,052,618	78,914	0.0006	0.9994	99.17
5.5	91,444,475	87,315	0.0010	0.9990	99.11
6.5	93,793,673	143,199	0.0015	0.9985	99.01
7.5	95,822,756	206,949	0.0022	0.9978	98.86
8.5	97,125,344	178,449	0.0018	0.9982	98.65
9.5	98,614,140	256,216	0.0026	0.9974	98.47
10.5	100,429,605	294,030	0.0029	0.9971	98.21
11.5	102,171,779	224,553	0.0022	0.9978	97.92
12.5	103,698,408	166,030	0.0016	0.9984	97.71
13.5	105,575,331	221,813	0.0021	0.9979	97.55
14.5	94,672,208	225,212	0.0024	0.9976	97.35
15.5	70,081,536	183,360	0.0026	0.9974	97.12
16.5	69,966,771	178,717	0.0026	0.9974	96.86
17.5	65,053,804	222,980	0.0034	0.9966	96.61
18.5	27,800,721	206,483	0.0074	0.9926	96.28
19.5	28,046,030	156,324	0.0056	0.9944	95.57
20.5	28,089,183	151,350	0.0054	0.9946	95.04
21.5	26,727,801	131,640	0.0049	0.9951	94.52
22.5	24,190,496	115,211	0.0048	0.9952	94.06
23.5	24,006,534	129,774	0.0054	0.9946	93.61
24.5	23,987,826	129,931	0.0054	0.9946	93.10
25.5	23,420,055	91,745	0.0039	0.9961	92.60
26.5	21,045,536	120,913	0.0057	0.9943	92.24
27.5	19,178,434	138,779	0.0072	0.9928	91.71
28.5	17,689,350	106,346	0.0060	0.9940	91.04
29.5	16,330,027	135,289	0.0083	0.9917	90.50
30.5	14,366,129	101,365	0.0071	0.9929	89.75
31.5	12,590,521	87,833	0.0070	0.9930	89.11
32.5	11,111,466	92,815	0.0084	0.9916	88.49
33.5	9,228,651	81,801	0.0089	0.9911	87.75
34.5	7,183,643	70,115	0.0098	0.9902	86.97
35.5	5,818,079	49,925	0.0086	0.9914	86.13
36.5	4,854,549	42,891	0.0088	0.9912	85.39
37.5	4,072,202	38,494	0.0095	0.9905	84.63
38.5	3,538,053	32,670	0.0092	0.9908	83.83

DUKE ENERGY KENTUCKY
GAS PLANT

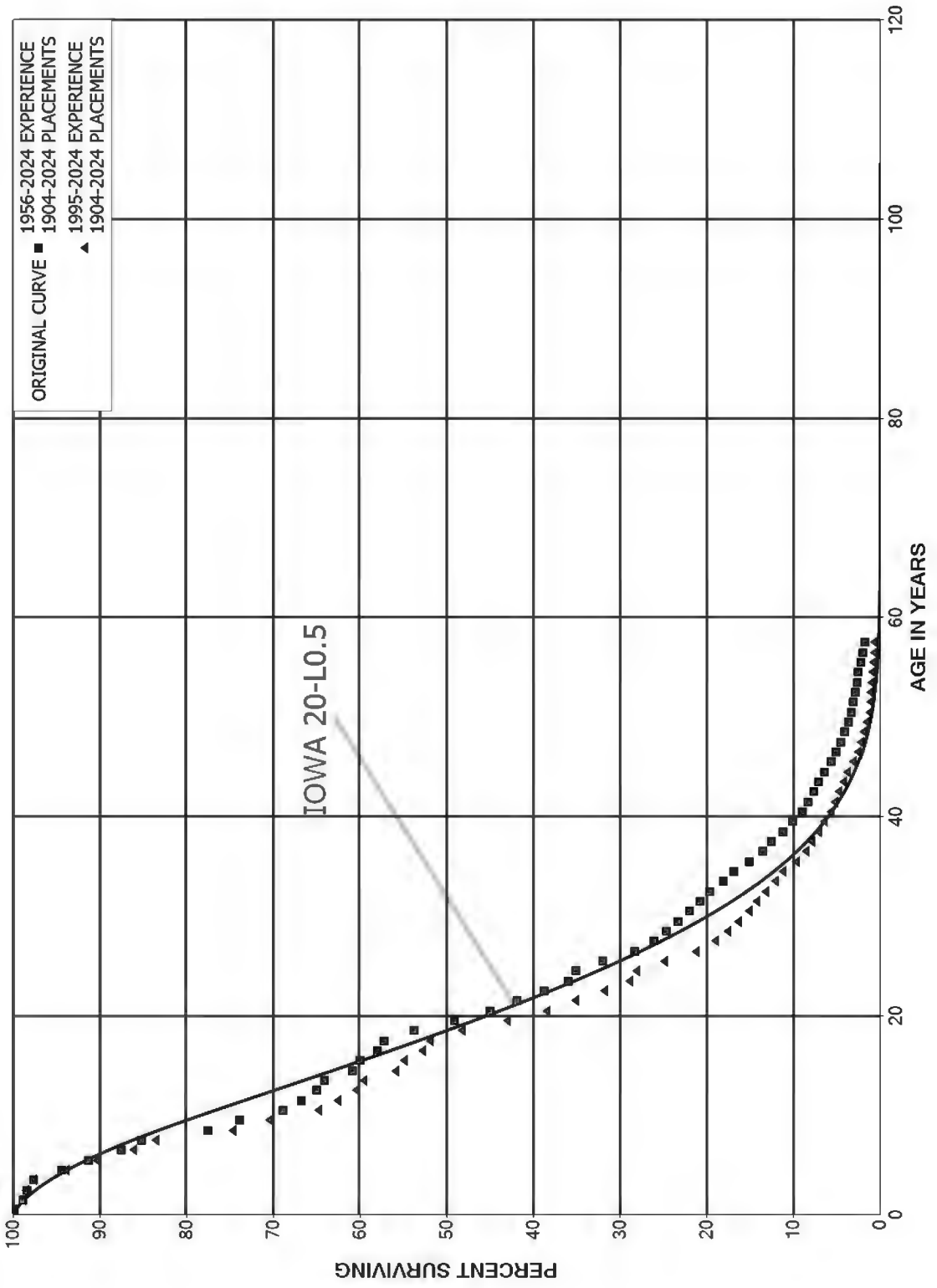
ACCOUNT 280.30 SERVICES - PLASTIC

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1965-2024 EXPERIENCE BAND 2005-2024

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	3,124,502	28,182	0.0090	0.9910	83.06
40.5	2,847,599	20,437	0.0072	0.9928	82.31
41.5	2,568,256	16,240	0.0063	0.9937	81.72
42.5	2,182,345	15,318	0.0070	0.9930	81.20
43.5	1,784,289	21,638	0.0121	0.9879	80.63
44.5	1,279,327	32,102	0.0251	0.9749	79.65
45.5	923,441	36,161	0.0392	0.9608	77.65
46.5	803,011	34,829	0.0434	0.9566	74.61
47.5	659,499	25,661	0.0389	0.9611	71.38
48.5	580,300	14,949	0.0258	0.9742	68.60
49.5	453,647	6,441	0.0142	0.9858	66.83
50.5	342,037	3,172	0.0093	0.9907	65.88
51.5	214,011	1,755	0.0082	0.9918	65.27
52.5	84,428	978	0.0116	0.9884	64.74
53.5	34,966	438	0.0125	0.9875	63.99
54.5	21,674	164	0.0075	0.9925	63.19
55.5	13,891	164	0.0118	0.9882	62.71
56.5	5,385		0.0000	1.0000	61.97
57.5	4,878		0.0000	1.0000	61.97
58.5	4,436		0.0000	1.0000	61.97
59.5					61.97

DUKE ENERGY KENTUCKY
GAS PLANT
ACCOUNT 281.00 METERS
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 281.00 METERS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1904-2024 EXPERIENCE BAND 1956-2024

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	43,354,305	65,785	0.0015	0.9985	100.00
0.5	26,855,002	284,467	0.0106	0.9894	99.85
1.5	22,340,238	87,706	0.0039	0.9961	98.79
2.5	22,012,065	174,357	0.0079	0.9921	98.40
3.5	21,830,165	714,677	0.0327	0.9673	97.62
4.5	20,279,367	676,875	0.0334	0.9666	94.43
5.5	19,685,551	805,166	0.0409	0.9591	91.28
6.5	18,347,169	496,326	0.0271	0.9729	87.54
7.5	15,121,849	1,369,128	0.0905	0.9095	85.17
8.5	13,311,530	629,431	0.0473	0.9527	77.46
9.5	12,431,392	841,571	0.0677	0.9323	73.80
10.5	10,986,100	329,623	0.0300	0.9700	68.80
11.5	10,016,565	276,953	0.0276	0.9724	66.74
12.5	8,651,694	111,233	0.0129	0.9871	64.89
13.5	8,503,327	424,176	0.0499	0.9501	64.06
14.5	7,850,231	121,648	0.0155	0.9845	60.86
15.5	7,731,099	255,434	0.0330	0.9670	59.92
16.5	7,334,434	101,893	0.0139	0.9861	57.94
17.5	7,157,056	426,754	0.0596	0.9404	57.14
18.5	6,693,676	585,839	0.0875	0.9125	53.73
19.5	6,057,807	507,064	0.0837	0.9163	49.03
20.5	5,497,282	382,001	0.0695	0.9305	44.92
21.5	5,139,992	382,402	0.0744	0.9256	41.80
22.5	4,686,319	324,845	0.0693	0.9307	38.69
23.5	4,257,182	116,491	0.0274	0.9726	36.01
24.5	3,927,959	348,508	0.0887	0.9113	35.02
25.5	3,319,268	372,332	0.1122	0.8878	31.92
26.5	2,922,020	232,902	0.0797	0.9203	28.34
27.5	2,647,093	147,394	0.0557	0.9443	26.08
28.5	2,443,372	135,429	0.0554	0.9446	24.63
29.5	2,287,382	133,797	0.0585	0.9415	23.26
30.5	2,125,299	109,502	0.0515	0.9485	21.90
31.5	1,973,719	108,690	0.0551	0.9449	20.77
32.5	1,820,104	140,875	0.0774	0.9226	19.63
33.5	1,647,610	120,842	0.0733	0.9267	18.11
34.5	1,488,930	156,123	0.1049	0.8951	16.78
35.5	1,269,483	127,360	0.1003	0.8997	15.02
36.5	1,138,329	83,340	0.0732	0.9268	13.51
37.5	1,033,926	115,617	0.1118	0.8882	12.52
38.5	896,660	88,012	0.0982	0.9018	11.12

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 281.00 METERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1904-2024 EXPERIENCE BAND 1956-2024

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	821,980	90,408	0.1100	0.8900	10.03
40.5	714,877	54,609	0.0764	0.9236	8.93
41.5	641,991	51,182	0.0797	0.9203	8.25
42.5	594,266	41,274	0.0695	0.9305	7.59
43.5	550,573	52,710	0.0957	0.9043	7.06
44.5	501,440	60,069	0.1198	0.8802	6.39
45.5	454,815	47,296	0.1040	0.8960	5.62
46.5	414,655	44,701	0.1078	0.8922	5.04
47.5	374,296	38,395	0.1026	0.8974	4.49
48.5	338,353	35,280	0.1043	0.8957	4.03
49.5	313,172	32,435	0.1036	0.8964	3.61
50.5	282,889	19,034	0.0673	0.9327	3.24
51.5	278,832	16,157	0.0579	0.9421	3.02
52.5	262,675	19,147	0.0729	0.9271	2.85
53.5	242,183	16,081	0.0664	0.9336	2.64
54.5	226,103	24,475	0.1082	0.8918	2.46
55.5	199,157	22,102	0.1110	0.8890	2.20
56.5	177,056	20,273	0.1145	0.8855	1.95
57.5	156,782	8,073	0.0515	0.9485	1.73
58.5	148,170	6,713	0.0453	0.9547	1.64
59.5	113,541	7,495	0.0660	0.9340	1.57
60.5	106,046	7,323	0.0691	0.9309	1.46
61.5	98,570	9,663	0.0980	0.9020	1.36
62.5	88,891	3,669	0.0413	0.9587	1.23
63.5	84,907	6,364	0.0749	0.9251	1.18
64.5	78,263	3,274	0.0418	0.9582	1.09
65.5	74,989	3,119	0.0416	0.9584	1.04
66.5	71,741	4,133	0.0576	0.9424	1.00
67.5	67,592	4,542	0.0672	0.9328	0.94
68.5	63,063	12,661	0.2008	0.7992	0.88
69.5	50,410	4,074	0.0808	0.9192	0.70
70.5	46,319	8,321	0.1797	0.8203	0.65
71.5	37,998	4,370	0.1150	0.8850	0.53
72.5	33,627	3,623	0.1078	0.8922	0.47
73.5	29,891	5,820	0.1947	0.8053	0.42
74.5	24,071	1,961	0.0815	0.9185	0.34
75.5	22,110	4,762	0.2154	0.7846	0.31
76.5	17,348	3,697	0.2131	0.7869	0.24
77.5	13,651	1,644	0.1204	0.8796	0.19
78.5	12,007	1,163	0.0969	0.9031	0.17

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 281.00 METERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1904-2024 EXPERIENCE BAND 1956-2024

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	10,843	803	0.0740	0.9260	0.15
80.5	10,041	1,186	0.1181	0.8819	0.14
81.5	8,855	786	0.0888	0.9112	0.12
82.5	8,059	719	0.0893	0.9107	0.11
83.5	7,302	198	0.0271	0.9729	0.10
84.5	7,104	1,035	0.1456	0.8544	0.10
85.5	6,070	79	0.0130	0.9870	0.09
86.5	5,991	886	0.1479	0.8521	0.08
87.5	5,105	85	0.0167	0.9833	0.07
88.5	5,019	118	0.0235	0.9765	0.07
89.5	4,901	24	0.0048	0.9952	0.07
90.5	4,878	180	0.0369	0.9631	0.07
91.5	4,697		0.0000	1.0000	0.07
92.5	4,697	11	0.0024	0.9976	0.07
93.5	4,686	52	0.0110	0.9890	0.07
94.5	4,635	1,217	0.2627	0.7373	0.07
95.5	3,417	75	0.0219	0.9781	0.05
96.5	3,145	42	0.0133	0.9867	0.05
97.5	3,095	38	0.0124	0.9876	0.05
98.5	3,057		0.0000	1.0000	0.05
99.5	3,057	265	0.0868	0.9132	0.05
100.5	2,792	354	0.1267	0.8733	0.04
101.5	2,175	176	0.0807	0.9193	0.04
102.5	1,999	191	0.0957	0.9043	0.03
103.5	1,798	62	0.0347	0.9653	0.03
104.5	1,736	65	0.0375	0.9625	0.03
105.5	1,671	254	0.1521	0.8479	0.03
106.5	1,417	510	0.3603	0.6397	0.02
107.5	906	36	0.0399	0.9601	0.02
108.5	870	192	0.2206	0.7794	0.01
109.5	678	244	0.3606	0.6394	0.01
110.5	434	32	0.0744	0.9256	0.01
111.5	401	167	0.4172	0.5828	0.01
112.5	180		0.0000	1.0000	0.00
113.5	180		0.0000	1.0000	0.00
114.5	180		0.0000	1.0000	0.00
115.5	180		0.0000	1.0000	0.00
116.5	180		0.0000	1.0000	0.00
117.5	174		0.0000	1.0000	0.00
118.5					0.00

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 281.00 METERS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1904-2024 EXPERIENCE BAND 1995-2024

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	39,189,351	65,576	0.0017	0.9983	100.00
0.5	22,947,075	246,852	0.0108	0.9892	99.83
1.5	18,768,777	76,705	0.0041	0.9959	98.76
2.5	18,507,721	166,163	0.0090	0.9910	98.36
3.5	18,675,386	709,839	0.0380	0.9620	97.47
4.5	17,530,581	672,419	0.0384	0.9616	93.77
5.5	17,251,619	797,806	0.0462	0.9538	90.17
6.5	15,986,979	491,724	0.0308	0.9692	86.00
7.5	12,844,119	1,364,684	0.1062	0.8938	83.36
8.5	11,087,107	621,348	0.0560	0.9440	74.50
9.5	10,289,699	829,562	0.0806	0.9194	70.32
10.5	8,914,654	316,115	0.0355	0.9645	64.65
11.5	8,052,027	267,276	0.0332	0.9668	62.36
12.5	6,756,326	101,567	0.0150	0.9850	60.29
13.5	6,768,631	416,137	0.0615	0.9385	59.39
14.5	6,286,756	112,395	0.0179	0.9821	55.73
15.5	6,270,563	248,399	0.0396	0.9604	54.74
16.5	5,892,914	93,089	0.0158	0.9842	52.57
17.5	5,740,157	412,931	0.0719	0.9281	51.74
18.5	5,293,190	571,887	0.1080	0.8920	48.02
19.5	4,670,472	493,382	0.1056	0.8944	42.83
20.5	4,144,966	366,441	0.0884	0.9116	38.30
21.5	3,792,979	361,370	0.0953	0.9047	34.92
22.5	3,394,419	302,945	0.0892	0.9108	31.59
23.5	3,070,521	86,949	0.0283	0.9717	28.77
24.5	2,819,121	323,959	0.1149	0.8851	27.96
25.5	2,293,282	341,717	0.1490	0.8510	24.74
26.5	1,931,740	204,281	0.1057	0.8943	21.06
27.5	1,689,819	124,166	0.0735	0.9265	18.83
28.5	1,522,828	112,909	0.0741	0.9259	17.45
29.5	1,437,822	107,637	0.0749	0.9251	16.15
30.5	1,313,502	82,001	0.0624	0.9376	14.94
31.5	1,203,261	82,085	0.0682	0.9318	14.01
32.5	1,098,091	95,497	0.0870	0.9130	13.06
33.5	998,362	75,593	0.0757	0.9243	11.92
34.5	908,313	120,470	0.1326	0.8674	11.02
35.5	737,717	92,654	0.1256	0.8744	9.56
36.5	657,911	48,201	0.0733	0.9267	8.36
37.5	620,362	59,748	0.0963	0.9037	7.74
38.5	549,761	54,852	0.0998	0.9002	7.00

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 281.00 METERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1904-2024 EXPERIENCE BAND 1995-2024

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	507,236	61,974	0.1222	0.8778	6.30
40.5	433,451	36,837	0.0850	0.9150	5.53
41.5	380,458	36,955	0.0971	0.9029	5.06
42.5	346,657	36,036	0.1040	0.8960	4.57
43.5	301,863	37,479	0.1242	0.8758	4.09
44.5	264,084	49,149	0.1861	0.8139	3.59
45.5	215,701	34,661	0.1607	0.8393	2.92
46.5	181,173	27,450	0.1515	0.8485	2.45
47.5	166,574	29,787	0.1788	0.8212	2.08
48.5	140,640	28,982	0.2061	0.7939	1.71
49.5	113,564	24,092	0.2121	0.7879	1.35
50.5	90,685	9,754	0.1076	0.8924	1.07
51.5	84,974	5,561	0.0654	0.9346	0.95
52.5	88,061	9,408	0.1068	0.8932	0.89
53.5	88,896	6,445	0.0725	0.9275	0.80
54.5	86,743	14,846	0.1711	0.8289	0.74
55.5	74,670	6,726	0.0901	0.9099	0.61
56.5	72,181	13,070	0.1811	0.8189	0.56
57.5	69,023	2,647	0.0383	0.9617	0.46
58.5	66,916	723	0.0108	0.9892	0.44
59.5	42,815	3,681	0.0860	0.9140	0.43
60.5	40,628	4,428	0.1090	0.8910	0.40
61.5	36,604	6,250	0.1707	0.8293	0.35
62.5	30,515	18	0.0006	0.9994	0.29
63.5	31,460	977	0.0310	0.9690	0.29
64.5	31,204	946	0.0303	0.9697	0.28
65.5	44,217	399	0.0090	0.9910	0.27
66.5	51,319	1,339	0.0261	0.9739	0.27
67.5	49,987	3,221	0.0644	0.9356	0.27
68.5	47,070	10,965	0.2330	0.7670	0.25
69.5	36,176	2,340	0.0647	0.9353	0.19
70.5	34,464	7,236	0.2100	0.7900	0.18
71.5	27,491	3,519	0.1280	0.8720	0.14
72.5	23,981	2,447	0.1020	0.8980	0.12
73.5	21,431	4,834	0.2255	0.7745	0.11
74.5	16,792	1,557	0.0927	0.9073	0.09
75.5	15,259	4,106	0.2691	0.7309	0.08
76.5	11,153	2,859	0.2564	0.7436	0.06
77.5	8,339	1,560	0.1870	0.8130	0.04
78.5	8,133	760	0.0935	0.9065	0.03

DUKE ENERGY KENTUCKY
GAS PLANT

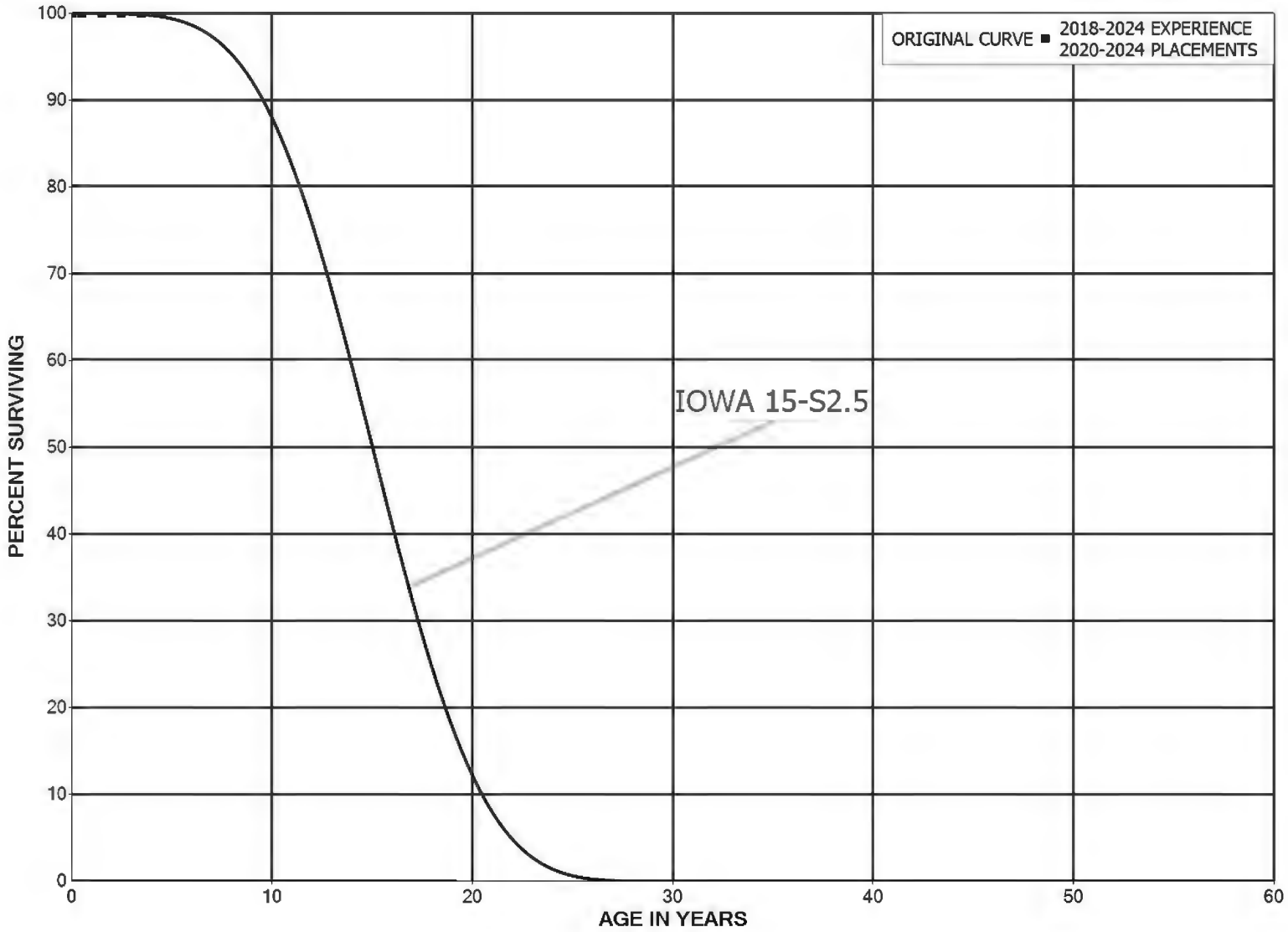
ACCOUNT 281.00 METERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1904-2024 EXPERIENCE BAND 1995-2024

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	7,373	481	0.0652	0.9348	0.03
80.5	6,897	1,100	0.1596	0.8404	0.03
81.5	5,861	786	0.1341	0.8659	0.02
82.5	5,119	705	0.1377	0.8623	0.02
83.5	4,711	147	0.0311	0.9689	0.02
84.5	4,950	1,011	0.2042	0.7958	0.02
85.5	4,162	72	0.0174	0.9826	0.01
86.5	4,200	768	0.1829	0.8171	0.01
87.5	3,438	76	0.0221	0.9779	0.01
88.5	3,565	39	0.0108	0.9892	0.01
89.5	3,935	24	0.0060	0.9940	0.01
90.5	4,878	180	0.0369	0.9631	0.01
91.5	4,697		0.0000	1.0000	0.01
92.5	4,697	11	0.0024	0.9976	0.01
93.5	4,686	52	0.0110	0.9890	0.01
94.5	4,635	1,217	0.2627	0.7373	0.01
95.5	3,417	75	0.0219	0.9781	0.01
96.5	3,145	42	0.0133	0.9867	0.01
97.5	3,095	38	0.0124	0.9876	0.01
98.5	3,057		0.0000	1.0000	0.01
99.5	3,057	265	0.0868	0.9132	0.01
100.5	2,792	354	0.1267	0.8733	0.01
101.5	2,175	176	0.0807	0.9193	0.01
102.5	1,999	191	0.0957	0.9043	0.01
103.5	1,798	62	0.0347	0.9653	0.00
104.5	1,736	65	0.0375	0.9625	0.00
105.5	1,671	254	0.1521	0.8479	0.00
106.5	1,417	510	0.3603	0.6397	0.00
107.5	906	36	0.0399	0.9601	0.00
108.5	870	192	0.2206	0.7794	0.00
109.5	678	244	0.3606	0.6394	0.00
110.5	434	32	0.0744	0.9256	0.00
111.5	401	167	0.4172	0.5828	0.00
112.5	180		0.0000	1.0000	0.00
113.5	180		0.0000	1.0000	0.00
114.5	180		0.0000	1.0000	0.00
115.5	180		0.0000	1.0000	0.00
116.5	180		0.0000	1.0000	0.00
117.5	174		0.0000	1.0000	0.00
118.5					0.00

DUKE ENERGY KENTUCKY
GAS PLANT
ACCOUNT 281.02 METERS - UoF
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY
GAS PLANT

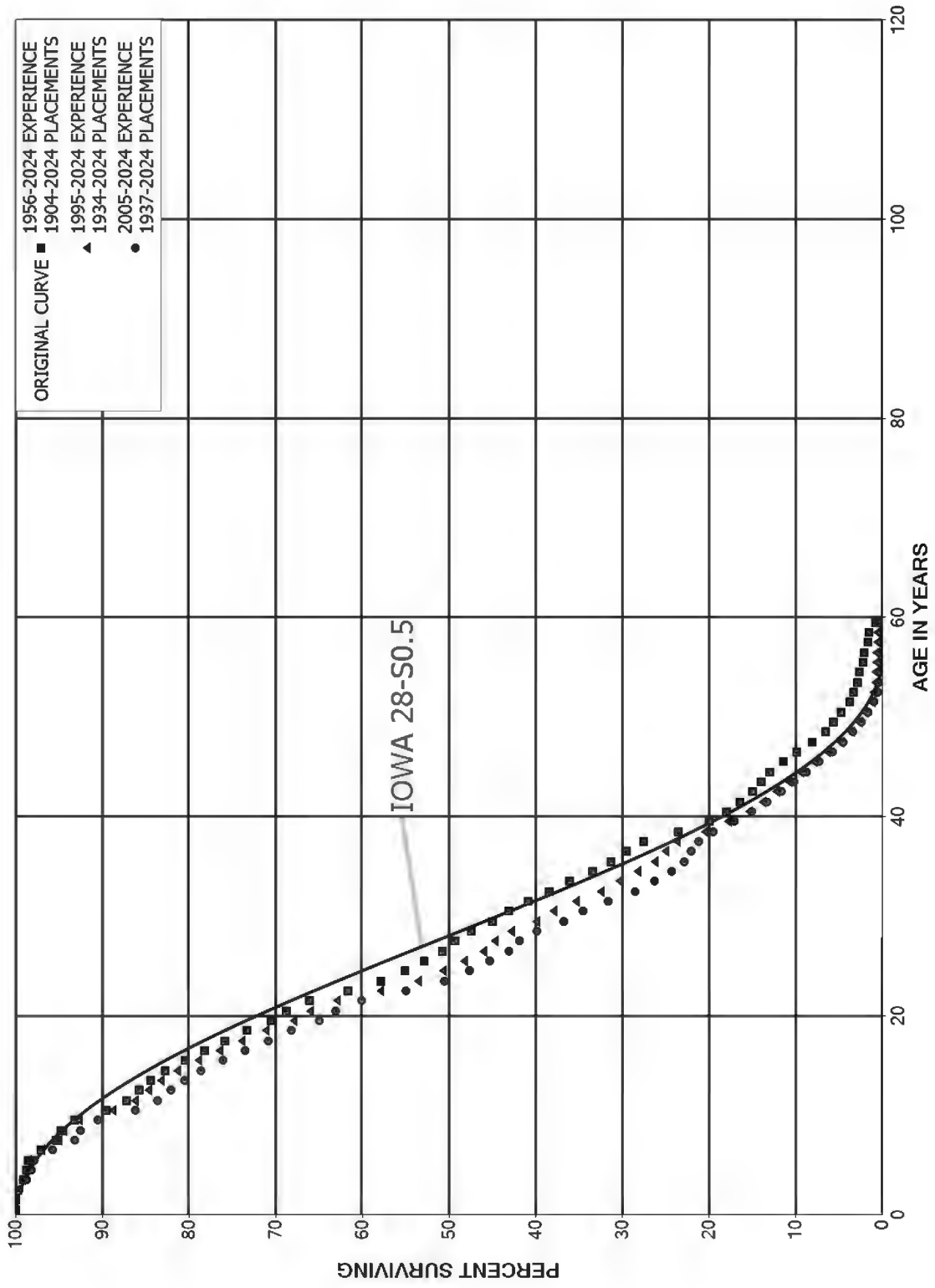
ACCOUNT 281.02 METERS - UoF

ORIGINAL LIFE TABLE

PLACEMENT BAND 2020-2024 EXPERIENCE BAND 2018-2024

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	985,276		0.0000	1.0000	100.00
0.5	856,533		0.0000	1.0000	100.00
1.5	574,447		0.0000	1.0000	100.00
2.5	146,101		0.0000	1.0000	100.00
3.5	61,011		0.0000	1.0000	100.00
4.5					100.00

DUKE ENERGY KENTUCKY
GAS PLANT
ACCOUNT 282.00 METER INSTALLATIONS
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 282.00 METER INSTALLATIONS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1904-2024 EXPERIENCE BAND 1956-2024

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	20,782,043	5,377	0.0003	0.9997	100.00
0.5	20,434,720	2,061	0.0001	0.9999	99.97
1.5	20,759,162	50,433	0.0024	0.9976	99.96
2.5	19,984,944	120,585	0.0060	0.9940	99.72
3.5	19,332,213	73,738	0.0038	0.9962	99.12
4.5	14,809,657	32,287	0.0022	0.9978	98.74
5.5	14,035,978	200,912	0.0143	0.9857	98.53
6.5	13,314,060	246,029	0.0185	0.9815	97.12
7.5	13,132,893	78,477	0.0060	0.9940	95.32
8.5	13,067,786	221,369	0.0169	0.9831	94.75
9.5	12,979,980	506,725	0.0390	0.9610	93.15
10.5	12,563,341	330,207	0.0263	0.9737	89.51
11.5	12,425,697	201,992	0.0163	0.9837	87.16
12.5	10,175,960	163,130	0.0160	0.9840	85.74
13.5	9,507,515	189,714	0.0200	0.9800	84.37
14.5	8,279,975	224,644	0.0271	0.9729	82.68
15.5	7,877,568	226,336	0.0287	0.9713	80.44
16.5	7,164,433	213,436	0.0298	0.9702	78.13
17.5	6,262,621	205,507	0.0328	0.9672	75.80
18.5	5,696,664	220,934	0.0388	0.9612	73.31
19.5	5,365,826	130,420	0.0243	0.9757	70.47
20.5	4,742,290	185,189	0.0391	0.9609	68.76
21.5	4,368,024	292,544	0.0670	0.9330	66.07
22.5	4,026,626	252,076	0.0626	0.9374	61.65
23.5	3,774,703	177,557	0.0470	0.9530	57.79
24.5	3,264,662	130,942	0.0401	0.9599	55.07
25.5	3,054,595	126,184	0.0413	0.9587	52.86
26.5	2,689,071	75,974	0.0283	0.9717	50.68
27.5	2,160,794	80,531	0.0373	0.9627	49.25
28.5	1,787,496	91,725	0.0513	0.9487	47.41
29.5	1,545,573	64,309	0.0416	0.9584	44.98
30.5	1,368,654	73,000	0.0533	0.9467	43.11
31.5	1,200,086	70,922	0.0591	0.9409	40.81
32.5	1,105,028	68,174	0.0617	0.9383	38.40
33.5	985,416	70,660	0.0717	0.9283	36.03
34.5	857,171	55,745	0.0650	0.9350	33.44
35.5	781,540	44,922	0.0575	0.9425	31.27
36.5	711,271	47,374	0.0666	0.9334	29.47
37.5	645,912	93,805	0.1452	0.8548	27.51
38.5	543,398	82,263	0.1514	0.8486	23.51

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 282.00 METER INSTALLATIONS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1904-2024 EXPERIENCE BAND 1956-2024

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	456,844	46,381	0.1015	0.8985	19.95
40.5	404,779	34,812	0.0860	0.9140	17.93
41.5	366,200	31,885	0.0871	0.9129	16.39
42.5	332,071	23,415	0.0705	0.9295	14.96
43.5	305,876	20,714	0.0677	0.9323	13.90
44.5	281,936	33,057	0.1173	0.8827	12.96
45.5	250,612	34,464	0.1375	0.8625	11.44
46.5	217,592	40,533	0.1863	0.8137	9.87
47.5	177,438	33,663	0.1897	0.8103	8.03
48.5	144,453	19,756	0.1368	0.8632	6.51
49.5	127,288	20,096	0.1579	0.8421	5.62
50.5	107,367	21,975	0.2047	0.7953	4.73
51.5	88,384	11,545	0.1306	0.8694	3.76
52.5	76,429	9,426	0.1233	0.8767	3.27
53.5	66,771	5,419	0.0812	0.9188	2.87
54.5	61,187	10,160	0.1661	0.8339	2.63
55.5	50,891	3,154	0.0620	0.9380	2.20
56.5	47,676	10,553	0.2213	0.7787	2.06
57.5	37,100	3,060	0.0825	0.9175	1.60
58.5	34,020	17,099	0.5026	0.4974	1.47
59.5	16,904	944	0.0558	0.9442	0.73
60.5	15,939	656	0.0412	0.9588	0.69
61.5	15,282	2,184	0.1429	0.8571	0.66
62.5	13,099	2,120	0.1618	0.8382	0.57
63.5	10,979	918	0.0836	0.9164	0.48
64.5	10,061	640	0.0637	0.9363	0.44
65.5	9,421	995	0.1056	0.8944	0.41
66.5	8,426	1,876	0.2227	0.7773	0.37
67.5	6,550	1,201	0.1834	0.8166	0.28
68.5	5,349	637	0.1191	0.8809	0.23
69.5	4,711	2,101	0.4460	0.5540	0.20
70.5	2,610	753	0.2884	0.7116	0.11
71.5	1,857	56	0.0303	0.9697	0.08
72.5	1,801	700	0.3888	0.6112	0.08
73.5	1,101	1,051	0.9546	0.0454	0.05
74.5	50	50	1.0000		0.00
75.5					

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 282.00 METER INSTALLATIONS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1934-2024 EXPERIENCE BAND 1995-2024

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	18,681,488	5,377	0.0003	0.9997	100.00
0.5	18,571,921	1,227	0.0001	0.9999	99.97
1.5	19,108,244	49,864	0.0026	0.9974	99.96
2.5	18,358,091	120,304	0.0066	0.9934	99.70
3.5	17,820,531	73,088	0.0041	0.9959	99.05
4.5	13,446,633	31,416	0.0023	0.9977	98.64
5.5	12,705,626	200,363	0.0158	0.9842	98.41
6.5	12,054,377	245,641	0.0204	0.9796	96.86
7.5	11,939,438	77,990	0.0065	0.9935	94.89
8.5	11,903,591	219,875	0.0185	0.9815	94.27
9.5	11,854,681	503,977	0.0425	0.9575	92.53
10.5	11,472,643	328,203	0.0286	0.9714	88.59
11.5	11,357,030	200,237	0.0176	0.9824	86.06
12.5	9,137,477	161,997	0.0177	0.9823	84.54
13.5	8,501,475	187,000	0.0220	0.9780	83.04
14.5	7,319,781	221,469	0.0303	0.9697	81.22
15.5	6,939,377	222,640	0.0321	0.9679	78.76
16.5	6,222,745	209,030	0.0336	0.9664	76.23
17.5	5,314,055	199,689	0.0376	0.9624	73.67
18.5	4,741,439	213,593	0.0450	0.9550	70.90
19.5	4,421,509	123,508	0.0279	0.9721	67.71
20.5	3,815,062	177,238	0.0465	0.9535	65.82
21.5	3,480,990	279,866	0.0804	0.9196	62.76
22.5	3,181,539	238,840	0.0751	0.9249	57.71
23.5	2,967,191	161,932	0.0546	0.9454	53.38
24.5	2,494,825	116,459	0.0467	0.9533	50.47
25.5	2,331,525	107,757	0.0462	0.9538	48.11
26.5	1,995,683	57,849	0.0290	0.9710	45.89
27.5	1,499,833	64,935	0.0433	0.9567	44.56
28.5	1,161,225	78,940	0.0680	0.9320	42.63
29.5	944,829	48,677	0.0515	0.9485	39.73
30.5	803,127	54,253	0.0676	0.9324	37.68
31.5	673,099	53,924	0.0801	0.9199	35.14
32.5	605,766	39,273	0.0648	0.9352	32.32
33.5	525,740	37,307	0.0710	0.9290	30.23
34.5	446,131	31,418	0.0704	0.9296	28.08
35.5	405,452	19,013	0.0469	0.9531	26.11
36.5	377,186	21,511	0.0570	0.9430	24.88
37.5	357,589	47,767	0.1336	0.8664	23.46
38.5	309,029	40,565	0.1313	0.8687	20.33

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 282.00 METER INSTALLATIONS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1934-2024 EXPERIENCE BAND 1995-2024

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	266,085	37,526	0.1410	0.8590	17.66
40.5	224,998	23,239	0.1033	0.8967	15.17
41.5	200,378	22,817	0.1139	0.8861	13.60
42.5	173,785	20,599	0.1185	0.8815	12.05
43.5	151,237	19,022	0.1258	0.8742	10.62
44.5	140,002	23,834	0.1702	0.8298	9.29
45.5	117,410	22,738	0.1937	0.8063	7.71
46.5	106,406	27,746	0.2608	0.7392	6.21
47.5	79,055	20,156	0.2550	0.7450	4.59
48.5	61,862	16,412	0.2653	0.7347	3.42
49.5	50,028	13,220	0.2642	0.7358	2.51
50.5	39,978	16,842	0.4213	0.5787	1.85
51.5	26,333	5,949	0.2259	0.7741	1.07
52.5	26,586	6,195	0.2330	0.7670	0.83
53.5	31,669	2,046	0.0646	0.9354	0.64
54.5	34,045	4,830	0.1419	0.8581	0.59
55.5	38,034	1,971	0.0518	0.9482	0.51
56.5	41,543	8,198	0.1974	0.8026	0.48
57.5	34,404	1,590	0.0462	0.9538	0.39
58.5	32,794	16,103	0.4910	0.5090	0.37
59.5	16,673	944	0.0566	0.9434	0.19
60.5	15,939	656	0.0412	0.9588	0.18
61.5	15,282	2,184	0.1429	0.8571	0.17
62.5	13,099	2,120	0.1618	0.8382	0.15
63.5	10,979	918	0.0836	0.9164	0.12
64.5	10,061	640	0.0637	0.9363	0.11
65.5	9,421	995	0.1056	0.8944	0.11
66.5	8,426	1,876	0.2227	0.7773	0.09
67.5	6,550	1,201	0.1834	0.8166	0.07
68.5	5,349	637	0.1191	0.8809	0.06
69.5	4,711	2,101	0.4460	0.5540	0.05
70.5	2,610	753	0.2884	0.7116	0.03
71.5	1,857	56	0.0303	0.9697	0.02
72.5	1,801	700	0.3888	0.6112	0.02
73.5	1,101	1,051	0.9546	0.0454	0.01
74.5	50	50	1.0000		0.00
75.5					

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 282.00 METER INSTALLATIONS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1937-2024 EXPERIENCE BAND 2005-2024

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	14,270,103	5,377	0.0004	0.9996	100.00
0.5	14,147,330		0.0000	1.0000	99.96
1.5	13,779,651	46,098	0.0033	0.9967	99.96
2.5	12,968,244	117,762	0.0091	0.9909	99.63
3.5	12,855,623	71,692	0.0056	0.9944	98.72
4.5	9,310,690	30,124	0.0032	0.9968	98.17
5.5	9,236,884	198,162	0.0215	0.9785	97.86
6.5	8,975,521	242,958	0.0271	0.9729	95.76
7.5	9,732,056	73,803	0.0076	0.9924	93.16
8.5	10,306,783	218,010	0.0212	0.9788	92.46
9.5	10,563,109	498,741	0.0472	0.9528	90.50
10.5	10,433,511	322,233	0.0309	0.9691	86.23
11.5	10,553,614	191,843	0.0182	0.9818	83.57
12.5	8,380,073	161,221	0.0192	0.9808	82.05
13.5	7,857,273	185,589	0.0236	0.9764	80.47
14.5	6,805,404	217,626	0.0320	0.9680	78.57
15.5	6,473,280	220,428	0.0341	0.9659	76.05
16.5	5,849,494	205,447	0.0351	0.9649	73.46
17.5	5,016,096	195,602	0.0390	0.9610	70.88
18.5	4,489,117	208,956	0.0465	0.9535	68.12
19.5	4,215,365	121,282	0.0288	0.9712	64.95
20.5	3,630,989	176,631	0.0486	0.9514	63.08
21.5	3,287,958	278,675	0.0848	0.9152	60.01
22.5	2,988,291	238,172	0.0797	0.9203	54.93
23.5	2,787,205	160,932	0.0577	0.9423	50.55
24.5	2,340,066	114,765	0.0490	0.9510	47.63
25.5	2,167,726	106,261	0.0490	0.9510	45.29
26.5	1,818,479	54,554	0.0300	0.9700	43.07
27.5	1,308,300	61,170	0.0468	0.9532	41.78
28.5	951,046	74,414	0.0782	0.9218	39.83
29.5	729,076	43,889	0.0602	0.9398	36.71
30.5	578,538	48,412	0.0837	0.9163	34.50
31.5	462,029	45,851	0.0992	0.9008	31.61
32.5	416,819	31,422	0.0754	0.9246	28.48
33.5	353,679	27,470	0.0777	0.9223	26.33
34.5	288,693	16,626	0.0576	0.9424	24.29
35.5	278,637	9,489	0.0341	0.9659	22.89
36.5	262,084	11,630	0.0444	0.9556	22.11
37.5	247,152	19,202	0.0777	0.9223	21.13
38.5	232,863	29,076	0.1249	0.8751	19.48

DUKE ENERGY KENTUCKY
GAS PLANT

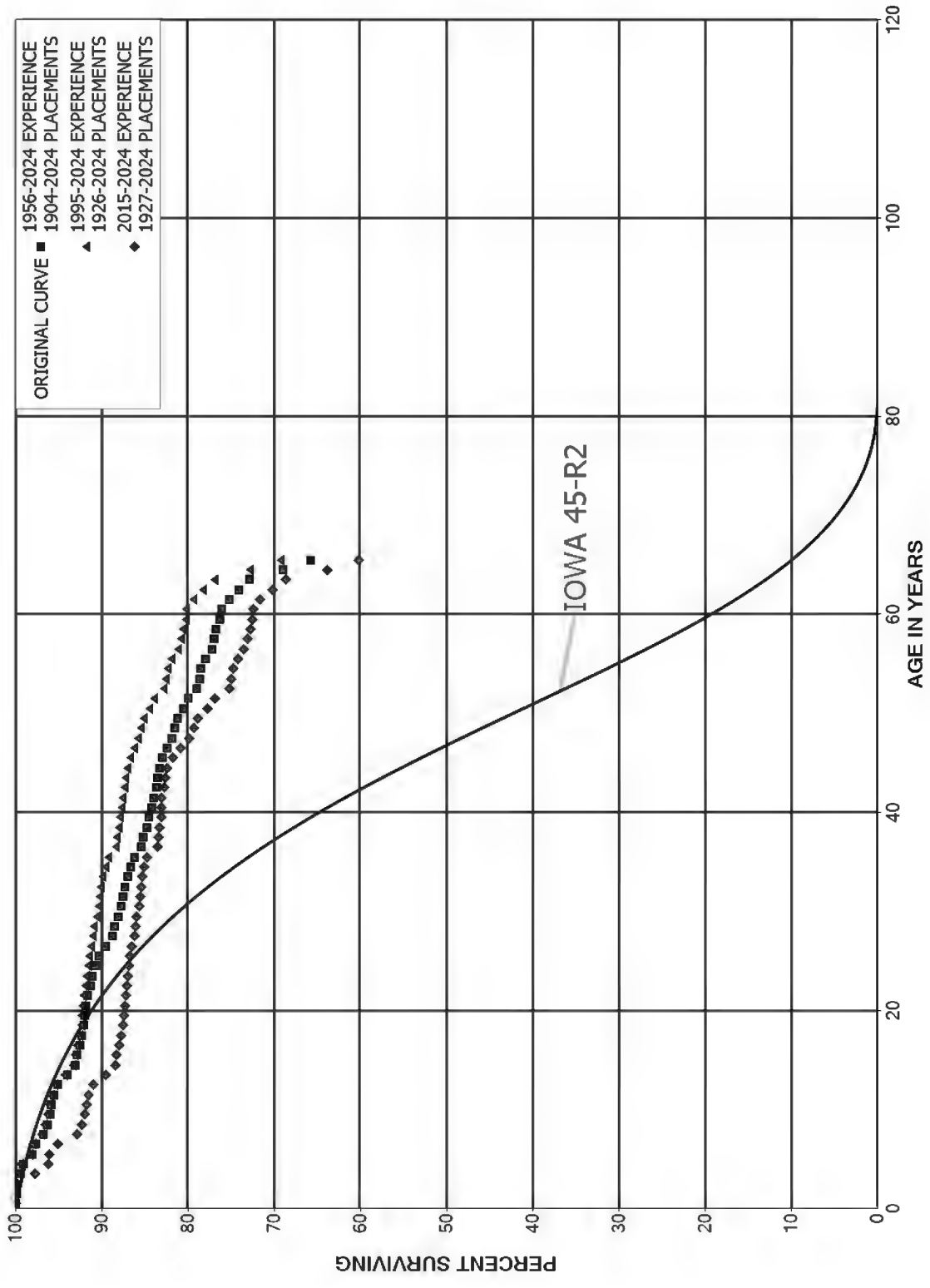
ACCOUNT 282.00 METER INSTALLATIONS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1937-2024 EXPERIENCE BAND 2005-2024

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	202,990	23,727	0.1169	0.8831	17.05
40.5	179,640	21,041	0.1171	0.8829	15.06
41.5	167,758	20,559	0.1226	0.8774	13.29
42.5	148,035	19,507	0.1318	0.8682	11.67
43.5	127,163	17,653	0.1388	0.8612	10.13
44.5	110,751	18,874	0.1704	0.8296	8.72
45.5	89,814	19,348	0.2154	0.7846	7.24
46.5	70,167	14,852	0.2117	0.7883	5.68
47.5	55,200	13,677	0.2478	0.7522	4.48
48.5	41,538	12,351	0.2973	0.7027	3.37
49.5	29,399	8,948	0.3044	0.6956	2.37
50.5	20,613	8,601	0.4173	0.5827	1.65
51.5	12,107	5,304	0.4381	0.5619	0.96
52.5	6,393	2,076	0.3247	0.6753	0.54
53.5	4,085	1,387	0.3394	0.6606	0.36
54.5	3,550	268	0.0754	0.9246	0.24
55.5	6,259	255	0.0407	0.9593	0.22
56.5	7,297	602	0.0825	0.9175	0.21
57.5	7,205	297	0.0413	0.9587	0.20
58.5	7,115	697	0.0980	0.9020	0.19
59.5	7,798		0.0000	1.0000	0.17
60.5	9,699	656	0.0677	0.9323	0.17
61.5	9,859	2,184	0.2215	0.7785	0.16
62.5	8,237	2,120	0.2573	0.7427	0.12
63.5	8,612	918	0.1066	0.8934	0.09
64.5	7,965	410	0.0515	0.9485	0.08
65.5	7,555	995	0.1317	0.8683	0.08
66.5	7,343	1,811	0.2467	0.7533	0.07
67.5	6,550	1,201	0.1834	0.8166	0.05
68.5	5,349	637	0.1191	0.8809	0.04
69.5	4,711	2,101	0.4460	0.5540	0.04
70.5	2,610	753	0.2884	0.7116	0.02
71.5	1,857	56	0.0303	0.9697	0.01
72.5	1,801	700	0.3888	0.6112	0.01
73.5	1,101	1,051	0.9546	0.0454	0.01
74.5	50	50	1.0000		0.00
75.5					

DUKE ENERGY KENTUCKY
GAS PLANT
ACCOUNT 283.00 HOUSE REGULATORS
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 283.00 HOUSE REGULATORS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1904-2024 EXPERIENCE BAND 1956-2024

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	8,499,344	1,244	0.0001	0.9999	100.00
0.5	8,307,377	10,216	0.0012	0.9988	99.99
1.5	8,173,477	6,330	0.0008	0.9992	99.86
2.5	8,041,302	34,814	0.0043	0.9957	99.79
3.5	7,879,812	23,756	0.0030	0.9970	99.35
4.5	7,769,041	78,798	0.0101	0.9899	99.05
5.5	7,419,828	29,728	0.0040	0.9960	98.05
6.5	7,218,040	68,004	0.0094	0.9906	97.66
7.5	6,908,433	28,393	0.0041	0.9959	96.74
8.5	6,880,091	24,876	0.0036	0.9964	96.34
9.5	7,098,922	13,395	0.0019	0.9981	95.99
10.5	6,979,133	19,654	0.0028	0.9972	95.81
11.5	6,708,042	30,057	0.0045	0.9955	95.54
12.5	6,500,184	77,081	0.0119	0.9881	95.11
13.5	6,424,975	62,812	0.0098	0.9902	93.98
14.5	5,801,946	13,458	0.0023	0.9977	93.06
15.5	4,694,455	15,513	0.0033	0.9967	92.85
16.5	4,447,323	12,394	0.0028	0.9972	92.54
17.5	3,904,004	9,708	0.0025	0.9975	92.28
18.5	3,508,789	4,812	0.0014	0.9986	92.05
19.5	2,977,177	4,283	0.0014	0.9986	91.93
20.5	2,297,710	5,148	0.0022	0.9978	91.80
21.5	1,851,741	6,437	0.0035	0.9965	91.59
22.5	1,749,110	4,449	0.0025	0.9975	91.27
23.5	1,745,568	8,453	0.0048	0.9952	91.04
24.5	1,737,745	5,812	0.0033	0.9967	90.60
25.5	1,526,763	13,275	0.0087	0.9913	90.30
26.5	1,343,088	11,793	0.0088	0.9912	89.51
27.5	1,238,850	3,207	0.0026	0.9974	88.72
28.5	1,175,479	5,658	0.0048	0.9952	88.49
29.5	1,070,886	3,981	0.0037	0.9963	88.07
30.5	960,168	2,682	0.0028	0.9972	87.74
31.5	904,908	2,726	0.0030	0.9970	87.50
32.5	863,726	3,332	0.0039	0.9961	87.23
33.5	788,544	2,852	0.0036	0.9964	86.90
34.5	701,888	3,424	0.0049	0.9951	86.58
35.5	582,988	5,221	0.0090	0.9910	86.16
36.5	524,135	1,604	0.0031	0.9969	85.39
37.5	478,323	2,391	0.0050	0.9950	85.13
38.5	432,387	1,195	0.0028	0.9972	84.70

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 283.00 HOUSE REGULATORS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1904-2024 EXPERIENCE BAND 1956-2024

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	419,116	1,299	0.0031	0.9969	84.47
40.5	408,726	1,140	0.0028	0.9972	84.21
41.5	391,549	1,416	0.0036	0.9964	83.97
42.5	384,368	955	0.0025	0.9975	83.67
43.5	366,581	762	0.0021	0.9979	83.46
44.5	295,026	1,269	0.0043	0.9957	83.29
45.5	270,251	1,859	0.0069	0.9931	82.93
46.5	264,057	1,689	0.0064	0.9936	82.36
47.5	261,588	982	0.0038	0.9962	81.83
48.5	259,604	957	0.0037	0.9963	81.52
49.5	257,652	2,205	0.0086	0.9914	81.22
50.5	246,252	1,827	0.0074	0.9926	80.53
51.5	237,736	2,943	0.0124	0.9876	79.93
52.5	221,583	775	0.0035	0.9965	78.94
53.5	199,865	497	0.0025	0.9975	78.66
54.5	180,177	1,122	0.0062	0.9938	78.47
55.5	160,967	1,572	0.0098	0.9902	77.98
56.5	151,143	611	0.0040	0.9960	77.22
57.5	141,031	401	0.0028	0.9972	76.91
58.5	127,358	592	0.0046	0.9954	76.69
59.5	120,255	361	0.0030	0.9970	76.33
60.5	109,189	1,276	0.0117	0.9883	76.10
61.5	97,736	1,493	0.0153	0.9847	75.21
62.5	86,514	1,458	0.0169	0.9831	74.06
63.5	79,405	4,240	0.0534	0.9466	72.81
64.5	70,048	3,220	0.0460	0.9540	68.93
65.5	60,091	767	0.0128	0.9872	65.76
66.5	51,101	757	0.0148	0.9852	64.92
67.5	47,778	286	0.0060	0.9940	63.96
68.5	41,758	260	0.0062	0.9938	63.57
69.5	35,757	107	0.0030	0.9970	63.18
70.5	32,045	171	0.0053	0.9947	62.99
71.5	27,768		0.0000	1.0000	62.65
72.5	23,602	11	0.0005	0.9995	62.65
73.5	17,791		0.0000	1.0000	62.63
74.5	14,312	85	0.0060	0.9940	62.63
75.5	10,445		0.0000	1.0000	62.25
76.5	7,936		0.0000	1.0000	62.25
77.5	7,311		0.0000	1.0000	62.25
78.5	6,774		0.0000	1.0000	62.25

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 283.00 HOUSE REGULATORS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1904-2024 EXPERIENCE BAND 1956-2024

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	6,769	10	0.0015	0.9985	62.25
80.5	6,759	16	0.0024	0.9976	62.16
81.5	6,743	0	0.0000	1.0000	62.01
82.5	6,415	21	0.0033	0.9967	62.01
83.5	5,922		0.0000	1.0000	61.81
84.5	5,783	158	0.0274	0.9726	61.81
85.5	5,299	520	0.0981	0.9019	60.12
86.5	4,276	55	0.0130	0.9870	54.22
87.5	3,921		0.0000	1.0000	53.52
88.5	3,752	3	0.0009	0.9991	53.52
89.5	3,730	10	0.0027	0.9973	53.47
90.5	3,720		0.0000	1.0000	53.33
91.5	3,720		0.0000	1.0000	53.33
92.5	3,706		0.0000	1.0000	53.33
93.5	3,706		0.0000	1.0000	53.33
94.5	3,503		0.0000	1.0000	53.33
95.5					53.33

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 283.00 HOUSE REGULATORS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1926-2024 EXPERIENCE BAND 1995-2024

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	7,350,091	158	0.0000	1.0000	100.00
0.5	7,254,995	2,870	0.0004	0.9996	100.00
1.5	7,186,360	2,084	0.0003	0.9997	99.96
2.5	7,093,571	30,285	0.0043	0.9957	99.93
3.5	7,002,933	18,758	0.0027	0.9973	99.50
4.5	6,978,940	74,704	0.0107	0.9893	99.24
5.5	6,759,011	25,951	0.0038	0.9962	98.17
6.5	6,609,046	65,920	0.0100	0.9900	97.80
7.5	6,343,260	23,102	0.0036	0.9964	96.82
8.5	6,366,697	19,624	0.0031	0.9969	96.47
9.5	6,601,251	11,995	0.0018	0.9982	96.17
10.5	6,492,410	17,973	0.0028	0.9972	96.00
11.5	6,239,438	27,746	0.0044	0.9956	95.73
12.5	6,041,245	75,002	0.0124	0.9876	95.31
13.5	5,989,038	59,209	0.0099	0.9901	94.12
14.5	5,449,110	11,941	0.0022	0.9978	93.19
15.5	4,370,160	13,693	0.0031	0.9969	92.99
16.5	4,130,366	11,191	0.0027	0.9973	92.70
17.5	3,588,604	8,602	0.0024	0.9976	92.44
18.5	3,195,767	3,104	0.0010	0.9990	92.22
19.5	2,667,310	2,419	0.0009	0.9991	92.13
20.5	1,993,537	2,368	0.0012	0.9988	92.05
21.5	1,549,450	3,151	0.0020	0.9980	91.94
22.5	1,463,880	2,180	0.0015	0.9985	91.75
23.5	1,484,663	4,028	0.0027	0.9973	91.62
24.5	1,503,048	1,844	0.0012	0.9988	91.37
25.5	1,315,589	2,572	0.0020	0.9980	91.26
26.5	1,146,517	3,651	0.0032	0.9968	91.08
27.5	1,060,949	1,243	0.0012	0.9988	90.79
28.5	1,015,771	2,615	0.0026	0.9974	90.68
29.5	922,512	2,513	0.0027	0.9973	90.45
30.5	828,643	1,009	0.0012	0.9988	90.20
31.5	786,353	1,443	0.0018	0.9982	90.09
32.5	757,101	2,034	0.0027	0.9973	89.93
33.5	689,919	2,015	0.0029	0.9971	89.69
34.5	610,230	2,688	0.0044	0.9956	89.42
35.5	499,440	4,489	0.0090	0.9910	89.03
36.5	450,266	1,025	0.0023	0.9977	88.23
37.5	408,045	889	0.0022	0.9978	88.03
38.5	369,766	673	0.0018	0.9982	87.84

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 283.00 HOUSE REGULATORS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1926-2024 EXPERIENCE BAND 1995-2024

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	363,199	759	0.0021	0.9979	87.68
40.5	357,903	300	0.0008	0.9992	87.49
41.5	346,912	980	0.0028	0.9972	87.42
42.5	345,655	570	0.0016	0.9984	87.17
43.5	339,358	547	0.0016	0.9984	87.03
44.5	275,339	1,062	0.0039	0.9961	86.89
45.5	255,816	1,495	0.0058	0.9942	86.55
46.5	253,580	1,386	0.0055	0.9945	86.05
47.5	252,317	915	0.0036	0.9964	85.58
48.5	251,118	858	0.0034	0.9966	85.27
49.5	248,958	2,072	0.0083	0.9917	84.98
50.5	237,650	1,660	0.0070	0.9930	84.27
51.5	228,994	2,845	0.0124	0.9876	83.68
52.5	213,336	630	0.0030	0.9970	82.64
53.5	192,290	421	0.0022	0.9978	82.40
54.5	172,895	1,032	0.0060	0.9940	82.22
55.5	154,122	1,520	0.0099	0.9901	81.73
56.5	144,858	539	0.0037	0.9963	80.92
57.5	135,117	328	0.0024	0.9976	80.62
58.5	121,697	483	0.0040	0.9960	80.42
59.5	114,739	133	0.0012	0.9988	80.10
60.5	103,900	1,059	0.0102	0.9898	80.01
61.5	92,665	1,349	0.0146	0.9854	79.20
62.5	81,601	1,380	0.0169	0.9831	78.04
63.5	74,733	4,047	0.0542	0.9458	76.72
64.5	65,779	3,152	0.0479	0.9521	72.57
65.5	59,858	767	0.0128	0.9872	69.09
66.5	50,868	688	0.0135	0.9865	68.20
67.5	47,617	286	0.0060	0.9940	67.28
68.5	41,618	260	0.0063	0.9937	66.88
69.5	35,618	74	0.0021	0.9979	66.46
70.5	31,938	64	0.0020	0.9980	66.32
71.5	27,768		0.0000	1.0000	66.19
72.5	23,602	11	0.0005	0.9995	66.19
73.5	17,791		0.0000	1.0000	66.16
74.5	14,312	85	0.0060	0.9940	66.16
75.5	10,445		0.0000	1.0000	65.76
76.5	7,936		0.0000	1.0000	65.76
77.5	7,311		0.0000	1.0000	65.76
78.5	6,774		0.0000	1.0000	65.76

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 283.00 HOUSE REGULATORS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1926-2024 EXPERIENCE BAND 1995-2024

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	6,769	10	0.0015	0.9985	65.76
80.5	6,759	16	0.0024	0.9976	65.67
81.5	6,743	0	0.0000	1.0000	65.51
82.5	6,415	21	0.0033	0.9967	65.51
83.5	5,922		0.0000	1.0000	65.30
84.5	5,783	158	0.0274	0.9726	65.30
85.5	5,299	520	0.0981	0.9019	63.51
86.5	4,276	55	0.0130	0.9870	57.28
87.5	3,921		0.0000	1.0000	56.54
88.5	3,752	3	0.0009	0.9991	56.54
89.5	3,730	10	0.0027	0.9973	56.49
90.5	3,720		0.0000	1.0000	56.34
91.5	3,720		0.0000	1.0000	56.34
92.5	3,706		0.0000	1.0000	56.34
93.5	3,706		0.0000	1.0000	56.34
94.5	3,503		0.0000	1.0000	56.34
95.5					56.34

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 283.00 HOUSE REGULATORS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1927-2024 EXPERIENCE BAND 2015-2024

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	1,081,213		0.0000		
0.5	952,719		0.0000	1.0000	100.00
1.5	1,214,272		0.0000	1.0000	100.00
2.5	1,279,351	28,737	0.0225	0.9775	100.00
3.5	1,116,748	17,845	0.0160	0.9840	97.75
4.5	1,638,536	1,442	0.0009	0.9991	96.19
5.5	2,001,572	20,759	0.0104	0.9896	96.11
6.5	2,497,669	59,841	0.0240	0.9760	95.11
7.5	2,983,299	15,856	0.0053	0.9947	92.83
8.5	3,362,228	13,050	0.0039	0.9961	92.34
9.5	3,891,139	9,069	0.0023	0.9977	91.98
10.5	4,934,179	14,465	0.0029	0.9971	91.77
11.5	4,667,204	27,276	0.0058	0.9942	91.50
12.5	4,705,846	72,700	0.0154	0.9846	90.96
13.5	4,633,146	57,406	0.0124	0.9876	89.56
14.5	4,015,880	7,700	0.0019	0.9981	88.45
15.5	3,127,109	11,927	0.0038	0.9962	88.28
16.5	3,066,721	8,055	0.0026	0.9974	87.94
17.5	2,623,405	5,500	0.0021	0.9979	87.71
18.5	2,293,289	2,383	0.0010	0.9990	87.53
19.5	1,863,878	2,165	0.0012	0.9988	87.43
20.5	1,290,371	1,600	0.0012	0.9988	87.33
21.5	892,131	2,147	0.0024	0.9976	87.22
22.5	833,695	634	0.0008	0.9992	87.01
23.5	904,905	1,471	0.0016	0.9984	86.95
24.5	988,625	630	0.0006	0.9994	86.81
25.5	902,837	2,177	0.0024	0.9976	86.75
26.5	779,286	3,345	0.0043	0.9957	86.54
27.5	728,440	776	0.0011	0.9989	86.17
28.5	713,263	1,476	0.0021	0.9979	86.08
29.5	625,659	1,928	0.0031	0.9969	85.90
30.5	526,481	664	0.0013	0.9987	85.64
31.5	489,863	877	0.0018	0.9982	85.53
32.5	456,381	599	0.0013	0.9987	85.38
33.5	403,037	877	0.0022	0.9978	85.26
34.5	393,548	1,850	0.0047	0.9953	85.08
35.5	300,791	4,149	0.0138	0.9862	84.68
36.5	247,064	431	0.0017	0.9983	83.51
37.5	203,179	239	0.0012	0.9988	83.36
38.5	160,317	285	0.0018	0.9982	83.27

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 283.00 HOUSE REGULATORS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1927-2024 EXPERIENCE BAND 2015-2024

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	149,316	68	0.0005	0.9995	83.12
40.5	149,629	17	0.0001	0.9999	83.08
41.5	141,283	519	0.0037	0.9963	83.07
42.5	148,451	315	0.0021	0.9979	82.77
43.5	153,165	393	0.0026	0.9974	82.59
44.5	102,516	844	0.0082	0.9918	82.38
45.5	97,647	1,071	0.0110	0.9890	81.70
46.5	101,512	1,193	0.0117	0.9883	80.80
47.5	109,539	711	0.0065	0.9935	79.86
48.5	122,833	707	0.0058	0.9942	79.34
49.5	128,749	1,899	0.0148	0.9852	78.88
50.5	131,079	1,576	0.0120	0.9880	77.72
51.5	132,965	2,834	0.0213	0.9787	76.78
52.5	126,930	386	0.0030	0.9970	75.14
53.5	111,991	314	0.0028	0.9972	74.92
54.5	98,532	769	0.0078	0.9922	74.71
55.5	86,839	775	0.0089	0.9911	74.12
56.5	86,509	462	0.0053	0.9947	73.46
57.5	79,435	317	0.0040	0.9960	73.07
58.5	71,753	216	0.0030	0.9970	72.78
59.5	71,041	128	0.0018	0.9982	72.56
60.5	64,518	732	0.0113	0.9887	72.43
61.5	58,826	1,153	0.0196	0.9804	71.61
62.5	53,206	1,197	0.0225	0.9775	70.20
63.5	56,935	4,011	0.0704	0.9296	68.62
64.5	54,787	3,142	0.0573	0.9427	63.79
65.5	49,454	722	0.0146	0.9854	60.13
66.5	43,018	669	0.0155	0.9845	59.25
67.5	40,203	277	0.0069	0.9931	58.33
68.5	34,728	251	0.0072	0.9928	57.93
69.5	28,743	64	0.0022	0.9978	57.51
70.5	25,073	64	0.0025	0.9975	57.38
71.5	20,914		0.0000	1.0000	57.24
72.5	17,076	11	0.0006	0.9994	57.24
73.5	11,737		0.0000	1.0000	57.20
74.5	8,397		0.0000	1.0000	57.20
75.5	4,940		0.0000	1.0000	57.20
76.5	2,935		0.0000	1.0000	57.20
77.5	2,609		0.0000	1.0000	57.20
78.5	2,241		0.0000	1.0000	57.20

DUKE ENERGY KENTUCKY
GAS PLANT

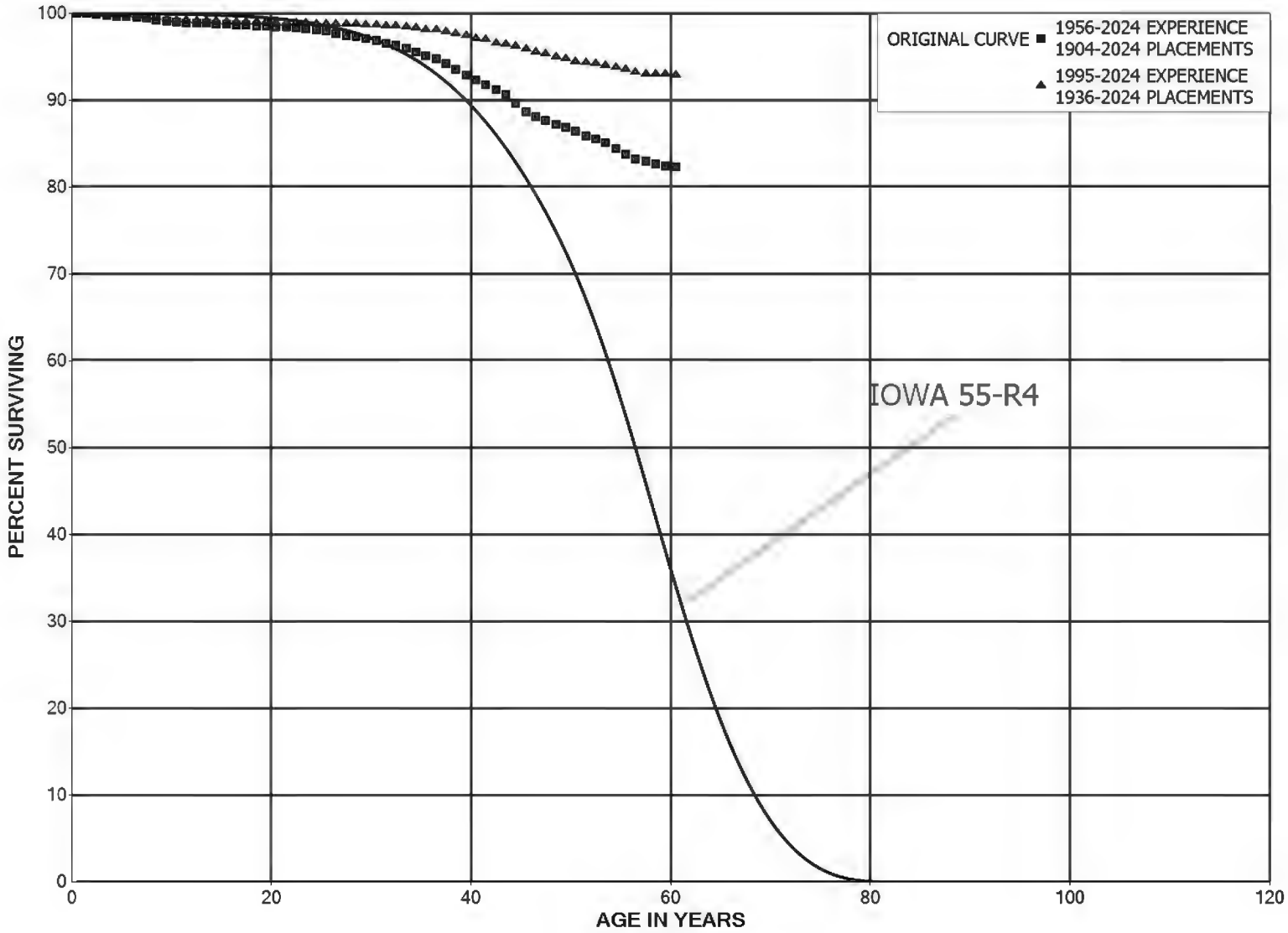
ACCOUNT 283.00 HOUSE REGULATORS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1927-2024 EXPERIENCE BAND 2015-2024

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	2,271		0.0000	1.0000	57.20
80.5	2,271	16	0.0070	0.9930	57.20
81.5	2,255		0.0000	1.0000	56.80
82.5	1,941		0.0000	1.0000	56.80
83.5	1,627		0.0000	1.0000	56.80
84.5	1,699	158	0.0932	0.9068	56.80
85.5	5,296	520	0.0982	0.9018	51.50
86.5	4,273	55	0.0130	0.9870	46.45
87.5	3,921		0.0000	1.0000	45.85
88.5	3,752	3	0.0009	0.9991	45.85
89.5	3,730	10	0.0027	0.9973	45.81
90.5	3,720		0.0000	1.0000	45.68
91.5	3,720		0.0000	1.0000	45.68
92.5	3,706		0.0000	1.0000	45.68
93.5	3,706		0.0000	1.0000	45.68
94.5	3,503		0.0000	1.0000	45.68
95.5					45.68

DUKE ENERGY KENTUCKY
GAS PLANT
ACCOUNT 284.00 HOUSE REGULATOR INSTALLATIONS
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 284.00 HOUSE REGULATOR INSTALLATIONS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1904-2024 EXPERIENCE BAND 1956-2024

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	6,116,423		0.0000	1.0000	100.00
0.5	6,096,738	4,717	0.0008	0.9992	100.00
1.5	6,186,308	6,367	0.0010	0.9990	99.92
2.5	6,171,747	5,845	0.0009	0.9991	99.82
3.5	6,138,184	4,309	0.0007	0.9993	99.73
4.5	6,118,936	2,970	0.0005	0.9995	99.66
5.5	6,063,319	7,938	0.0013	0.9987	99.61
6.5	6,020,984	6,544	0.0011	0.9989	99.48
7.5	6,031,587	8,447	0.0014	0.9986	99.37
8.5	6,013,676	12,614	0.0021	0.9979	99.23
9.5	6,230,448	5,054	0.0008	0.9992	99.02
10.5	6,225,447	3,260	0.0005	0.9995	98.94
11.5	6,893,807	2,402	0.0003	0.9997	98.89
12.5	6,233,383	2,713	0.0004	0.9996	98.85
13.5	6,485,638	3,234	0.0005	0.9995	98.81
14.5	6,018,250	4,354	0.0007	0.9993	98.76
15.5	4,508,204	2,165	0.0005	0.9995	98.69
16.5	4,197,328	2,237	0.0005	0.9995	98.64
17.5	3,910,614	1,864	0.0005	0.9995	98.59
18.5	3,369,773	1,999	0.0006	0.9994	98.54
19.5	2,553,682	1,307	0.0005	0.9995	98.49
20.5	2,092,387	1,051	0.0005	0.9995	98.43
21.5	1,686,120	1,961	0.0012	0.9988	98.39
22.5	1,456,730	957	0.0007	0.9993	98.27
23.5	1,373,633	2,256	0.0016	0.9984	98.21
24.5	1,237,318	1,905	0.0015	0.9985	98.05
25.5	1,132,715	2,811	0.0025	0.9975	97.89
26.5	1,012,546	2,583	0.0026	0.9974	97.65
27.5	918,506	1,535	0.0017	0.9983	97.40
28.5	846,630	1,702	0.0020	0.9980	97.24
29.5	724,324	1,500	0.0021	0.9979	97.04
30.5	599,046	1,883	0.0031	0.9969	96.84
31.5	544,552	1,595	0.0029	0.9971	96.54
32.5	452,500	1,662	0.0037	0.9963	96.26
33.5	416,141	1,708	0.0041	0.9959	95.90
34.5	370,315	1,518	0.0041	0.9959	95.51
35.5	270,814	1,170	0.0043	0.9957	95.12
36.5	237,990	1,423	0.0060	0.9940	94.71
37.5	202,728	1,474	0.0073	0.9927	94.14
38.5	185,711	1,137	0.0061	0.9939	93.46

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 284.00 HOUSE REGULATOR INSTALLATIONS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1904-2024 EXPERIENCE BAND 1956-2024

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	182,830	1,157	0.0063	0.9937	92.88
40.5	176,415	1,002	0.0057	0.9943	92.30
41.5	172,495	1,062	0.0062	0.9938	91.77
42.5	170,435	1,118	0.0066	0.9934	91.21
43.5	164,202	1,739	0.0106	0.9894	90.61
44.5	147,774	1,663	0.0113	0.9887	89.65
45.5	139,886	947	0.0068	0.9932	88.64
46.5	139,057	678	0.0049	0.9951	88.04
47.5	138,395	666	0.0048	0.9952	87.61
48.5	137,759	580	0.0042	0.9958	87.19
49.5	136,617	742	0.0054	0.9946	86.82
50.5	135,674	806	0.0059	0.9941	86.35
51.5	131,320	448	0.0034	0.9966	85.84
52.5	126,590	668	0.0053	0.9947	85.54
53.5	120,341	955	0.0079	0.9921	85.09
54.5	116,745	884	0.0076	0.9924	84.42
55.5	111,313	749	0.0067	0.9933	83.78
56.5	108,037	382	0.0035	0.9965	83.21
57.5	104,164	423	0.0041	0.9959	82.92
58.5	99,938	270	0.0027	0.9973	82.58
59.5	98,149	58	0.0006	0.9994	82.36
60.5	94,058	69	0.0007	0.9993	82.31
61.5	91,429	85	0.0009	0.9991	82.25
62.5	81,994	32	0.0004	0.9996	82.18
63.5	80,233	31	0.0004	0.9996	82.14
64.5	76,412	28	0.0004	0.9996	82.11
65.5	60,495	16	0.0003	0.9997	82.08
66.5	45,976	86	0.0019	0.9981	82.06
67.5	41,938	12	0.0003	0.9997	81.91
68.5	36,479	13	0.0004	0.9996	81.88
69.5	30,728	11	0.0004	0.9996	81.85
70.5	24,993	12	0.0005	0.9995	81.82
71.5	20,748	12	0.0006	0.9994	81.78
72.5	15,010	24	0.0016	0.9984	81.73
73.5	11,648	0	0.0000	1.0000	81.60
74.5	8,924		0.0000	1.0000	81.60
75.5	6,393		0.0000	1.0000	81.60
76.5	4,628		0.0000	1.0000	81.60
77.5	2,525		0.0000	1.0000	81.60
78.5	1,435		0.0000	1.0000	81.60

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 284.00 HOUSE REGULATOR INSTALLATIONS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1904-2024 EXPERIENCE BAND 1956-2024

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	1,435		0.0000	1.0000	81.60
80.5	1,435		0.0000	1.0000	81.60
81.5	1,435		0.0000	1.0000	81.60
82.5	984		0.0000	1.0000	81.60
83.5	984		0.0000	1.0000	81.60
84.5	984		0.0000	1.0000	81.60
85.5	580		0.0000	1.0000	81.60
86.5					81.60

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 284.00 HOUSE REGULATOR INSTALLATIONS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1936-2024 EXPERIENCE BAND 1995-2024

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	5,373,340		0.0000	1.0000	100.00
0.5	5,476,683	3,382	0.0006	0.9994	100.00
1.5	5,614,073	2,994	0.0005	0.9995	99.94
2.5	5,690,848	2,944	0.0005	0.9995	99.88
3.5	5,689,815	1,147	0.0002	0.9998	99.83
4.5	5,716,119	1,166	0.0002	0.9998	99.81
5.5	5,764,004	6,298	0.0011	0.9989	99.79
6.5	5,753,007	5,134	0.0009	0.9991	99.68
7.5	5,796,733	7,859	0.0014	0.9986	99.59
8.5	5,793,581	12,196	0.0021	0.9979	99.46
9.5	6,011,893	4,270	0.0007	0.9993	99.25
10.5	6,013,834	2,891	0.0005	0.9995	99.18
11.5	6,685,625	1,769	0.0003	0.9997	99.13
12.5	6,027,559	1,667	0.0003	0.9997	99.11
13.5	6,285,759	1,872	0.0003	0.9997	99.08
14.5	5,835,478	2,785	0.0005	0.9995	99.05
15.5	4,333,763	1,439	0.0003	0.9997	99.00
16.5	4,023,200	1,152	0.0003	0.9997	98.97
17.5	3,736,874	1,098	0.0003	0.9997	98.94
18.5	3,196,704	319	0.0001	0.9999	98.91
19.5	2,382,818	398	0.0002	0.9998	98.90
20.5	1,922,594	145	0.0001	0.9999	98.89
21.5	1,521,368	498	0.0003	0.9997	98.88
22.5	1,298,363	170	0.0001	0.9999	98.85
23.5	1,221,867	871	0.0007	0.9993	98.83
24.5	1,089,702	278	0.0003	0.9997	98.76
25.5	990,718	208	0.0002	0.9998	98.74
26.5	874,715	127	0.0001	0.9999	98.72
27.5	786,167	170	0.0002	0.9998	98.70
28.5	719,268	268	0.0004	0.9996	98.68
29.5	599,978	152	0.0003	0.9997	98.64
30.5	480,305	306	0.0006	0.9994	98.62
31.5	429,830	378	0.0009	0.9991	98.56
32.5	348,839	419	0.0012	0.9988	98.47
33.5	315,600	375	0.0012	0.9988	98.35
34.5	274,923	325	0.0012	0.9988	98.23
35.5	193,236	125	0.0006	0.9994	98.12
36.5	176,395	337	0.0019	0.9981	98.05
37.5	146,570	342	0.0023	0.9977	97.87
38.5	136,447	405	0.0030	0.9970	97.64

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 284.00 HOUSE REGULATOR INSTALLATIONS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1936-2024 EXPERIENCE BAND 1995-2024

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	139,714	409	0.0029	0.9971	97.35
40.5	140,446	202	0.0014	0.9986	97.06
41.5	141,751	586	0.0041	0.9959	96.92
42.5	145,812	139	0.0010	0.9990	96.52
43.5	144,283	330	0.0023	0.9977	96.43
44.5	132,191	510	0.0039	0.9961	96.21
45.5	128,002	381	0.0030	0.9970	95.84
46.5	129,956	389	0.0030	0.9970	95.55
47.5	131,820	383	0.0029	0.9971	95.27
48.5	132,642	299	0.0023	0.9977	94.99
49.5	131,448	538	0.0041	0.9959	94.78
50.5	130,654	163	0.0012	0.9988	94.39
51.5	126,489	82	0.0006	0.9994	94.27
52.5	122,627	315	0.0026	0.9974	94.21
53.5	116,767	305	0.0026	0.9974	93.97
54.5	113,868	278	0.0024	0.9976	93.72
55.5	109,460	381	0.0035	0.9965	93.49
56.5	107,144	184	0.0017	0.9983	93.17
57.5	103,552	89	0.0009	0.9991	93.01
58.5	99,701	33	0.0003	0.9997	92.93
59.5	98,149	58	0.0006	0.9994	92.90
60.5	94,058	69	0.0007	0.9993	92.84
61.5	91,429	85	0.0009	0.9991	92.77
62.5	81,994	32	0.0004	0.9996	92.69
63.5	80,233	31	0.0004	0.9996	92.65
64.5	76,412	28	0.0004	0.9996	92.62
65.5	60,495	16	0.0003	0.9997	92.58
66.5	45,976	86	0.0019	0.9981	92.56
67.5	41,938	12	0.0003	0.9997	92.38
68.5	36,479	13	0.0004	0.9996	92.36
69.5	30,728	11	0.0004	0.9996	92.32
70.5	24,993	12	0.0005	0.9995	92.29
71.5	20,748	12	0.0006	0.9994	92.24
72.5	15,010	24	0.0016	0.9984	92.19
73.5	11,648	0	0.0000	1.0000	92.04
74.5	8,924		0.0000	1.0000	92.04
75.5	6,393		0.0000	1.0000	92.04
76.5	4,628		0.0000	1.0000	92.04
77.5	2,525		0.0000	1.0000	92.04
78.5	1,435		0.0000	1.0000	92.04

DUKE ENERGY KENTUCKY
GAS PLANT

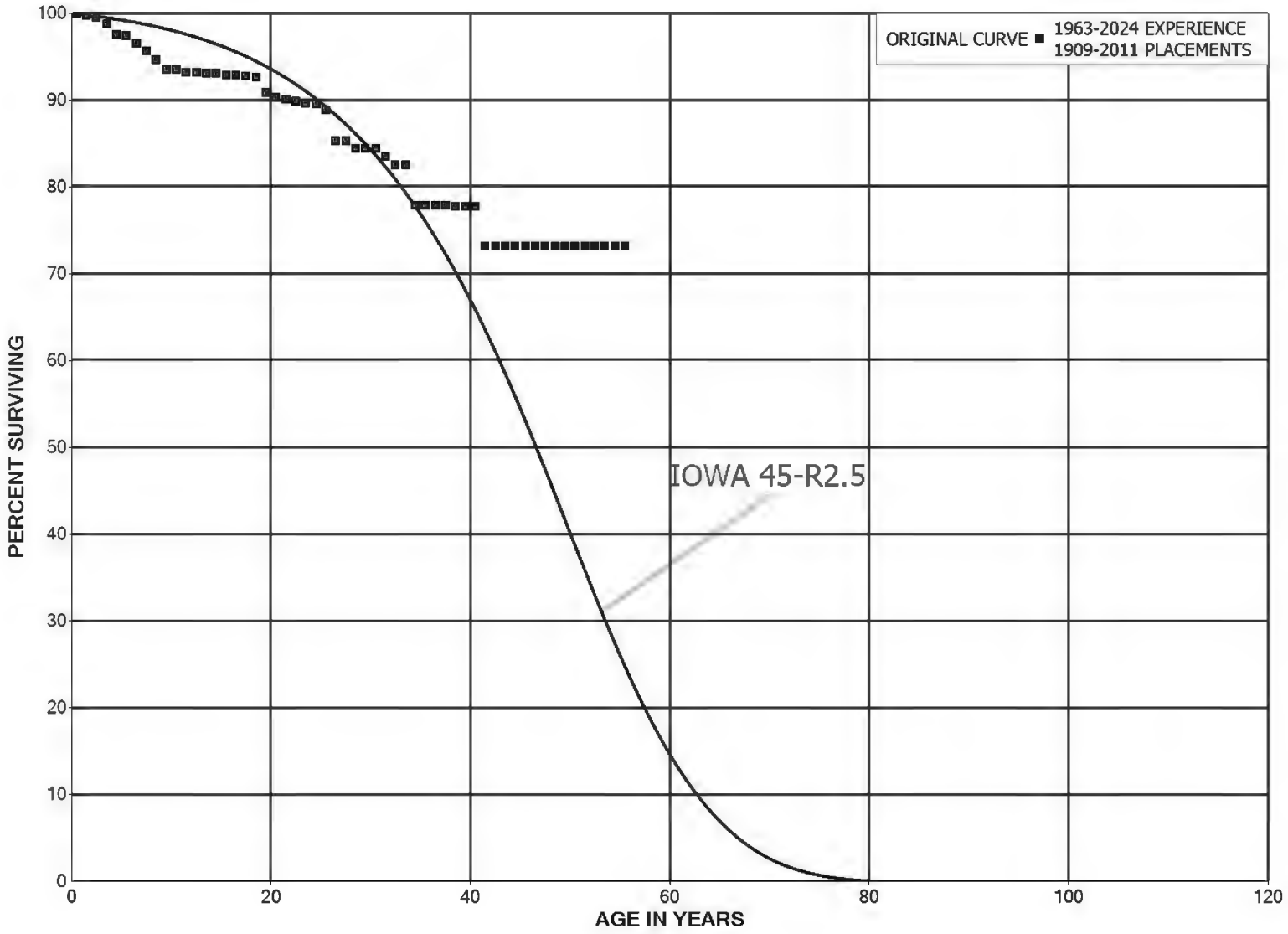
ACCOUNT 284.00 HOUSE REGULATOR INSTALLATIONS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1936-2024 EXPERIENCE BAND 1995-2024

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	1,435		0.0000	1.0000	92.04
80.5	1,435		0.0000	1.0000	92.04
81.5	1,435		0.0000	1.0000	92.04
82.5	984		0.0000	1.0000	92.04
83.5	984		0.0000	1.0000	92.04
84.5	984		0.0000	1.0000	92.04
85.5	580		0.0000	1.0000	92.04
86.5					92.04

DUKE ENERGY KENTUCKY
GAS PLANT
ACCOUNT 285.00 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 285.00 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1909-2011 EXPERIENCE BAND 1963-2024

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	500,856		0.0000	1.0000	100.00
0.5	502,423	1,247	0.0025	0.9975	100.00
1.5	503,070	1,102	0.0022	0.9978	99.75
2.5	504,841	3,911	0.0077	0.9923	99.53
3.5	502,279	6,364	0.0127	0.9873	98.76
4.5	501,086	562	0.0011	0.9989	97.51
5.5	500,844	4,490	0.0090	0.9910	97.40
6.5	506,886	4,833	0.0095	0.9905	96.53
7.5	505,929	5,500	0.0109	0.9891	95.61
8.5	507,972	5,664	0.0112	0.9888	94.57
9.5	503,911	320	0.0006	0.9994	93.51
10.5	504,058	1,717	0.0034	0.9966	93.45
11.5	502,428	25	0.0000	1.0000	93.14
12.5	502,598	195	0.0004	0.9996	93.13
13.5	497,777	200	0.0004	0.9996	93.10
14.5	497,577	1,026	0.0021	0.9979	93.06
15.5	496,551	86	0.0002	0.9998	92.87
16.5	496,465	661	0.0013	0.9987	92.85
17.5	495,804	512	0.0010	0.9990	92.73
18.5	485,261	9,183	0.0189	0.9811	92.63
19.5	473,919	3,332	0.0070	0.9930	90.88
20.5	459,571	1,045	0.0023	0.9977	90.24
21.5	469,033	1,307	0.0028	0.9972	90.03
22.5	467,607	870	0.0019	0.9981	89.78
23.5	455,844	381	0.0008	0.9992	89.62
24.5	435,940	3,500	0.0080	0.9920	89.54
25.5	394,081	15,635	0.0397	0.9603	88.82
26.5	359,007		0.0000	1.0000	85.30
27.5	351,185	3,924	0.0112	0.9888	85.30
28.5	336,798		0.0000	1.0000	84.34
29.5	319,485		0.0000	1.0000	84.34
30.5	302,653	2,886	0.0095	0.9905	84.34
31.5	278,169	3,422	0.0123	0.9877	83.54
32.5	258,390		0.0000	1.0000	82.51
33.5	233,129	13,088	0.0561	0.9439	82.51
34.5	151,109		0.0000	1.0000	77.88
35.5	144,989		0.0000	1.0000	77.88
36.5	133,200		0.0000	1.0000	77.88
37.5	127,664	195	0.0015	0.9985	77.88
38.5	117,656		0.0000	1.0000	77.76

DUKE ENERGY KENTUCKY
GAS PLANT

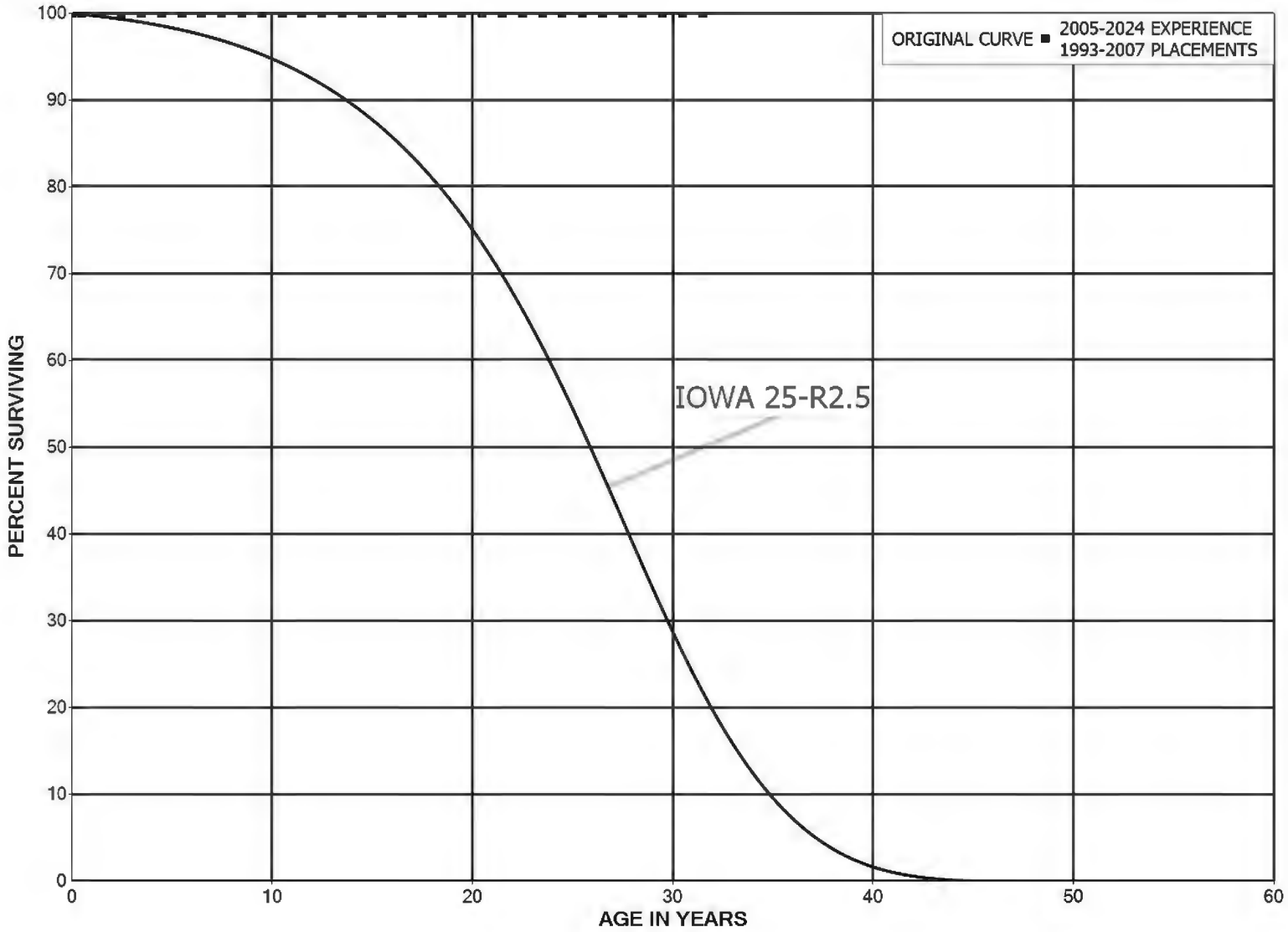
ACCOUNT 285.00 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1909-2011 EXPERIENCE BAND 1963-2024

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	109,087		0.0000	1.0000	77.76
40.5	96,358	5,666	0.0588	0.9412	77.76
41.5	70,337		0.0000	1.0000	73.19
42.5	70,337		0.0000	1.0000	73.19
43.5	70,337		0.0000	1.0000	73.19
44.5	56,433		0.0000	1.0000	73.19
45.5	55,097		0.0000	1.0000	73.19
46.5	55,097		0.0000	1.0000	73.19
47.5	55,097		0.0000	1.0000	73.19
48.5	55,097		0.0000	1.0000	73.19
49.5	55,097		0.0000	1.0000	73.19
50.5	55,097		0.0000	1.0000	73.19
51.5	54,940		0.0000	1.0000	73.19
52.5	52,797		0.0000	1.0000	73.19
53.5	48,144		0.0000	1.0000	73.19
54.5	46,768		0.0000	1.0000	73.19
55.5	9,549		0.0000	1.0000	73.19
56.5	8,996		0.0000	1.0000	73.19
57.5	7,652		0.0000	1.0000	73.19
58.5	7,115		0.0000	1.0000	73.19
59.5	5,088	242	0.0475	0.9525	73.19
60.5	4,847		0.0000	1.0000	69.71
61.5	4,103		0.0000	1.0000	69.71
62.5	3,098		0.0000	1.0000	69.71
63.5	3,098		0.0000	1.0000	69.71
64.5	3,098		0.0000	1.0000	69.71
65.5	2,069		0.0000	1.0000	69.71
66.5	2,069		0.0000	1.0000	69.71
67.5	2,069		0.0000	1.0000	69.71
68.5	2,069		0.0000	1.0000	69.71
69.5	1,760		0.0000	1.0000	69.71
70.5	1,654		0.0000	1.0000	69.71
71.5	251		0.0000	1.0000	69.71
72.5					69.71

DUKE ENERGY KENTUCKY
GAS PLANT
ACCOUNT 285.10 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT - ELECTRONIC
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY
GAS PLANT

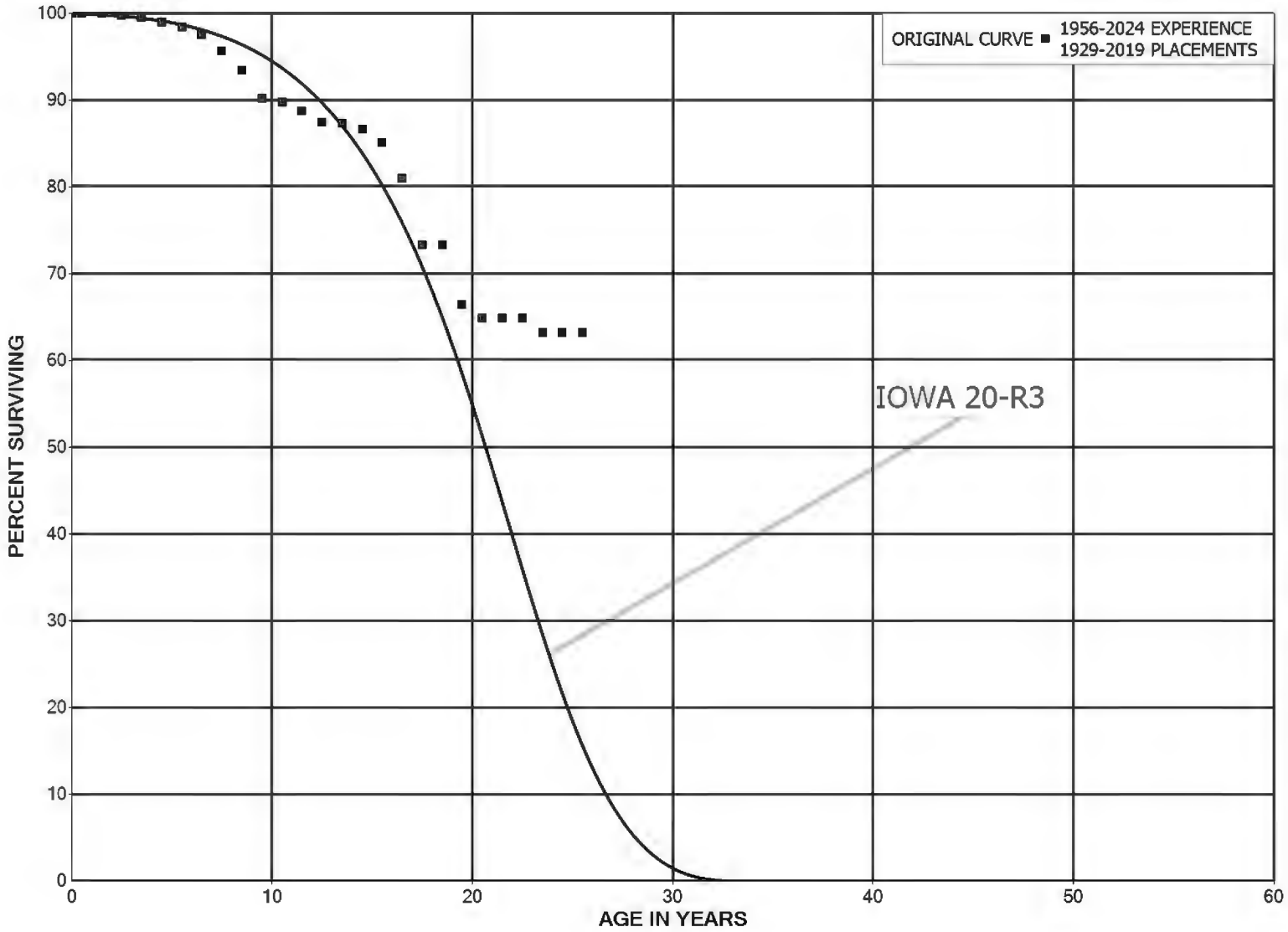
ACCOUNT 285.10 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT - ELECTRONIC

ORIGINAL LIFE TABLE

PLACEMENT BAND 1993-2007 EXPERIENCE BAND 2005-2024

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	23,064		0.0000	1.0000	100.00
0.5	23,064		0.0000	1.0000	100.00
1.5	23,064		0.0000	1.0000	100.00
2.5	23,064		0.0000	1.0000	100.00
3.5	23,064		0.0000	1.0000	100.00
4.5	23,064		0.0000	1.0000	100.00
5.5	23,064		0.0000	1.0000	100.00
6.5	23,064		0.0000	1.0000	100.00
7.5	23,064		0.0000	1.0000	100.00
8.5	23,064		0.0000	1.0000	100.00
9.5	35,684		0.0000	1.0000	100.00
10.5	35,684		0.0000	1.0000	100.00
11.5	64,791		0.0000	1.0000	100.00
12.5	64,791		0.0000	1.0000	100.00
13.5	64,791		0.0000	1.0000	100.00
14.5	64,791		0.0000	1.0000	100.00
15.5	64,791		0.0000	1.0000	100.00
16.5	64,791		0.0000	1.0000	100.00
17.5	41,727		0.0000	1.0000	100.00
18.5	41,727		0.0000	1.0000	100.00
19.5	41,727		0.0000	1.0000	100.00
20.5	41,727		0.0000	1.0000	100.00
21.5	41,727		0.0000	1.0000	100.00
22.5	41,727		0.0000	1.0000	100.00
23.5	41,727		0.0000	1.0000	100.00
24.5	41,727		0.0000	1.0000	100.00
25.5	41,727		0.0000	1.0000	100.00
26.5	41,727		0.0000	1.0000	100.00
27.5	41,727		0.0000	1.0000	100.00
28.5	41,727		0.0000	1.0000	100.00
29.5	29,107		0.0000	1.0000	100.00
30.5	29,107		0.0000	1.0000	100.00
31.5					100.00

DUKE ENERGY KENTUCKY
GAS PLANT
ACCOUNT 287.00 OTHER EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY
GAS PLANT

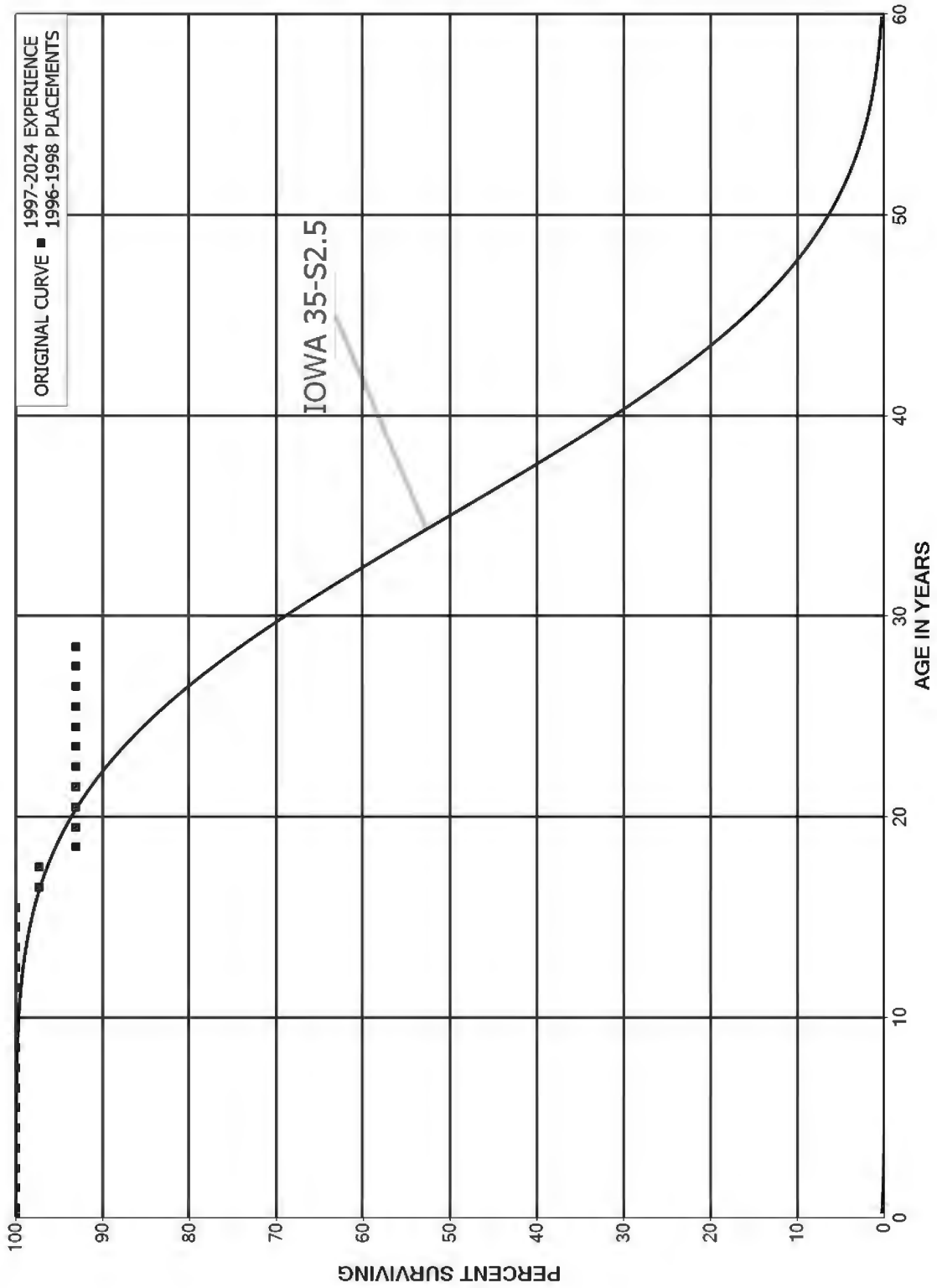
ACCOUNT 287.00 OTHER EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1929-2019 EXPERIENCE BAND 1956-2024

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	154,630		0.0000	1.0000	100.00
0.5	154,630		0.0000	1.0000	100.00
1.5	155,293	355	0.0023	0.9977	100.00
2.5	155,452	389	0.0025	0.9975	99.77
3.5	157,359	866	0.0055	0.9945	99.52
4.5	159,737	898	0.0056	0.9944	98.97
5.5	125,506	1,233	0.0098	0.9902	98.42
6.5	128,819	2,399	0.0186	0.9814	97.45
7.5	127,368	2,952	0.0232	0.9768	95.64
8.5	124,416	4,340	0.0349	0.9651	93.42
9.5	120,453	637	0.0053	0.9947	90.16
10.5	120,217	1,286	0.0107	0.9893	89.68
11.5	118,930	1,854	0.0156	0.9844	88.72
12.5	117,144	77	0.0007	0.9993	87.34
13.5	117,130	966	0.0082	0.9918	87.28
14.5	29,698	515	0.0173	0.9827	86.56
15.5	29,183	1,426	0.0489	0.9511	85.06
16.5	27,757	2,620	0.0944	0.9056	80.91
17.5	25,137		0.0000	1.0000	73.27
18.5	25,137	2,369	0.0942	0.9058	73.27
19.5	22,768	520	0.0228	0.9772	66.37
20.5	22,248		0.0000	1.0000	64.85
21.5	22,248		0.0000	1.0000	64.85
22.5	22,248	570	0.0256	0.9744	64.85
23.5	21,678		0.0000	1.0000	63.19
24.5	21,678		0.0000	1.0000	63.19
25.5	232		0.0000	1.0000	63.19
26.5	252		0.0000	1.0000	63.19
27.5	252	20	0.0795	0.9205	63.19
28.5	232	16	0.0686	0.9314	58.17
29.5	216	45	0.2106	0.7894	54.18
30.5	170	170	1.0000		42.77
31.5					

DUKE ENERGY KENTUCKY
GAS PLANT
ACCOUNT 287.10 STREET LIGHTING EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY
GAS PLANT

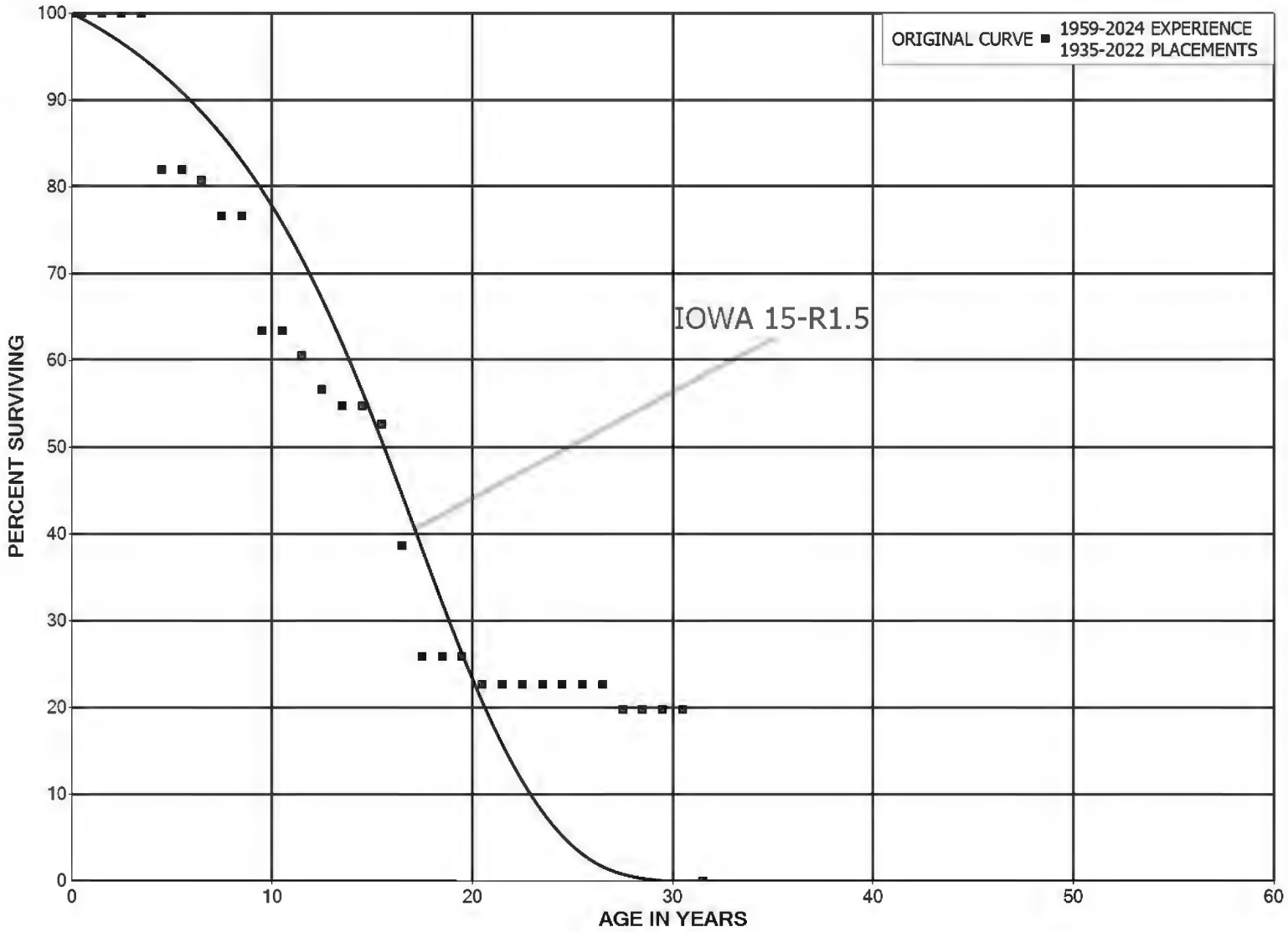
ACCOUNT 287.10 STREET LIGHTING EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1996-1998 EXPERIENCE BAND 1997-2024

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	20,794		0.0000	1.0000	100.00
0.5	29,953		0.0000	1.0000	100.00
1.5	30,411		0.0000	1.0000	100.00
2.5	30,411		0.0000	1.0000	100.00
3.5	30,411		0.0000	1.0000	100.00
4.5	30,411		0.0000	1.0000	100.00
5.5	30,411		0.0000	1.0000	100.00
6.5	30,411		0.0000	1.0000	100.00
7.5	30,411		0.0000	1.0000	100.00
8.5	30,411		0.0000	1.0000	100.00
9.5	30,411		0.0000	1.0000	100.00
10.5	30,411		0.0000	1.0000	100.00
11.5	30,411		0.0000	1.0000	100.00
12.5	30,411		0.0000	1.0000	100.00
13.5	30,411		0.0000	1.0000	100.00
14.5	30,411		0.0000	1.0000	100.00
15.5	30,411	813	0.0267	0.9733	100.00
16.5	29,598		0.0000	1.0000	97.33
17.5	29,598	1,308	0.0442	0.9558	97.33
18.5	28,290		0.0000	1.0000	93.03
19.5	28,290		0.0000	1.0000	93.03
20.5	28,290		0.0000	1.0000	93.03
21.5	28,290		0.0000	1.0000	93.03
22.5	28,290		0.0000	1.0000	93.03
23.5	28,290		0.0000	1.0000	93.03
24.5	28,290		0.0000	1.0000	93.03
25.5	28,290		0.0000	1.0000	93.03
26.5	23,935		0.0000	1.0000	93.03
27.5	8,309		0.0000	1.0000	93.03
28.5					93.03

DUKE ENERGY KENTUCKY
GAS PLANT
ACCOUNT 292.10 TRANSPORTATION EQUIPMENT - TRAILERS
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY
GAS PLANT

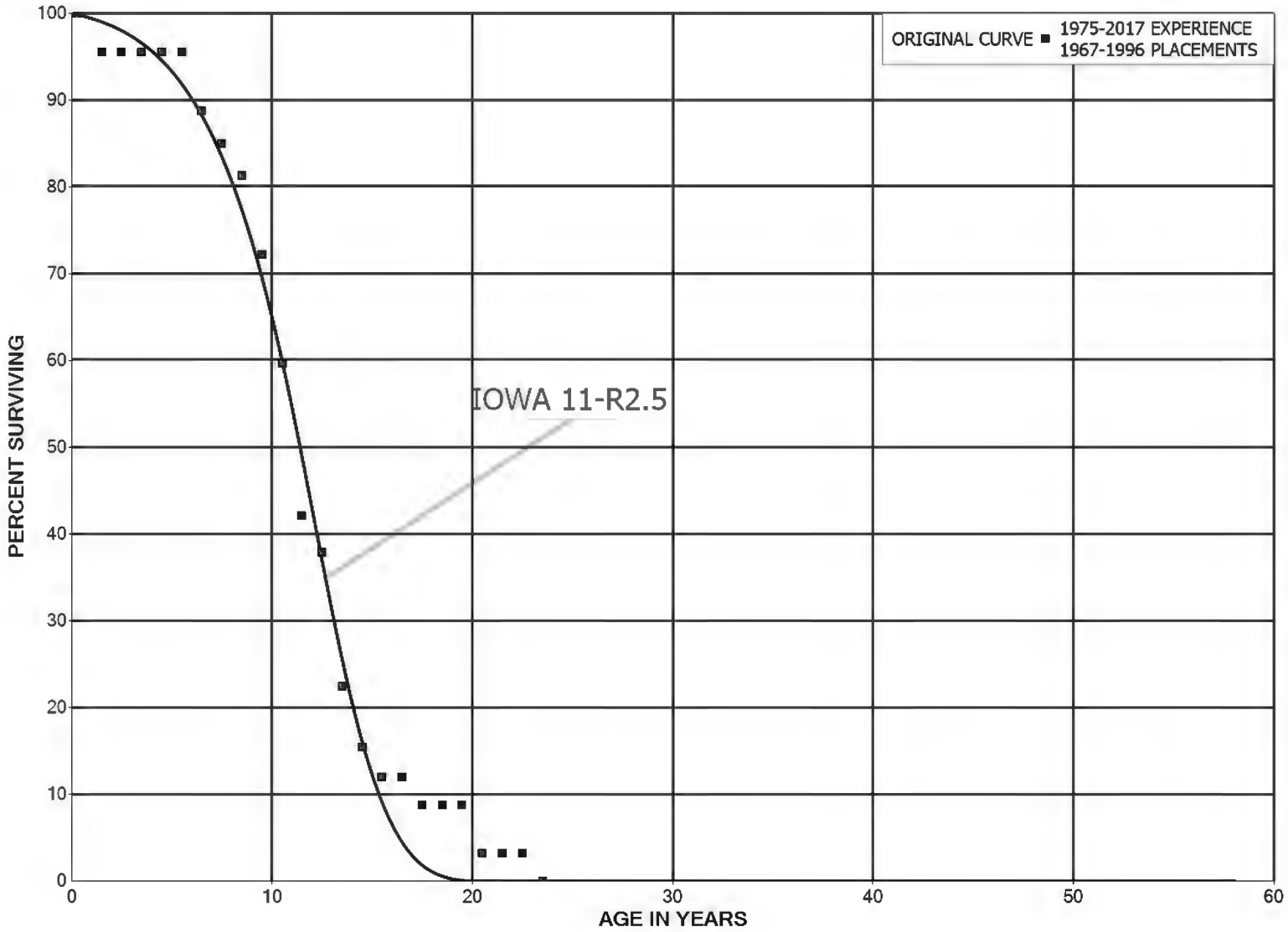
ACCOUNT 292.10 TRANSPORTATION EQUIPMENT - TRAILERS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1935-2022 EXPERIENCE BAND 1959-2024

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	207,323		0.0000	1.0000	100.00
0.5	207,323		0.0000	1.0000	100.00
1.5	208,446		0.0000	1.0000	100.00
2.5	187,672		0.0000	1.0000	100.00
3.5	187,672	33,976	0.1810	0.8190	100.00
4.5	153,695		0.0000	1.0000	81.90
5.5	147,196	2,061	0.0140	0.9860	81.90
6.5	145,388	7,476	0.0514	0.9486	80.75
7.5	137,911		0.0000	1.0000	76.60
8.5	137,911	23,806	0.1726	0.8274	76.60
9.5	114,105		0.0000	1.0000	63.37
10.5	117,285	5,269	0.0449	0.9551	63.37
11.5	115,758	7,541	0.0651	0.9349	60.53
12.5	109,158	3,529	0.0323	0.9677	56.58
13.5	106,783		0.0000	1.0000	54.75
14.5	106,783	4,227	0.0396	0.9604	54.75
15.5	102,556	27,304	0.2662	0.7338	52.59
16.5	75,252	24,932	0.3313	0.6687	38.59
17.5	50,319		0.0000	1.0000	25.80
18.5	50,319		0.0000	1.0000	25.80
19.5	50,319	6,317	0.1255	0.8745	25.80
20.5	44,002		0.0000	1.0000	22.56
21.5	44,002		0.0000	1.0000	22.56
22.5	44,002		0.0000	1.0000	22.56
23.5	42,697		0.0000	1.0000	22.56
24.5	39,311		0.0000	1.0000	22.56
25.5	13,164		0.0000	1.0000	22.56
26.5	10,591	1,328	0.1254	0.8746	22.56
27.5	2,998		0.0000	1.0000	19.73
28.5	2,998		0.0000	1.0000	19.73
29.5	378		0.0000	1.0000	19.73
30.5	378	378	1.0000		19.73
31.5					

DUKE ENERGY KENTUCKY
GAS PLANT
ACCOUNT 296.00 POWER OPERATED EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 296.00 POWER OPERATED EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1967-1996 EXPERIENCE BAND 1975-2017

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	721,601		0.0000	1.0000	100.00
0.5	735,809	33,205	0.0451	0.9549	100.00
1.5	702,604		0.0000	1.0000	95.49
2.5	702,604		0.0000	1.0000	95.49
3.5	717,070		0.0000	1.0000	95.49
4.5	804,379		0.0000	1.0000	95.49
5.5	804,379	57,106	0.0710	0.9290	95.49
6.5	747,273	31,876	0.0427	0.9573	88.71
7.5	732,503	31,843	0.0435	0.9565	84.92
8.5	700,660	77,663	0.1108	0.8892	81.23
9.5	622,997	108,409	0.1740	0.8260	72.23
10.5	514,588	151,357	0.2941	0.7059	59.66
11.5	363,231	37,075	0.1021	0.8979	42.11
12.5	326,157	133,182	0.4083	0.5917	37.81
13.5	192,975	60,650	0.3143	0.6857	22.37
14.5	132,325	29,719	0.2246	0.7754	15.34
15.5	102,606		0.0000	1.0000	11.90
16.5	102,606	27,736	0.2703	0.7297	11.90
17.5	74,871		0.0000	1.0000	8.68
18.5	74,871		0.0000	1.0000	8.68
19.5	74,871	47,221	0.6307	0.3693	8.68
20.5	27,650		0.0000	1.0000	3.21
21.5	27,650		0.0000	1.0000	3.21
22.5	27,650	27,650	1.0000		3.21
23.5					

PART VIII. NET SALVAGE STATISTICS

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 275.00 STRUCTURES AND IMPROVEMENTS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	COST OF REMOVAL PCT	GROSS SALVAGE AMOUNT	GROSS SALVAGE PCT	NET SALVAGE AMOUNT	NET SALVAGE PCT
2004	2,372		0		0		0
2005							
2006							
2007							
2008							
2009							
2010							
2011							
2012							
2013							
2014							
2015							
2016							
2017							
2018							
2019	7,196		0		0		0
2020	27,112	45,286	167		0	45,286-	167-
2021	10,952	19,183	175		0	19,183-	175-
2022							
2023							
2024							
TOTAL	47,633	64,469	135		0	64,469-	135-
THREE-YEAR MOVING AVERAGES							
04-06	791		0		0		0
05-07							
06-08							
07-09							
08-10							
09-11							
10-12							
11-13							
12-14							
13-15							
14-16							
15-17							
16-18							
17-19	2,399		0		0		0
18-20	11,436	15,095	132		0	15,095-	132-

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 275.00 STRUCTURES AND IMPROVEMENTS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
19-21	15,087	21,490	142		0	21,490-	142-
20-22	12,688	21,490	169		0	21,490-	169-
21-23	3,651	6,394	175		0	6,394-	175-
22-24							
FIVE-YEAR AVERAGE							
20-24	7,613	12,894	169		0	12,894-	169-

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNTS 276.10 THROUGH 276.50 MAINS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
1980	297,448	63,990	22	226,938	76	162,948	55
1981	96,963	31,862	33	137-	0	31,999-	33-
1982	101,423	42,201	42	87,935	87	45,734	45
1983	56,366	50,631	90	175,712	312	125,081	222
1984	69,904	27,581	39	21,909	31	5,672-	8-
1985	99,714	27,067	27	126,424	127	99,358	100
1986	162,431	47,728	29	15,840	10	31,889-	20-
1987	208,624	47,610	23	9,107	4	38,503-	18-
1988	74,281	62,808	85	199,126	268	136,319	184
1989	144,904	152,404	105	215,651	149	63,247	44
1990	374,020	257,462	69	92,061	25	165,401-	44-
1991	325,319	210,093	65	1,374	0	208,719-	64-
1992	309,776	229,016	74	43,084-	14-	272,100-	88-
1993	401,462	57,958	14	655,817	163	597,859	149
1994	145,620	43,617	30	17,369	12	26,248-	18-
1995	169,197	80,946	48	159,250	94	78,304	46
1996	379,558	70,301	19	7,734	2	62,567-	16-
1997	280,831	82,481	29	20,990	7	61,490-	22-
1998	120,612	129,207	107	5,348	4	123,859-	103-
1999	478,232	97,369	20	14,793	3	82,576-	17-
2000	309,772	31,208-	10-	2,048	1	33,255	11
2001	951,780	380,571	40	342	0	380,229-	40-
2002	911,154	263,744	29		0	263,744-	29-
2003	496,164	74,211-	15-		0	74,211	15
2004	1,153,525	20,143	2		0	20,143-	2-
2005	535,014	12,886	2		0	12,886-	2-
2006	1,044,020	820,972	79		0	820,972-	79-
2007	464,868	178,746	38		0	178,746-	38-
2008	902,897	2,088	0	72,599	8	70,511	8
2009	768,874	151,704	20		0	151,704-	20-
2010	361,638	2,636	1		0	2,636-	1-
2011	28,962		0		0		0
2012	386,020	57,499	15	155-	0	57,654-	15-
2013	473,152	264,737	56	819-	0	265,556-	56-
2014	175,294	107,314	61	768-	0	108,082-	62-
2015	406,913	64,713	16	3,079-	1-	67,792-	17-
2016	45,141	19,513	43		0	19,513-	43-
2017	77,154		0		0		0
2018	889,919	31,022	3	2,975-	0	33,997-	4-
2019	1,672,645	755,340	45	3,287-	0	758,626-	45-
2020	1,934,100	1,350,461	70	45	0	1,350,415-	70-

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNTS 276.10 THROUGH 276.50 MAINS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
2021	1,333,387	1,143,825	86	6,481	0	1,137,345-	85-
2022	1,146,859	1,194,354	104		0	1,194,354-	104-
2023	681,250	755,161	111		0	755,161-	111-
2024	277,216	534,622	193		0	534,622-	193-
TOTAL	21,724,401	9,818,961	45	2,080,590	10	7,738,371-	36-
THREE-YEAR MOVING AVERAGES							
80-82	165,278	46,018	28	104,912	63	58,894	36
81-83	84,917	41,565	49	87,837	103	46,272	54
82-84	75,898	40,138	53	95,185	125	55,048	73
83-85	75,328	35,093	47	108,015	143	72,922	97
84-86	110,683	34,125	31	54,724	49	20,599	19
85-87	156,923	40,802	26	50,457	32	9,655	6
86-88	148,445	52,715	36	74,691	50	21,976	15
87-89	142,603	87,607	61	141,295	99	53,688	38
88-90	197,735	157,558	80	168,946	85	11,388	6
89-91	281,414	206,653	73	103,029	37	103,624-	37-
90-92	336,371	232,190	69	16,784	5	215,406-	64-
91-93	345,519	165,689	48	204,702	59	39,014	11
92-94	285,619	110,197	39	210,034	74	99,837	35
93-95	238,760	60,840	25	277,479	116	216,639	91
94-96	231,458	64,955	28	61,451	27	3,503-	2-
95-97	276,528	77,909	28	62,658	23	15,251-	6-
96-98	260,333	93,996	36	11,357	4	82,639-	32-
97-99	293,225	103,019	35	13,710	5	89,309-	30-
98-00	302,872	65,123	22	7,396	2	57,727-	19-
99-01	579,928	148,911	26	5,728	1	143,183-	25-
00-02	724,235	204,369	28	797	0	203,572-	28-
01-03	786,366	190,034	24	114	0	189,920-	24-
02-04	853,614	69,892	8		0	69,892-	8-
03-05	728,234	13,728-	2-		0	13,728	2
04-06	910,853	284,667	31		0	284,667-	31-
05-07	681,301	337,535	50		0	337,535-	50-
06-08	803,928	333,935	42	24,200	3	309,736-	39-
07-09	712,213	110,846	16	24,200	3	86,646-	12-
08-10	677,803	52,142	8	24,200	4	27,943-	4-
09-11	386,491	51,447	13		0	51,447-	13-
10-12	258,873	20,045	8	52-	0	20,097-	8-
11-13	296,045	107,412	36	325-	0	107,737-	36-

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNTS 276.10 THROUGH 276.50 MAINS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
12-14	344,822	143,183	42	581-	0	143,764-	42-
13-15	351,786	145,588	41	1,555-	0	147,143-	42-
14-16	209,116	63,847	31	1,282-	1-	65,129-	31-
15-17	176,403	28,075	16	1,026-	1-	29,102-	16-
16-18	337,405	16,845	5	992-	0	17,837-	5-
17-19	879,906	262,121	30	2,087-	0	264,208-	30-
18-20	1,498,888	712,274	48	2,072-	0	714,346-	48-
19-21	1,646,711	1,083,208	66	1,080	0	1,082,129-	66-
20-22	1,471,448	1,229,547	84	2,175	0	1,227,371-	83-
21-23	1,053,832	1,031,114	98	2,160	0	1,028,953-	98-
22-24	701,775	828,046	118		0	828,046-	118-
FIVE-YEAR AVERAGE							
20-24	1,074,562	995,685	93	1,305	0	994,379-	93-

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNTS 278.00 AND 278.10 MEASURING AND REGULATING STATION EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
1980	25,901	14,529	56	1,441	6	13,088-	51-
1981	1,913	930	49	2,031	106	1,102	58
1982	65-	3,167		50	77-	3,117-	
1983				10		10	
1984							
1985	12,087	3,716	31	409	3	3,307-	27-
1986	44,778	2,356	5	3,776	8	1,420	3
1987	42,349	10,457	25	6,680	16	3,776-	9-
1988	8,059	5,502	68	765	9	4,737-	59-
1989	54,330	6,734	12	1,198	2	5,536-	10-
1990		6,389		3,604		2,785-	
1991	7,057	7,981	113	49	1	7,932-	112-
1992	2,007	566	28	3	0	563-	28-
1993	16,129	273	2	48	0	226-	1-
1994	20,980		0	19	0	19	0
1995							
1996	30,954	2,672	9		0	2,672-	9-
1997				90-		90-	
1998							
1999							
2000							
2001							
2002	14,005		0		0		0
2003	24,878		0		0		0
2004	4,363		0		0		0
2005	5,278	5,939	113		0	5,939-	113-
2006	28,480	6,131	22		0	6,131-	22-
2007	54,620	2,738	5		0	2,738-	5-
2008							
2009							
2010							
2011		17,964				17,964-	
2012	92,692		0		0		0
2013							
2014							
2015							
2016							
2017							
2018	75,263		0		0		0
2019	86,688	10,798	12		0	10,798-	12-
2020	367,900	731,931	199	1,997-	1-	733,928-	199-

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNTS 278.00 AND 278.10 MEASURING AND REGULATING STATION EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
2021	445,591	909,871	204	16,861-	4-	926,732-	208-
2022	121,545	121,999	100		0	121,999-	100-
2023	258,795	32,256	12		0	32,256-	12-
2024	758,602	370,134	49		0	370,134-	49-
TOTAL	2,605,183	2,275,033	87	1,136	0	2,273,897-	87-
THREE-YEAR MOVING AVERAGES							
80-82	9,250	6,209	67	1,174	13	5,035-	54-
81-83	616	1,366	222	697	113	668-	108-
82-84	22-	1,056		20	93-	1,036-	
83-85	4,029	1,239	31	140	3	1,099-	27-
84-86	18,955	2,024	11	1,395	7	629-	3-
85-87	33,072	5,509	17	3,622	11	1,888-	6-
86-88	31,729	6,105	19	3,740	12	2,364-	7-
87-89	34,913	7,564	22	2,881	8	4,683-	13-
88-90	20,797	6,209	30	1,856	9	4,353-	21-
89-91	20,462	7,035	34	1,617	8	5,418-	26-
90-92	3,021	4,979	165	1,219	40	3,760-	124-
91-93	8,398	2,940	35	33	0	2,907-	35-
92-94	13,038	280	2	23	0	256-	2-
93-95	12,369	91	1	22	0	69-	1-
94-96	17,311	891	5	6	0	884-	5-
95-97	10,318	891	9	30-	0	921-	9-
96-98	10,318	891	9	30-	0	921-	9-
97-99				30-		30-	
98-00							
99-01							
00-02	4,668		0		0		0
01-03	12,961		0		0		0
02-04	14,415		0		0		0
03-05	11,507	1,980	17		0	1,980-	17-
04-06	12,707	4,023	32		0	4,023-	32-
05-07	29,460	4,936	17		0	4,936-	17-
06-08	27,700	2,956	11		0	2,956-	11-
07-09	18,207	913	5		0	913-	5-
08-10							
09-11		5,988				5,988-	
10-12	30,897	5,988	19		0	5,988-	19-
11-13	30,897	5,988	19		0	5,988-	19-

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNTS 278.00 AND 278.10 MEASURING AND REGULATING STATION EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	COST OF REMOVAL PCT	GROSS SALVAGE AMOUNT	GROSS SALVAGE PCT	NET SALVAGE AMOUNT	NET SALVAGE PCT
THREE-YEAR MOVING AVERAGES							
12-14	30,897		0		0		0
13-15							
14-16							
15-17							
16-18	25,088		0		0		0
17-19	53,984	3,599	7		0	3,599-	7-
18-20	176,617	247,577	140	666-	0	248,242-	141-
19-21	300,060	550,867	184	6,286-	2-	557,153-	186-
20-22	311,679	587,934	189	6,286-	2-	594,220-	191-
21-23	275,310	354,709	129	5,620-	2-	360,329-	131-
22-24	379,648	174,796	46		0	174,796-	46-
FIVE-YEAR AVERAGE							
20-24	390,487	433,238	111	3,772-	1-	437,010-	112-

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 278.20 MEASURING AND REGULATING STATION EQUIPMENT - DISTRICT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
1980	2,308	416	18	486	21	70	3
1981	5,034	2,740	54	199	4	2,541-	50-
1982	1,629		0		0		0
1983	1,002	109	11	125	13	16	2
1984	14,822	2,250	15	344	2	1,906-	13-
1985	3,257	8,900	273	1,259	39	7,641-	235-
1986	5,959	6,689	112	482	8	6,207-	104-
1987				301		301	
1988	2,724	5,590	205	388	14	5,201-	191-
1989	4,437		0	137	3	137	3
1990		7,121		291		6,830-	
1991	5,557	3,153	57	48	1	3,104-	56-
1992	6,941	4,239	61	4	0	4,235-	61-
1993				13		13	
1994							
1995	2,924	5,160	176	26	1	5,134-	176-
1996							
1997	8,705	4,876	56		0	4,876-	56-
1998							
1999							
2000							
2001							
2002							
2003							
2004	5,462		0		0		0
2005							
2006							
2007	123,301		0		0		0
2008							
2009							
2010							
2011							
2012							
2013							
2014							
2015							
2016							
2017							
2018							
2019							
2020	5,521		0		0		0

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 278.20 MEASURING AND REGULATING STATION EQUIPMENT - DISTRICT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
2021	313,196	86,922	28		0	86,922-	28-
2022	2,963	3,760	127		0	3,760-	127-
2023	47,798	5,754	12		0	5,754-	12-
2024	13,163	647	5		0	647-	5-
TOTAL	576,703	148,325	26	4,104	1	144,221-	25-
THREE-YEAR MOVING AVERAGES							
80-82	2,990	1,052	35	228	8	824-	28-
81-83	2,555	950	37	108	4	842-	33-
82-84	5,818	787	14	156	3	630-	11-
83-85	6,361	3,753	59	576	9	3,177-	50-
84-86	8,013	5,946	74	695	9	5,251-	66-
85-87	3,072	5,196	169	681	22	4,516-	147-
86-88	2,894	4,093	141	390	13	3,703-	128-
87-89	2,387	1,863	78	276	12	1,588-	67-
88-90	2,387	4,237	178	272	11	3,965-	166-
89-91	3,331	3,425	103	159	5	3,266-	98-
90-92	4,166	4,838	116	114	3	4,723-	113-
91-93	4,166	2,464	59	22	1	2,442-	59-
92-94	2,314	1,413	61	6	0	1,407-	61-
93-95	975	1,720	176	13	1	1,707-	175-
94-96	975	1,720	176	9	1	1,711-	176-
95-97	3,877	3,345	86	9	0	3,337-	86-
96-98	2,902	1,625	56		0	1,625-	56-
97-99	2,902	1,625	56		0	1,625-	56-
98-00							
99-01							
00-02							
01-03							
02-04	1,821	0		0		0	
03-05	1,821	0		0		0	
04-06	1,821	0		0		0	
05-07	41,100	0		0		0	
06-08	41,100	0		0		0	
07-09	41,100	0		0		0	
08-10							
09-11							
10-12							
11-13							

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 278.20 MEASURING AND REGULATING STATION EQUIPMENT - DISTRICT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
12-14							
13-15							
14-16							
15-17							
16-18							
17-19							
18-20	1,840		0		0		0
19-21	106,239	28,974	27		0	28,974-	27-
20-22	107,227	30,227	28		0	30,227-	28-
21-23	121,319	32,145	26		0	32,145-	26-
22-24	21,308	3,387	16		0	3,387-	16-
FIVE-YEAR AVERAGE							
20-24	76,528	19,416	25		0	19,416-	25-

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNTS 280.10 THROUGH 280.30 SERVICES

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
1980	135,656	50,083	37	18,509	14	31,573-	23-
1981	302,302	62,979	21	37,075	12	25,904-	9-
1982	149,937	64,940	43	43,970	29	20,969-	14-
1983	238,055	76,514	32	24,929	10	51,585-	22-
1984	112,911	65,364	58	39,679	35	25,685-	23-
1985	106,308	64,400	61	21,039	20	43,361-	41-
1986	140,701	80,731	57	20,432	15	60,298-	43-
1987	147,848	74,281	50	30,560	21	43,720-	30-
1988	157,350	143,746	91	25,861	16	117,885-	75-
1989	186,402	84,688	45	22,024	12	62,664-	34-
1990	265,841	97,991	37	37,664	14	60,328-	23-
1991	204,646	113,540	55	36,078	18	77,462-	38-
1992	217,280	73,083	34	11,764	5	61,320-	28-
1993	166,165	82,826	50	15,233	9	67,593-	41-
1994	164,178	68,270	42	15,698	10	52,572-	32-
1995	223,270	70,646	32	20,634	9	50,012-	22-
1996	218,739	84,035	38	24,112	11	59,923-	27-
1997	172,654	62,567	36	17,057	10	45,509-	26-
1998	285,837	127,759	45	9,132	3	118,627-	42-
1999	390,999	136,649	35	39,352	10	97,297-	25-
2000							
2001	298,851		0		0		0
2002	748,583	180,819	24		0	180,819-	24-
2003	751,729	491,114	65	2,439	0	488,675-	65-
2004	1,175,885	126,107	11		0	126,107-	11-
2005	1,326,366	767-	0		0	767	0
2006	2,016,660	994,460	49		0	994,460-	49-
2007	1,207,953	141,491	12		0	141,491-	12-
2008	1,910,520	1,937	0		0	1,937-	0
2009	1,657,019	17,447	1		0	17,447-	1-
2010	689,795		0		0		0
2011	208,392	47,571	23		0	47,571-	23-
2012	405,900		0		0		0
2013	472,263		0		0		0
2014	275,270		0		0		0
2015	261,301		0		0		0
2016	355,078		0		0		0
2017	1,157,849		0		0		0
2018	537,562		0		0		0
2019	732,800	3,001,387	410		0	3,001,387-	410-
2020	921,147	933,895	101		0	933,895-	101-

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNTS 280.10 THROUGH 280.30 SERVICES

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
2021	1,083,418	319,652	30		0	319,652-	30-
2022		856				856-	
2023	332,730	3,126,123	940		0	3,126,123-	940-
2024		166,565				166,565-	
TOTAL	22,514,150	11,233,750	50	513,243	2	10,720,507-	48-
THREE-YEAR MOVING AVERAGES							
80-82	195,965	59,334	30	33,185	17	26,149-	13-
81-83	230,098	68,144	30	35,325	15	32,820-	14-
82-84	166,968	68,939	41	36,193	22	32,746-	20-
83-85	152,425	68,759	45	28,549	19	40,210-	26-
84-86	119,973	70,165	58	27,050	23	43,115-	36-
85-87	131,619	73,137	56	24,011	18	49,126-	37-
86-88	148,633	99,586	67	25,618	17	73,968-	50-
87-89	163,867	100,905	62	26,149	16	74,756-	46-
88-90	203,198	108,809	54	28,516	14	80,292-	40-
89-91	218,963	98,740	45	31,922	15	66,818-	31-
90-92	229,256	94,871	41	28,502	12	66,370-	29-
91-93	196,030	89,816	46	21,025	11	68,791-	35-
92-94	182,541	74,727	41	14,232	8	60,495-	33-
93-95	184,538	73,914	40	17,188	9	56,725-	31-
94-96	202,062	74,317	37	20,148	10	54,169-	27-
95-97	204,888	72,416	35	20,601	10	51,815-	25-
96-98	225,743	91,454	41	16,767	7	74,686-	33-
97-99	283,163	108,992	38	21,847	8	87,145-	31-
98-00	225,612	88,136	39	16,161	7	71,975-	32-
99-01	229,950	45,550	20	13,117	6	32,432-	14-
00-02	349,145	60,273	17		0	60,273-	17-
01-03	599,721	223,978	37	813	0	223,164-	37-
02-04	892,066	266,013	30	813	0	265,200-	30-
03-05	1,084,660	205,485	19	813	0	204,672-	19-
04-06	1,506,304	373,267	25		0	373,267-	25-
05-07	1,516,993	378,395	25		0	378,395-	25-
06-08	1,711,711	379,296	22		0	379,296-	22-
07-09	1,591,830	53,625	3		0	53,625-	3-
08-10	1,419,111	6,462	0		0	6,462-	0
09-11	851,735	21,673	3		0	21,673-	3-
10-12	434,695	15,857	4		0	15,857-	4-
11-13	362,185	15,857	4		0	15,857-	4-

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNTS 280.10 THROUGH 280.30 SERVICES

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
12-14	384,477	0		0		0	
13-15	336,278	0		0		0	
14-16	297,216	0		0		0	
15-17	591,409	0		0		0	
16-18	683,496	0		0		0	
17-19	809,404	1,000,462	124	0		1,000,462-	124-
18-20	730,503	1,311,761	180	0		1,311,761-	180-
19-21	912,455	1,418,312	155	0		1,418,312-	155-
20-22	668,188	418,135	63	0		418,135-	63-
21-23	472,050	1,148,877	243	0		1,148,877-	243-
22-24	110,910	1,097,848	990	0		1,097,848-	990-
FIVE-YEAR AVERAGE							
20-24	467,459	909,418	195	0		909,418-	195-

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 281.00 METERS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
1980	44,360	769	2	15,015	34	14,246	32
1981	24,426	905	4	8,646	35	7,741	32
1982	34,256	1,091	3	12,800	37	11,710	34
1983	58,836	1,673	3	15,702	27	14,029	24
1984	63,821	738	1	10,694	17	9,956	16
1985	34,017	678	2	7,340	22	6,662	20
1986	49,461	1,064	2	9,448	19	8,384	17
1987	58,238	1,086	2	3,347	6	2,261	4
1988	46,074	1,034-	2-	6,303	14	7,337	16
1989	28,598	1,010	4	8,864	31	7,854	27
1990	77,800	1,889	2	1,666	2	224-	0
1991	85,222	1,321	2		0	1,321-	2-
1992	72,432	6,450	9	841	1	5,609-	8-
1993	50,387	12,835	25	2,612	5	10,224-	20-
1994	60,429	18,042	30	19,727	33	1,685	3
1995	89,728	4,369	5	18,263	20	13,894	15
1996	85,011	40	0	18,808	22	18,768	22
1997	69,582	406	1	29,350	42	28,944	42
1998	176,137	1,510	1	33,876	19	32,366	18
1999	190,950	1,815	1	38,022	20	36,207	19
2000		1,879		1,685		194-	
2001		3,117		2,244		873-	
2002		2,666		2,330		336-	
2003		1,402		4,371		2,969	
2004	102,135	296	0	6,885	7	6,589	6
2005	131,239		0		0		0
2006	265,830		0		0		0
2007	359,876		0		0		0
2008	356,538		0		0		0
2009	293,807		0		0		0
2010							
2011	276,736		0		0		0
2012	301,709	2,231	1		0	2,231-	1-
2013	158,425		0		0		0
2014	745,781		0		0		0
2015	46,576		0	182,244	391	182,244	391
2016	4,235,134		0		0		0
2017	18,016		0		0		0
2018	888,430		0		0		0
2019	750,496		0		0		0
2020	283,299		0		0		0

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 281.00 METERS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
2021							
2022							
2023							
2024		1,151,426		69,621		1,081,805-	
TOTAL	10,613,789	1,219,674	11	530,703	5	688,971-	6-
THREE-YEAR MOVING AVERAGES							
80-82	34,347	922	3	12,154	35	11,232	33
81-83	39,173	1,223	3	12,383	32	11,160	28
82-84	52,304	1,167	2	13,066	25	11,898	23
83-85	52,225	1,030	2	11,245	22	10,216	20
84-86	49,100	827	2	9,161	19	8,334	17
85-87	47,239	943	2	6,712	14	5,769	12
86-88	51,258	372	1	6,366	12	5,994	12
87-89	44,303	354	1	6,171	14	5,817	13
88-90	50,824	622	1	5,611	11	4,989	10
89-91	63,873	1,407	2	3,510	5	2,103	3
90-92	78,485	3,220	4	835	1	2,385-	3-
91-93	69,347	6,869	10	1,151	2	5,718-	8-
92-94	61,083	12,442	20	7,726	13	4,716-	8-
93-95	66,848	11,749	18	13,534	20	1,785	3
94-96	78,389	7,484	10	18,933	24	11,449	15
95-97	81,440	1,605	2	22,141	27	20,535	25
96-98	110,243	652	1	27,345	25	26,693	24
97-99	145,556	1,244	1	33,750	23	32,506	22
98-00	122,362	1,735	1	24,528	20	22,793	19
99-01	63,650	2,270	4	13,984	22	11,713	18
00-02		2,554		2,086		468-	
01-03		2,395		2,981		586	
02-04	34,045	1,455	4	4,528	13	3,074	9
03-05	77,791	566	1	3,752	5	3,186	4
04-06	166,401	99	0	2,295	1	2,196	1
05-07	252,315		0		0		0
06-08	327,415		0		0		0
07-09	336,740		0		0		0
08-10	216,781		0		0		0
09-11	190,181		0		0		0
10-12	192,815	744	0		0	744-	0
11-13	245,623	744	0		0	744-	0

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 281.00 METERS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
12-14	401,972	744	0		0	744-	0
13-15	316,927		0	60,748	19	60,748	19
14-16	1,675,830		0	60,748	4	60,748	4
15-17	1,433,242		0	60,748	4	60,748	4
16-18	1,713,860		0		0		0
17-19	552,314		0		0		0
18-20	640,742		0		0		0
19-21	344,598		0		0		0
20-22	94,433		0		0		0
21-23							
22-24		383,809		23,207		360,602-	
FIVE-YEAR AVERAGE							
20-24	56,660	230,285	406	13,924	25	216,361-	382-

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 282.00 METER INSTALLATIONS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
1980	23,536	564	2	2,805	12	2,241	10
1981	14,897	6	0	3,134	21	3,128	21
1982	17,381	8	0	1,084	6	1,076	6
1983	31,237	2-	0	2,050	7	2,052	7
1984	33,973	68	0	2,486	7	2,418	7
1985	20,584		0	2,846	14	2,846	14
1986	17,419		0	1,618	9	1,618	9
1987	32,090	10	0	3,044	9	3,034	9
1988	20,095		0	2,580	13	2,580	13
1989	18,351		0	1,204	7	1,204	7
1990	57,234		0	1,969	3	1,969	3
1991	62,824	36	0	1,128	2	1,092	2
1992	52,537		0	33	0	33	0
1993	36,728	738	2	292	1	446-	1-
1994	32,931	6	0	88	0	83	0
1995	48,587	283	1	531	1	248	1
1996	25,275		0		0		0
1997	38,151		0		0		0
1998	80,727		0		0		0
1999	57,346		0		0		0
2000							
2001							
2002							
2003							
2004	44,579		0		0		0
2005	57,269		0		0		0
2006	199,280		0		0		0
2007							
2008							
2009							
2010							
2011	287,216		0		0		0
2012	572,833		0		0		0
2013	162,528		0		0		0
2014	588,776		0		0		0
2015							
2016							
2017							
2018	56,439		0		0		0
2019	1,856,239		0		0		0
2020	453,888	96,154	21		0	96,154-	21-

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 282.00 METER INSTALLATIONS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
2021							
2022							
2023							
2024							
TOTAL	5,000,951	97,873	2	26,893	1	70,980-	1-
THREE-YEAR MOVING AVERAGES							
80-82	18,605	193	1	2,341	13	2,148	12
81-83	21,172	4	0	2,089	10	2,085	10
82-84	27,530	25	0	1,873	7	1,849	7
83-85	28,598	22	0	2,461	9	2,439	9
84-86	23,992	23	0	2,317	10	2,294	10
85-87	23,365	3	0	2,503	11	2,499	11
86-88	23,202	3	0	2,414	10	2,411	10
87-89	23,512	3	0	2,276	10	2,273	10
88-90	31,893		0	1,918	6	1,918	6
89-91	46,136	12	0	1,434	3	1,422	3
90-92	57,532	12	0	1,043	2	1,031	2
91-93	50,697	258	1	484	1	226	0
92-94	40,732	248	1	138	0	110-	0
93-95	39,416	342	1	304	1	39-	0
94-96	35,598	96	0	207	1	110	0
95-97	37,338	94	0	177	0	83	0
96-98	48,051		0		0		0
97-99	58,741		0		0		0
98-00	46,024		0		0		0
99-01	19,115		0		0		0
00-02							
01-03							
02-04	14,860		0		0		0
03-05	33,949		0		0		0
04-06	100,376		0		0		0
05-07	85,516		0		0		0
06-08	66,427		0		0		0
07-09							
08-10							
09-11	95,739		0		0		0
10-12	286,683		0		0		0
11-13	340,859		0		0		0

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 282.00 METER INSTALLATIONS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	COST OF REMOVAL PCT	GROSS SALVAGE AMOUNT	GROSS SALVAGE PCT	NET SALVAGE AMOUNT	NET SALVAGE PCT
THREE-YEAR MOVING AVERAGES							
12-14	441,379		0		0		0
13-15	250,435		0		0		0
14-16	196,259		0		0		0
15-17							
16-18	18,813		0		0		0
17-19	637,559		0		0		0
18-20	788,855	32,051	4		0	32,051-	4-
19-21	770,042	32,051	4		0	32,051-	4-
20-22	151,296	32,051	21		0	32,051-	21-
21-23							
22-24							
FIVE-YEAR AVERAGE							
20-24	90,778	19,231	21		0	19,231-	21-

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 283.00 HOUSE REGULATORS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
1980	4,614	29	1	974	21	946	20
1981	4,743	455	10	3,040	64	2,585	54
1982	3,216	435	14	2,072	64	1,637	51
1983	2,492		0	1,035	42	1,035	42
1984	1,898	28	1	700	37	672	35
1985	4,371	41	1	2,873	66	2,832	65
1986	5,467	155	3	3,675	67	3,520	64
1987	6,521	39	1	2,449	38	2,409	37
1988	5,541	67	1	2,707	49	2,640	48
1989	9,307	885	10	2,755	30	1,870	20
1990	15,816	1,006	6	198	1	808-	5-
1991	12,354	683	6	913	7	230	2
1992	13,129	928	7	6,142	47	5,214	40
1993	19,067	1,135	6	4,544	24	3,409	18
1994	17,868	437	2	4,374	24	3,937	22
1995	11,977	752	6	5,395	45	4,642	39
1996	16,188		0	9,988	62	9,988	62
1997	16,522	272	2	5,557	34	5,285	32
1998	20,252		0	7,232	36	7,232	36
1999	5,002	1,294	26	1,486	30	191	4
2000		1,169				1,169-	
2001		843				843-	
2002		3,303				3,303-	
2003		8,199				8,199-	
2004	38,322	2,049	5		0	2,049-	5-
2005	13,807		0		0		0
2006	29,210		0		0		0
2007							
2008							
2009	69,799		0		0		0
2010							
2011							
2012							
2013							
2014							
2015	98,345		0	34,713	35	34,713	35
2016	123,620		0		0		0
2017	65,283		0		0		0
2018	11,900		0		0		0
2019	9,039		0		0		0
2020	587		0		0		0

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 283.00 HOUSE REGULATORS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
2021							
2022							
2023							
2024		861		52		809-	
TOTAL	656,255	25,066	4	102,871	16	77,805	12
THREE-YEAR MOVING AVERAGES							
80-82	4,191	306	7	2,029	48	1,722	41
81-83	3,483	297	9	2,049	59	1,752	50
82-84	2,535	154	6	1,269	50	1,115	44
83-85	2,920	23	1	1,536	53	1,513	52
84-86	3,912	75	2	2,416	62	2,341	60
85-87	5,453	79	1	2,999	55	2,920	54
86-88	5,843	87	1	2,943	50	2,856	49
87-89	7,123	330	5	2,637	37	2,306	32
88-90	10,222	653	6	1,886	18	1,234	12
89-91	12,492	858	7	1,289	10	430	3
90-92	13,766	872	6	2,418	18	1,545	11
91-93	14,850	915	6	3,866	26	2,951	20
92-94	16,688	833	5	5,020	30	4,187	25
93-95	16,304	775	5	4,771	29	3,996	25
94-96	15,344	397	3	6,586	43	6,189	40
95-97	14,896	341	2	6,980	47	6,638	45
96-98	17,654	91	1	7,592	43	7,502	42
97-99	13,925	522	4	4,758	34	4,236	30
98-00	8,418	821	10	2,906	35	2,084	25
99-01	1,667	1,102	66	495	30	607-	36-
00-02		1,772				1,772-	
01-03		4,115				4,115-	
02-04	12,774	4,517	35		0	4,517-	35-
03-05	17,376	3,416	20		0	3,416-	20-
04-06	27,113	683	3		0	683-	3-
05-07	14,339		0		0		0
06-08	9,737		0		0		0
07-09	23,266		0		0		0
08-10	23,266		0		0		0
09-11	23,266		0		0		0
10-12							
11-13							

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 283.00 HOUSE REGULATORS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	COST OF REMOVAL PCT	GROSS SALVAGE AMOUNT	GROSS SALVAGE PCT	NET SALVAGE AMOUNT	NET SALVAGE PCT
THREE-YEAR MOVING AVERAGES							
12-14							
13-15	32,782	0		11,571	35	11,571	35
14-16	73,988	0		11,571	16	11,571	16
15-17	95,749	0		11,571	12	11,571	12
16-18	66,934	0			0		0
17-19	28,741	0			0		0
18-20	7,175	0			0		0
19-21	3,208	0			0		0
20-22	196	0			0		0
21-23							
22-24		287		17		270-	
FIVE-YEAR AVERAGE							
20-24	117	172	147	10	9	162-	138-

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 284.00 HOUSE REGULATOR INSTALLATIONS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
1980	978	122	12	154	16	32	3
1981	1,881	1	0	134	7	133	7
1982	1,242		0	191	15	191	15
1983	885		0	109	12	109	12
1984	1,356	16	1	63	5	48	4
1985	1,373		0	132	10	132	10
1986	1,389		0	104	7	104	7
1987	1,590	1	0	213	13	212	13
1988	1,863		0	163	9	163	9
1989	4,144		0	223	5	223	5
1990	4,359		0	255	6	255	6
1991	3,797		0	73	2	73	2
1992	3,957		0	4	0	4	0
1993	8,943	499	6	42	0	457-	5-
1994	6,023	26	0	19	0	7-	0
1995	3,549	36	1	46	1	11	0
1996	4,700		0		0		0
1997	14,562		0		0		0
1998	10,239		0		0		0
1999	2,701		0		0		0
2000							
2001							
2002							
2003							
2004	34,397		0		0		0
2005	17,871		0		0		0
2006	35,211		0		0		0
2007							
2008							
2009							
2010							
2011							
2012							
2013							
2014							
2015							
2016	261		0		0		0
2017							
2018							
2019	4,588		0		0		0
2020	171		0		0		0

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 284.00 HOUSE REGULATOR INSTALLATIONS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
2021							
2022							
2023							
2024							
TOTAL	172,028	699	0	1,925	1	1,226	1
THREE-YEAR MOVING AVERAGES							
80-82	1,367	41	3	159	12	119	9
81-83	1,336		0	144	11	144	11
82-84	1,161	5	0	121	10	116	10
83-85	1,205	5	0	102	8	96	8
84-86	1,373	5	0	100	7	95	7
85-87	1,450		0	150	10	149	10
86-88	1,614		0	160	10	160	10
87-89	2,532		0	200	8	200	8
88-90	3,455		0	214	6	214	6
89-91	4,100		0	184	4	184	4
90-92	4,037		0	111	3	111	3
91-93	5,565	166	3	40	1	127-	2-
92-94	6,308	175	3	22	0	153-	2-
93-95	6,172	187	3	36	1	151-	2-
94-96	4,757	20	0	22	0	1	0
95-97	7,604	12	0	15	0	4	0
96-98	9,833		0		0		0
97-99	9,167		0		0		0
98-00	4,313		0		0		0
99-01	900		0		0		0
00-02							
01-03							
02-04	11,466		0		0		0
03-05	17,423		0		0		0
04-06	29,160		0		0		0
05-07	17,694		0		0		0
06-08	11,737		0		0		0
07-09							
08-10							
09-11							
10-12							
11-13							

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 284.00 HOUSE REGULATOR INSTALLATIONS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	COST OF REMOVAL PCT	GROSS SALVAGE AMOUNT	GROSS SALVAGE PCT	NET SALVAGE AMOUNT	NET SALVAGE PCT
THREE-YEAR MOVING AVERAGES							
12-14							
13-15							
14-16	87	0		0		0	
15-17	87	0		0		0	
16-18	87	0		0		0	
17-19	1,529	0		0		0	
18-20	1,586	0		0		0	
19-21	1,586	0		0		0	
20-22	57	0		0		0	
21-23							
22-24							
FIVE-YEAR AVERAGE							
20-24	34	0		0		0	

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 285.00 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
1980	452		0	18	4	18	4
1981	661	226	34	39	6	187-	28-
1982							
1983	3,542		0		0		0
1984		569		290		280-	
1985							
1986	4,743	622	13	330	7	292-	6-
1987	1,602	95	6	328	21	233	15
1988	7,866	1,009	13	470	6	539-	7-
1989	2,149	799	37	356	17	443-	21-
1990	22,374	2,351	11	22	0	2,329-	10-
1991	23,687	1,921	8	389	2	1,532-	6-
1992	3,001	161	5	8	0	154-	5-
1993	6,490	1,252	19	36	1	1,216-	19-
1994	1,746		0	7	0	7	0
1995	4,370	1,800	41	52	1	1,748-	40-
1996	1,367	501	37		0	501-	37-
1997							
1998	5,041	207	4		0	207-	4-
1999	6,340	214	3		0	214-	3-
2000							
2001							
2002							
2003							
2004							
2005							
2006							
2007							
2008							
2009							
2010							
2011							
2012							
2013							
2014							
2015							
2016							
2017							
2018							
2019							
2020							

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 285.00 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	COST OF REMOVAL PCT	GROSS SALVAGE AMOUNT	GROSS SALVAGE PCT	NET SALVAGE AMOUNT	NET SALVAGE PCT
2021							
2022							
2023							
2024							
TOTAL	95,431	11,728	12	2,345	2	9,383-	10-
THREE-YEAR MOVING AVERAGES							
80-82	371	75	20	19	5	56-	15-
81-83	1,401	75	5	13	1	62-	4-
82-84	1,181	190	16	97	8	93-	8-
83-85	1,181	190	16	97	8	93-	8-
84-86	1,581	397	25	207	13	190-	12-
85-87	2,115	239	11	220	10	20-	1-
86-88	4,737	576	12	376	8	199-	4-
87-89	3,872	634	16	385	10	250-	6-
88-90	10,796	1,386	13	283	3	1,104-	10-
89-91	16,070	1,690	11	256	2	1,435-	9-
90-92	16,354	1,478	9	140	1	1,338-	8-
91-93	11,059	1,111	10	144	1	967-	9-
92-94	3,746	471	13	17	0	454-	12-
93-95	4,202	1,017	24	32	1	986-	23-
94-96	2,494	767	31	20	1	747-	30-
95-97	1,913	767	40	17	1	750-	39-
96-98	2,136	236	11		0	236-	11-
97-99	3,794	141	4		0	141-	4-
98-00	3,794	141	4		0	141-	4-
99-01	2,113	72	3		0	72-	3-
00-02							
01-03							
02-04							
03-05							
04-06							
05-07							
06-08							
07-09							
08-10							
09-11							
10-12							
11-13							

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 285.00 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	COST OF REMOVAL PCT	GROSS SALVAGE AMOUNT	GROSS SALVAGE PCT	NET SALVAGE AMOUNT	NET SALVAGE PCT
THREE-YEAR MOVING AVERAGES							
12-14							
13-15							
14-16							
15-17							
16-18							
17-19							
18-20							
19-21							
20-22							
21-23							
22-24							
FIVE-YEAR AVERAGE							
20-24							

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 292.10 TRANSPORTATION EQUIPMENT - TRAILERS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	COST OF REMOVAL PCT	GROSS SALVAGE AMOUNT	GROSS SALVAGE PCT	NET SALVAGE AMOUNT	NET SALVAGE PCT
1980	6,372		0		0		0
1981							
1982	4,767		0	1,545	32	1,545	32
1983							
1984							
1985							
1986	3,073	91	3	1,850	60	1,759	57
1987							
1988							
1989	1,328		0		0		0
1990							
1991							
1992				67		67	
1993							
1994							
1995							
1996							
1997	19,604		0		0		0
1998							
1999							
2000							
2001							
2002							
2003							
2004							
2005							
2006							
2007							
2008							
2009							
2010							
2011							
2012							
2013	30,313		0		0		0
2014							
2015							
2016							
2017							
2018	23,171		0		0		0
2019							
2020							

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 292.10 TRANSPORTATION EQUIPMENT - TRAILERS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	COST OF REMOVAL PCT	GROSS SALVAGE AMOUNT	GROSS SALVAGE PCT	NET SALVAGE AMOUNT	NET SALVAGE PCT
2021							
2022				5,457		5,457	
2023							
2024							
TOTAL	88,627	91	0	8,919	10	8,828	10
THREE-YEAR MOVING AVERAGES							
80-82	3,713		0	515	14	515	14
81-83	1,589		0	515	32	515	32
82-84	1,589		0	515	32	515	32
83-85							
84-86	1,024	30	3	617	60	586	57
85-87	1,024	30	3	617	60	586	57
86-88	1,024	30	3	617	60	586	57
87-89	443		0		0		0
88-90	443		0		0		0
89-91	443		0		0		0
90-92				22		22	
91-93				22		22	
92-94				22		22	
93-95							
94-96							
95-97	6,535		0		0		0
96-98	6,535		0		0		0
97-99	6,535		0		0		0
98-00							
99-01							
00-02							
01-03							
02-04							
03-05							
04-06							
05-07							
06-08							
07-09							
08-10							
09-11							
10-12							
11-13	10,104		0		0		0

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 292.10 TRANSPORTATION EQUIPMENT - TRAILERS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	COST OF REMOVAL PCT	GROSS SALVAGE AMOUNT	GROSS SALVAGE PCT	NET SALVAGE AMOUNT	NET SALVAGE PCT
THREE-YEAR MOVING AVERAGES							
12-14	10,104	0		0		0	
13-15	10,104	0		0		0	
14-16							
15-17							
16-18	7,724	0		0		0	
17-19	7,724	0		0		0	
18-20	7,724	0		0		0	
19-21							
20-22				1,819		1,819	
21-23				1,819		1,819	
22-24				1,819		1,819	
FIVE-YEAR AVERAGE							
20-24				1,091		1,091	

PART IX. DETAILED DEPRECIATION CALCULATIONS

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 274.10 RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 70-R4						
NET SALVAGE PERCENT.. 0						
1910	10,635.46	10,635	10,635			
1919	1,621.43	1,613	1,448	173	0.37	173
1924	8,823.50	8,653	7,766	1,058	1.35	784
1925	678.47	663	595	83	1.56	53
1933	5,568.76	5,294	4,752	817	3.45	237
1952	1,342.39	1,165	1,046	296	9.25	32
1953	1,826.75	1,574	1,413	414	9.68	43
1954	25.70	22	20	6	10.13	1
1955	27,640.73	23,455	21,051	6,590	10.60	622
1956	180.45	152	136	44	11.10	4
1957	15,131.04	12,621	11,328	3,803	11.61	328
1958	308.05	255	229	79	12.15	7
1959	1,946.26	1,593	1,430	516	12.72	41
1960	1,108.84	898	806	303	13.30	23
1961	7,019.04	5,624	5,048	1,971	13.91	142
1962	19,073.27	15,112	13,563	5,510	14.54	379
1963	1,814.75	1,421	1,275	540	15.18	36
1964	1,991.19	1,541	1,383	608	15.83	38
1965	134,989.37	103,171	92,599	42,390	16.50	2,569
1966	1,070.30	808	725	345	17.18	20
1967	12,722.90	9,475	8,504	4,219	17.87	236
1968	5,087.66	3,738	3,355	1,733	18.57	93
1969	3,480.98	2,522	2,264	1,217	19.28	63
1970	9,619.27	6,871	6,167	3,452	20.00	173
1971	17,951.13	12,638	11,343	6,608	20.72	319
1972	35,609.14	24,692	22,162	13,447	21.46	627
1973	6,934.62	4,734	4,249	2,686	22.21	121
1974	16,960.64	11,393	10,226	6,735	22.98	293
1975	28,419.62	18,777	16,853	11,567	23.75	487
1976	8,582.46	5,575	5,004	3,578	24.53	146
1977	22,107.90	14,111	12,665	9,443	25.32	373
1978	3,731.10	2,338	2,098	1,633	26.13	62
1979	941.95	579	520	422	26.94	16
1980	15,885.32	9,583	8,601	7,284	27.77	262
1981	5,112.34	3,024	2,714	2,398	28.60	84
1982	44,454.50	25,752	23,113	21,342	29.45	725
1983	6,959.60	3,947	3,543	3,417	30.30	113
1984	3,024.89	1,678	1,506	1,519	31.17	49
1985	10,039.09	5,444	4,886	5,153	32.04	161
1986	24,359.25	12,903	11,581	12,778	32.92	388
1987	21,569.99	11,152	10,009	11,561	33.81	342

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 274.10 RIGHTS OF WAY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 70-R4						
NET SALVAGE PERCENT.. 0						
1988	15,344.70	7,736	6,943	8,402	34.71	242
1989	69,914.21	34,348	30,828	39,086	35.61	1,098
1990	37,094.33	17,736	15,919	21,175	36.53	580
1991	29,490.94	13,713	12,308	17,183	37.45	459
1992	180,997.49	81,786	73,405	107,592	38.37	2,804
1993	9,764.91	4,281	3,842	5,923	39.31	151
1994	105,098.80	44,667	40,090	65,009	40.25	1,615
1995	909.60	374	336	574	41.19	14
1996	25,191.12	10,026	8,999	16,192	42.14	384
2005	2,674.77	731	656	2,019	50.86	40
2006	51,359.23	13,317	11,952	39,407	51.85	760
2008	10,163.32	2,349	2,108	8,055	53.82	150
2012	152.55	27	24	129	57.78	2
2019	1,065.96	80	72	994	64.76	15
2020	4,902,544.72	296,947	266,517	4,636,028	65.76	70,499
2021	466,304.31	21,651	19,432	446,872	66.75	6,695
2022	139,503.11	4,484	4,025	135,478	67.75	2,000
2023	673,327.87	12,026	10,794	662,534	68.75	9,637
	7,267,252.04	953,475	856,861	6,410,391		107,810

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 59.5 1.48

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 275.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R2						
NET SALVAGE PERCENT.. -5						
1927	2,450.16	2,514	1,647	926	1.26	735
1935	106.66	105	69	43	3.46	12
1953	181.28	160	105	85	8.81	10
1971	40,333.78	29,984	19,644	22,706	16.06	1,414
1972	209.34	154	101	119	16.56	7
1974	3,422.20	2,443	1,601	1,992	17.60	113
1980	22,083.46	14,355	9,405	13,783	20.95	658
1981	853.89	545	357	540	21.55	25
1999	3,684.93	1,489	976	2,893	33.83	86
2000	26,153.29	10,190	6,676	20,785	34.59	601
2003	3,874.50	1,337	876	3,192	36.92	86
2012	13,126.97	2,691	1,763	12,020	44.26	272
2015	221,720.41	34,625	22,684	210,122	46.82	4,488
2016	164,675.32	23,012	15,076	157,833	47.68	3,310
2018	1,251,057.42	133,266	87,309	1,226,301	49.42	24,814
2019	1,015,870.92	91,146	59,714	1,006,950	50.30	20,019
2020	1,526,502.56	111,028	72,740	1,530,088	51.19	29,890
2022	5,410,125.33	209,672	137,365	5,543,267	52.97	104,649
2023	215,097.48	4,641	3,041	222,812	53.87	4,136
	9,921,529.90	673,357	441,149	9,976,458		195,325

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 51.1 1.97

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 276.10 MAINS - CAST IRON, COPPER AND ALL VALVES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R3						
NET SALVAGE PERCENT.. -25						
1854	1,205.00	1,506	1,506			
1855	1,306.00	1,632	1,632			
1856	1,256.00	1,570	1,570			
1857	1,206.00	1,508	1,508			
1858	1,206.00	1,508	1,508			
1859	952.00	1,190	1,190			
1860	703.00	879	879			
1861	639.00	799	799			
1909	561.76	702	702			
1914	45,824.51	57,281	57,281			
1915	16,724.66	20,906	20,906			
1916	30.28	38	38			
1917	575.30	719	719			
1923	57.00	71	71			
1924	890.00	1,112	1,112			
1926	17.80	22	22			
1927	66.11	83	83			
1928	7,396.65	9,246	9,246			
1929	4,983.58	6,229	6,229			
1930	4,506.59	5,633	5,633			
1931	7,190.62	8,988	8,988			
1932	557.17	696	696			
1933	2,127.30	2,659	2,659			
1934	3,327.66	4,160	4,160			
1935	2,995.15	3,744	3,744			
1936	7,459.79	9,325	9,325			
1937	12,852.99	16,066	16,066			
1938	3,691.10	4,614	4,614			
1939	3,778.66	4,723	4,723			
1940	5,436.51	6,779	6,239	557	0.12	557
1941	5,180.07	6,431	5,919	556	0.34	556
1942	2,010.39	2,485	2,287	226	0.55	226
1943	566.84	697	642	67	0.78	67
1944	5,063.39	6,201	5,707	622	1.01	616
1945	5,027.47	6,128	5,640	644	1.24	519
1946	5,911.19	7,170	6,599	790	1.48	534
1947	25,367.29	30,612	28,175	3,534	1.73	2,043
1948	34,209.41	41,068	37,799	4,963	1.98	2,507
1949	60,303.07	72,017	66,285	9,094	2.23	4,078
1950	69,243.01	82,261	75,714	10,840	2.48	4,371
1951	96,865.84	114,447	105,338	15,744	2.74	5,746

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 276.10 MAINS - CAST IRON, COPPER AND ALL VALVES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R3						
NET SALVAGE PERCENT.. -25						
1952	32,662.30	38,386	35,331	5,497	2.99	1,838
1953	77,161.12	90,182	83,004	13,447	3.25	4,138
1954	76,137.32	88,491	81,448	13,724	3.51	3,910
1955	93,363.96	107,905	99,316	17,389	3.77	4,612
1956	48,601.98	55,868	51,421	9,331	4.02	2,321
1957	83,729.66	95,703	88,086	16,576	4.28	3,873
1958	55,256.41	62,799	57,801	11,270	4.54	2,482
1959	54,398.31	61,470	56,577	11,421	4.80	2,379
1960	22,472.62	25,242	23,233	4,858	5.07	958
1961	31,476.86	35,144	32,347	6,999	5.34	1,311
1962	13,149.53	14,589	13,428	3,009	5.62	535
1963	39,074.41	43,070	39,642	9,201	5.91	1,557
1964	4,293.31	4,701	4,327	1,040	6.20	168
1965	6,812.15	7,407	6,817	1,698	6.51	261
1966	7,539.17	8,137	7,489	1,935	6.83	283
1967	1,665.41	1,784	1,642	440	7.16	61
1968	16,940.98	17,996	16,564	4,612	7.51	614
1969	5,624.67	5,923	5,452	1,579	7.88	200
1970	7,529.62	7,857	7,232	2,180	8.26	264
1971	11,179.85	11,554	10,634	3,341	8.66	386
1972	12,910.06	13,207	12,156	3,982	9.08	439
1973	16,552.71	16,751	15,418	5,273	9.52	554
1974	28,422.68	28,444	26,180	9,348	9.97	938
1975	25,251.13	24,967	22,980	8,584	10.45	821
1976	2,592.82	2,532	2,330	911	10.94	83
1977	22,324.89	21,516	19,803	8,103	11.45	708
1978	56,977.64	54,157	49,846	21,376	11.98	1,784
1979	49,927.84	46,770	43,047	19,363	12.53	1,545
1980	74,471.63	68,700	63,232	29,858	13.10	2,279
1981	54,495.67	49,468	45,531	22,589	13.69	1,650
1982	39,631.38	35,381	32,565	16,974	14.29	1,188
1983	26,032.21	22,837	21,019	11,521	14.91	773
1984	38,499.45	33,158	30,519	17,605	15.55	1,132
1985	29,763.41	25,150	23,148	14,056	16.20	868
1986	48,270.72	39,980	36,798	23,540	16.87	1,395
1987	13,296.61	10,787	9,928	6,693	17.55	381
1988	40,038.59	31,791	29,261	20,787	18.24	1,140
1989	19,529.91	15,160	13,953	10,459	18.95	552
1990	87,769.75	66,551	61,254	48,458	19.67	2,464
1991	34,654.48	25,636	23,596	19,722	20.41	966
1992	12,115.32	8,738	8,043	7,101	21.15	336

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 276.10 MAINS - CAST IRON, COPPER AND ALL VALVES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R3						
NET SALVAGE PERCENT.. -25						
1993	16,723.67	11,744	10,809	10,096	21.91	461
1994	9,537.02	6,514	5,996	5,925	22.68	261
1995	11,765.39	7,806	7,185	7,522	23.46	321
1996	16,194.08	10,425	9,595	10,648	24.25	439
1997	13,396.24	8,356	7,691	9,054	25.05	361
1998	58,388.34	35,223	32,419	40,566	25.87	1,568
1999	16,097.65	9,381	8,634	11,488	26.69	430
	2,013,973.09	2,059,243	1,908,680	608,786		79,808

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 7.6 3.96

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 276.20 MAINS - STEEL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R2.5						
NET SALVAGE PERCENT.. -25						
1917	1.11	1	1			
1919	16.41	19	20	1	4.08	
1921	107.41	125	133	1	4.56	
1922	0.82	1	1			
1923	77.07	89	95	1	5.01	
1924	242.71	279	297	6	5.23	1
1925	93.37	107	114	3	5.44	1
1926	173.18	198	211	5	5.66	1
1927	5,586.77	6,352	6,755	228	5.88	39
1928	5,380.65	6,095	6,482	244	6.10	40
1929	2,101.07	2,371	2,521	105	6.32	17
1930	6.81	8	9			
1931	4,473.46	5,009	5,327	265	6.77	39
1933	106.31	118	125	8	7.22	1
1935	271.64	299	318	22	7.69	3
1941	6.97	7	7	2	9.18	
1942	1,756.71	1,877	1,996	200	9.44	21
1943	82.92	88	94	10	9.72	1
1944	172.34	182	194	21	9.99	2
1945	16.60	17	18	3	10.28	
1946	2,090.50	2,188	2,327	286	10.57	27
1947	1,046.88	1,090	1,159	150	10.88	14
1948	171.67	178	189	26	11.19	2
1949	118.78	122	130	18	11.51	2
1950	2,877.37	2,941	3,128	469	11.85	40
1951	786.84	799	850	134	12.20	11
1952	1,263.38	1,274	1,355	224	12.55	18
1953	32,621.89	32,672	34,745	6,032	12.92	467
1954	10,699.82	10,636	11,311	2,064	13.31	155
1955	16,941.01	16,713	17,773	3,403	13.70	248
1956	43,692.61	42,760	45,473	9,143	14.11	648
1957	48,046.03	46,632	49,590	10,468	14.53	720
1958	233,106.33	224,275	238,504	52,879	14.97	3,532
1959	155,754.55	148,506	157,928	36,765	15.42	2,384
1960	308,320.53	291,243	309,720	75,681	15.88	4,766
1961	185,344.19	173,369	184,368	47,312	16.36	2,892
1962	38,212.64	35,391	37,636	10,130	16.84	602
1963	368,873.45	338,017	359,462	101,630	17.35	5,858
1964	278,634.06	252,592	268,617	79,676	17.86	4,461
1965	499,601.50	447,818	476,229	148,273	18.39	8,063
1966	353,987.81	313,620	333,517	108,968	18.93	5,756

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 276.20 MAINS - STEEL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2024

SURVIVOR CURVE.. IOWA 65-R2.5
NET SALVAGE PERCENT.. -25

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
1967	283,853.69	248,425	264,186	90,631	19.49	4,650
1968	581,103.28	502,320	534,189	192,190	20.05	9,586
1969	588,739.40	502,357	534,228	201,696	20.63	9,777
1970	485,398.63	408,669	434,596	172,152	21.22	8,113
1971	367,779.50	305,399	324,774	134,950	21.82	6,185
1972	507,923.66	415,812	442,192	192,713	22.43	8,592
1973	228,892.76	184,611	196,323	89,793	23.06	3,894
1974	361,482.62	287,171	305,390	146,463	23.69	6,182
1975	365,750.14	286,058	304,206	152,982	24.33	6,288
1976	236,629.03	182,068	193,619	102,167	24.99	4,088
1977	229,947.93	174,007	185,046	102,389	25.65	3,992
1978	617,937.38	459,653	488,815	283,607	26.32	10,775
1979	1,181,614.94	863,258	918,026	558,993	27.01	20,696
1980	2,141,669.04	1,536,246	1,633,710	1,043,376	27.70	37,667
1981	1,205,311.82	848,359	902,181	604,459	28.40	21,284
1982	1,459,572.97	1,007,379	1,071,290	753,176	29.11	25,873
1983	1,598,521.38	1,081,160	1,149,752	848,400	29.83	28,441
1984	794,528.71	526,375	559,770	433,391	30.55	14,186
1985	1,622,801.54	1,052,326	1,119,089	909,413	31.28	29,073
1986	1,933,466.11	1,225,890	1,303,664	1,113,169	32.03	34,754
1987	3,516,805.73	2,179,760	2,318,050	2,077,957	32.77	63,410
1988	4,800,908.22	2,905,450	3,089,780	2,911,355	33.53	86,828
1989	4,694,177.60	2,771,384	2,947,208	2,920,514	34.30	85,146
1990	8,867,328.49	5,103,813	5,427,613	5,656,548	35.07	161,293
1991	4,760,972.66	2,668,882	2,838,203	3,113,013	35.85	86,834
1992	2,390,768.29	1,304,343	1,387,094	1,601,366	36.63	43,717
1993	1,093,577.00	579,801	616,585	750,386	37.43	20,048
1994	99,800.92	51,379	54,639	70,112	38.23	1,834
1995	67,159.85	33,541	35,669	48,281	39.03	1,237
1996	233,987.39	113,168	120,348	172,136	39.85	4,320
1997	202,144.08	94,619	100,622	152,058	40.66	3,740
1998	672,453.00	304,024	323,312	517,254	41.49	12,467
1999	1,151,125.87	502,064	533,916	904,991	42.32	21,384
2000	176,644.16	74,191	78,898	141,907	43.16	3,288
2001	3,587,622.31	1,448,144	1,540,018	2,944,510	44.01	66,905
2002	2,154,577.29	834,495	887,438	1,805,784	44.86	40,254
2003	1,840,211.76	682,650	725,959	1,574,306	45.71	34,441
2004	1,173,803.98	416,025	442,419	1,024,836	46.57	22,006
2005	3,478,021.36	1,174,484	1,248,997	3,098,530	47.44	65,315
2006	1,348,755.90	432,900	460,364	1,225,581	48.31	25,369
2007	2,119,338.45	644,358	685,238	1,963,935	49.19	39,925

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 276.20 MAINS - STEEL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R2.5						
NET SALVAGE PERCENT.. -25						
2008	4,449,327.02	1,277,457	1,358,503	4,203,156	50.07	83,946
2009	3,424,491.71	924,613	983,273	3,297,342	50.96	64,705
2010	1,090,947.15	275,887	293,390	1,070,294	51.85	20,642
2011	98,676.26	23,246	24,721	98,624	52.75	1,870
2012	649,457.09	141,760	150,754	661,067	53.65	12,322
2013	216,670.78	43,502	46,262	224,576	54.56	4,116
2014	137,232.13	25,151	26,747	144,793	55.47	2,610
2015	604,992.49	100,293	106,656	649,585	56.38	11,522
2016	346,935.58	51,372	54,631	379,038	57.30	6,615
2017	200,424.39	26,133	27,791	222,739	58.22	3,826
2018	2,558,055.85	287,781	306,038	2,891,532	59.15	48,885
2019	430,923.99	40,857	43,449	495,206	60.07	8,244
2020	617,399.38	47,370	50,375	721,374	61.01	11,824
2021	356,995.30	21,009	22,342	423,902	61.94	6,844
2022	445,499.51	18,165	19,317	537,557	62.88	8,549
2023	2,142,580.92	48,610	51,694	2,626,532	63.82	41,155
2024	562,605.19	3,784	4,024	699,232	64.65	10,816
	86,159,189.75	42,180,086	44,856,112	62,842,875		1,573,180

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 39.9 1.83

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 276.30 MAINS - PLASTIC

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 70-R3						
NET SALVAGE PERCENT.. -25						
1901	20,826.61	26,033	26,033			
1965	1,025.37	916	1,095	187	19.95	9
1968	5,637.65	4,849	5,797	1,250	21.83	57
1970	99,388.90	83,167	99,420	24,816	23.14	1,072
1971	167,246.75	137,949	164,908	44,150	23.81	1,854
1972	178,191.43	144,781	173,076	49,663	24.50	2,027
1973	113,480.37	90,804	108,550	33,300	25.19	1,322
1974	56,787.84	44,730	53,472	17,513	25.89	676
1975	64,457.12	49,954	59,717	20,854	26.60	784
1976	27,331.88	20,831	24,902	9,263	27.32	339
1977	7,398.78	5,543	6,626	2,622	28.05	93
1978	58,550.74	43,087	51,508	21,680	28.79	753
1979	97,557.74	70,485	84,260	37,687	29.54	1,276
1980	160,855.16	114,034	136,320	64,749	30.30	2,137
1981	35,093.83	24,403	29,172	14,695	31.06	473
1983	9,187.39	6,134	7,333	4,151	32.61	127
1984	39,970.11	26,123	31,228	18,735	33.40	561
1986	27,456.00	17,160	20,514	13,806	35.00	394
1987	58,286.77	35,586	42,541	30,317	35.81	847
1988	12,010.86	7,159	8,558	6,456	36.62	176
1989	70,434.58	40,940	48,941	39,102	37.45	1,044
1990	58,670.74	33,233	39,728	33,610	38.28	878
1991	170,088.21	93,791	112,121	100,489	39.12	2,569
1992	1,239,596.25	664,950	794,902	754,593	39.96	18,884
1993	2,346,257.23	1,222,576	1,461,505	1,471,317	40.82	36,044
1994	3,709,946.71	1,876,816	2,243,603	2,393,830	41.67	57,447
1995	2,977,565.36	1,460,086	1,745,432	1,976,525	42.54	46,463
1996	3,431,642.51	1,629,430	1,947,871	2,341,682	43.41	53,943
1997	4,125,655.62	1,894,140	2,264,313	2,892,757	44.29	65,314
1998	3,419,423.02	1,516,129	1,812,427	2,461,852	45.17	54,502
1999	2,521,305.53	1,077,858	1,288,505	1,863,127	46.06	40,450
2000	3,221,390.88	1,325,361	1,584,377	2,442,362	46.96	52,009
2001	6,304,610.50	2,492,607	2,979,739	4,901,024	47.86	102,403
2002	10,773,444.14	4,084,347	4,882,554	8,584,251	48.77	176,015
2003	10,008,129.86	3,631,575	4,341,296	8,168,866	49.68	164,430
2004	15,258,239.83	5,288,697	6,322,271	12,750,529	50.59	252,037
2005	10,587,682.79	3,493,935	4,176,757	9,057,846	51.52	175,812
2006	10,951,238.82	3,434,035	4,105,151	9,583,898	52.44	182,759
2007	7,274,266.75	2,158,911	2,580,828	6,512,005	53.38	121,993
2008	11,278,769.64	3,160,029	3,777,595	10,320,867	54.31	190,036
2009	14,919,830.53	3,929,697	4,697,680	13,952,108	55.25	252,527

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 276.30 MAINS - PLASTIC

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 70-R3						
NET SALVAGE PERCENT.. -25						
2010	4,621,522.71	1,138,859	1,361,427	4,415,476	56.20	78,567
2011	2,109,491.39	484,049	578,647	2,058,217	57.15	36,014
2012	3,072,873.25	652,986	780,600	3,060,492	58.10	52,676
2013	1,562,393.07	305,506	365,211	1,587,780	59.05	26,889
2014	1,674,582.01	298,724	357,104	1,736,124	60.01	28,931
2015	1,333,545.89	214,801	256,780	1,410,152	60.98	23,125
2016	2,925,630.94	421,071	503,361	3,153,678	61.94	50,915
2017	722,420.54	91,467	109,342	793,684	62.91	12,616
2018	4,851,535.48	530,212	633,832	5,430,587	63.88	85,012
2019	7,221,344.11	664,093	793,877	8,232,803	64.85	126,951
2020	10,011,696.82	745,496	891,189	11,623,432	65.83	176,567
2021	8,357,341.59	476,055	569,091	9,877,586	66.81	147,846
2022	9,549,606.19	376,851	450,499	11,486,509	67.79	169,443
2023	15,920,915.16	349,663	417,998	19,483,146	68.77	283,309
2024	6,173,189.23	40,820	48,797	7,667,689	69.63	110,120
	205,997,019.18	52,253,524	62,460,381	195,035,893		3,471,517

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 56.2 1.69

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 276.50 MAINS - STEEL FEEDER LINES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R2.5						
NET SALVAGE PERCENT.. -25						
1910	280.88	342	174	177	1.67	106
1917	575.29	680	346	373	3.57	104
1924	2,027.03	2,330	1,186	1,348	5.23	258
1931	545.02	610	311	370	6.77	55
1933	482.94	537	273	331	7.22	46
1941	494.82	531	270	349	9.18	38
1948	682.29	706	359	494	11.19	44
1949	2,599.74	2,674	1,361	1,889	11.51	164
1952	1,994.57	2,012	1,024	1,469	12.55	117
1953	170,840.27	171,103	87,114	126,436	12.92	9,786
1954	10,565.19	10,502	5,347	7,859	13.31	590
1955	1,007,541.89	993,978	506,064	753,363	13.70	54,990
1957	103,172.26	100,136	50,982	77,983	14.53	5,367
1958	50,018.88	48,124	24,501	38,023	14.97	2,540
1959	88,069.57	83,971	42,752	67,335	15.42	4,367
1960	16,566.52	15,649	7,967	12,741	15.88	802
1961	31,546.59	29,508	15,023	24,410	16.36	1,492
1962	378.20	350	178	295	16.84	18
1963	16,583.27	15,196	7,737	12,992	17.35	749
1965	1,413,792.45	1,267,253	645,197	1,122,044	18.39	61,014
1966	52,345.06	46,376	23,611	41,820	18.93	2,209
1967	128,419.36	112,391	57,222	103,302	19.49	5,300
1968	651,844.66	563,471	286,880	527,926	20.05	26,330
1969	201,651.71	172,064	87,603	164,462	20.63	7,972
1970	455,727.98	383,689	195,348	374,312	21.22	17,640
1971	836,967.98	695,008	353,850	692,360	21.82	31,731
1972	686,880.40	562,315	286,292	572,308	22.43	25,515
1973	24,722.66	19,940	10,152	20,751	23.06	900
1974	1,049,318.28	833,605	424,414	887,234	23.69	37,452
1975	597,317.59	467,170	237,850	508,797	24.33	20,912
1976	13,686.47	10,531	5,362	11,746	24.99	470
1977	319,075.14	241,452	122,931	275,913	25.65	10,757
1978	296,531.79	220,575	112,301	258,364	26.32	9,816
1979	168,072.08	122,789	62,516	147,574	27.01	5,464
1980	156,080.03	111,958	57,001	138,099	27.70	4,986
1982	301,205.61	207,888	105,842	270,665	29.11	9,298
1984	85,703.43	56,779	28,908	78,221	30.55	2,560
1985	61,378.46	39,802	20,264	56,459	31.28	1,805
1986	529,998.88	336,039	171,088	491,411	32.03	15,342
1987	287,439.52	178,159	90,706	268,593	32.77	8,196
1988	239,086.71	144,692	73,667	225,191	33.53	6,716

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 276.50 MAINS - STEEL FEEDER LINES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 65-R2.5						
NET SALVAGE PERCENT.. -25						
1989	2,261,032.96	1,334,886	679,631	2,146,660	34.30	62,585
1990	14,556.84	8,379	4,266	13,930	35.07	397
1991	1,496,759.73	839,046	427,184	1,443,766	35.85	40,272
1992	770,488.71	420,359	214,018	749,093	36.63	20,450
1993	305,445.72	161,944	82,451	299,356	37.43	7,998
1994	415,129.62	213,714	108,808	410,104	38.23	10,727
1995	12,077.85	6,032	3,071	12,026	39.03	308
1996	22,620.14	10,940	5,570	22,705	39.85	570
1997	45,640.61	21,363	10,877	46,174	40.66	1,136
1998	49,712.97	22,476	11,443	50,698	41.49	1,222
1999	400,704.65	174,767	88,979	411,902	42.32	9,733
2000	492,386.85	206,802	105,289	510,195	43.16	11,821
2001	37,051.03	14,956	7,615	38,699	44.01	879
2002	133,350.60	51,648	26,296	140,392	44.86	3,130
2003	1,350,008.92	500,803	254,974	1,432,537	45.71	31,340
2004	27,645.95	9,798	4,988	29,569	46.57	635
2005	314,841.66	106,318	54,130	339,422	47.44	7,155
2006	946,855.33	303,905	154,727	1,028,842	48.31	21,297
2007	1,211,129.98	368,229	187,477	1,326,435	49.19	26,966
2008	1,834,179.86	526,616	268,116	2,024,609	50.07	40,436
2009	41,811.51	11,289	5,748	46,516	50.96	913
2010	178,656.06	45,180	23,003	200,317	51.85	3,863
2011	369,503.61	87,046	44,318	417,562	52.75	7,916
2012	2,841,093.97	620,140	315,732	3,235,635	53.65	60,310
2013	95,631.55	19,200	9,775	109,764	54.56	2,012
2014	10,640.75	1,950	993	12,308	55.47	222
2015	789,274.36	130,842	66,616	919,977	56.38	16,317
2016	1,468,527.96	217,452	110,711	1,724,949	57.30	30,104
2017	1,570,745.61	204,806	104,273	1,859,159	58.22	31,933
2018	30,368,576.26	3,416,465	1,739,425	36,221,295	59.15	612,363
2019	15,248,421.08	1,445,741	736,070	18,324,456	60.07	305,052
2020	42,849,064.25	3,287,594	1,673,813	51,887,517	61.01	850,476
2021	34,074,356.28	2,005,276	1,020,947	41,571,998	61.94	671,166
2022	22,372,120.03	912,223	464,440	27,500,710	62.88	437,352
2023	29,970,378.25	679,953	346,185	37,116,788	63.82	581,586
2024	5,001,333.80	33,634	17,124	6,234,543	64.65	96,435
	209,453,966.78	26,694,657	13,591,057	248,226,402		4,401,095

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 56.4 2.10

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 278.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-S0						
NET SALVAGE PERCENT.. -30						
1935	321.98	416	204	215	0.29	215
1947	38.20	44	22	28	4.73	6
1949	3,140.75	3,585	1,759	2,324	5.49	423
1953	6,318.91	6,931	3,401	4,814	7.03	685
1955	3,265.35	3,508	1,721	2,524	7.81	323
1958	172.99	180	88	137	8.99	15
1959	16,126.69	16,590	8,141	12,824	9.39	1,366
1960	777.63	791	388	623	9.78	64
1961	3,025.73	3,044	1,494	2,439	10.18	240
1963	2,407.00	2,365	1,161	1,968	10.99	179
1965	1,628.82	1,562	767	1,350	11.81	114
1966	573.66	543	266	480	12.22	39
1968	2,744.00	2,533	1,243	2,324	13.04	178
1969	2,460.90	2,242	1,100	2,099	13.46	156
1970	4,696.32	4,222	2,072	4,033	13.88	291
1971	98,478.80	87,339	42,860	85,162	14.30	5,955
1972	73,122.65	63,944	31,379	63,680	14.73	4,323
1973	15,242.80	13,140	6,448	13,368	15.16	882
1974	11,105.65	9,436	4,631	9,806	15.59	629
1975	19,958.63	16,709	8,200	17,746	16.02	1,108
1976	5,487.72	4,526	2,221	4,913	16.45	299
1977	6,110.34	4,962	2,435	5,508	16.89	326
1978	22,168.45	17,714	8,693	20,126	17.34	1,161
1979	23,824.80	18,735	9,194	21,778	17.78	1,225
1980	4,393.34	3,398	1,668	4,043	18.23	222
1981	13,256.74	10,080	4,947	12,287	18.68	658
1982	15,274.32	11,415	5,602	14,255	19.13	745
1983	5,748.05	4,219	2,070	5,402	19.59	276
1984	28,980.63	20,888	10,250	27,425	20.05	1,368
1985	32,413.91	22,923	11,249	30,889	20.52	1,505
1986	71,077.64	49,301	24,194	68,207	20.99	3,249
1987	17,871.30	12,153	5,964	17,269	21.46	805
1988	72,188.72	48,090	23,599	70,246	21.94	3,202
1989	130,358.56	84,997	41,711	127,755	22.43	5,696
1990	8,312.92	5,305	2,603	8,204	22.91	358
1991	70,622.58	44,068	21,626	70,183	23.40	2,999
1992	20,720.61	12,630	6,198	20,739	23.90	868
1993	51,130.83	30,429	14,932	51,538	24.40	2,112
1994	26,094.62	15,145	7,432	26,491	24.91	1,063
1995	21,534.86	12,181	5,978	22,017	25.42	866
1997	23,285.48	12,465	6,117	24,154	26.47	913

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 278.00 MEASURING AND REGULATING STATION EQUIPMENT - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-S0						
NET SALVAGE PERCENT.. -30						
1998	36,528.17	18,995	9,321	38,166	27.00	1,414
1999	46,330.76	23,369	11,468	48,762	27.54	1,771
2000	36,043.82	17,618	8,646	38,211	28.08	1,361
2001	58,295.29	27,569	13,529	62,255	28.63	2,174
2002	47,612.00	21,746	10,671	51,225	29.19	1,755
2003	135,076.69	59,470	29,184	146,416	29.76	4,920
2004	79,222.14	33,552	16,465	86,524	30.34	2,852
2005	101,849.42	41,428	20,330	112,074	30.92	3,625
2006	336,505.88	131,045	64,308	373,150	31.52	11,839
2007	367,906.63	136,893	67,178	411,101	32.12	12,799
2008	248,474.61	88,077	43,222	279,795	32.73	8,549
2009	300,571.49	101,073	49,600	341,143	33.36	10,226
2010	4,800.67	1,526	749	5,492	34.00	162
2011	393,131.14	117,659	57,739	453,331	34.64	13,087
2012	272,001.53	76,141	37,365	316,237	35.31	8,956
2013	495,056.62	128,998	63,303	580,271	35.98	16,128
2014	180,134.06	43,348	21,272	212,902	36.67	5,806
2015	1,201,147.97	264,408	129,753	1,431,739	37.38	38,302
2016	992,803.10	197,894	97,113	1,193,531	38.10	31,326
2017	880,285.45	156,401	76,751	1,067,620	38.85	27,481
2018	2,663,163.39	414,692	203,503	3,258,609	39.61	82,267
2019	15,918,464.16	2,119,894	1,040,299	19,653,704	40.39	486,598
2020	23,932,994.80	2,627,173	1,289,238	29,823,655	41.20	723,875
2021	5,341,045.44	456,734	224,134	6,719,225	42.04	159,829
2022	11,204,675.45	679,799	333,599	14,232,479	42.90	331,759
2023	22,148,857.89	761,301	373,595	28,419,920	43.81	648,709
2024	17,454,016.00	186,514	91,528	22,598,693	44.63	506,357
	105,813,458.45	9,618,065	4,719,891	132,837,605		3,191,034

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 41.6 3.02

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 278.10 MEASURING AND REGULATING STATION EQUIPMENT - ELECTRONIC

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 25-S2						
NET SALVAGE PERCENT.. -30						
1976	9,321.74	11,963	12,118			
1986	22,151.26	26,090	27,362	1,435	2.35	611
1987	31,052.72	36,186	37,950	2,419	2.59	934
1988	27,683.04	31,914	33,469	2,519	2.83	890
1994	54,049.86	57,645	60,454	9,811	4.49	2,185
1995	3,799.69	3,989	4,183	757	4.81	157
1996	28,084.62	29,004	30,418	6,092	5.14	1,185
1997	28,631.08	29,047	30,463	6,757	5.49	1,231
1998	10,209.87	10,162	10,657	2,616	5.86	446
2002	4,227.56	3,845	4,032	1,464	7.51	195
2003	15,546.63	13,767	14,438	5,773	7.97	724
2004	11,995.27	10,311	10,814	4,780	8.47	564
2005	45,007.48	37,470	39,296	19,214	8.99	2,137
2006	47,577.71	38,249	40,113	21,738	9.54	2,279
2008	28,347.51	21,020	22,044	14,808	10.74	1,379
2009	14,788.92	10,466	10,976	8,250	11.39	724
2010	3,681.85	2,474	2,595	2,191	12.08	181
2011	9,238.58	5,861	6,147	5,863	12.80	458
2012	24,830.55	14,771	15,491	16,789	13.56	1,238
2014	47,574.92	24,269	25,452	36,395	15.19	2,396
2015	106,041.86	49,352	51,757	86,097	16.05	5,364
2017	56,268.60	20,862	21,879	51,270	17.87	2,869
2018	165,089.02	53,053	55,638	158,978	18.82	8,447
2020	601,162.64	132,544	139,004	642,507	20.76	30,949
2023	605,188.66	39,337	41,254	745,492	23.75	31,389
	2,001,551.64	713,651	748,004	1,854,014		98,932

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 18.7 4.94

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 278.20 MEASURING AND REGULATING STATION EQUIPMENT - DISTRICT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R1						
NET SALVAGE PERCENT.. -25						
1938	1,351.39	1,453	1,689			
1939	1.99	2	2			
1948	1,403.07	1,398	1,754			
1949	1,423.51	1,406	1,779			
1952	15,020.07	14,446	18,775			
1953	8,004.32	7,628	10,005			
1955	4,216.45	3,941	5,271			
1961	4,752.05	4,170	5,727	213	16.39	13
1964	4,478.32	3,793	5,209	389	17.73	22
1965	2,336.22	1,954	2,684	236	18.19	13
1966	6,971.70	5,760	7,911	804	18.65	43
1969	172.23	137	188	27	20.08	1
1970	8,163.68	6,388	8,773	1,432	20.57	70
1971	4,561.64	3,519	4,833	869	21.06	41
1972	1,878.25	1,427	1,960	388	21.56	18
1973	23,703.02	17,740	24,365	5,264	22.07	239
1974	10,564.00	7,784	10,691	2,514	22.58	111
1975	21,000.40	15,225	20,910	5,340	23.10	231
1976	18,501.10	13,195	18,122	5,004	23.62	212
1978	31,926.81	21,993	30,206	9,703	24.69	393
1979	20,187.49	13,654	18,753	6,481	25.24	257
1980	14,438.96	9,585	13,164	4,885	25.79	189
1982	11,678.95	7,456	10,240	4,359	26.91	162
1983	10,848.54	6,785	9,319	4,242	27.48	154
1984	8,617.72	5,278	7,249	3,523	28.05	126
1985	21,620.50	12,957	17,796	9,230	28.63	322
1986	19,391.30	11,362	15,605	8,634	29.22	295
1989	44,358.02	24,175	33,203	22,245	31.02	717
1990	24,859.96	13,204	18,135	12,940	31.63	409
1992	13,666.49	6,874	9,441	7,642	32.87	232
1996	11,583.38	5,157	7,083	7,396	35.41	209
2003	44,747.25	15,224	20,909	35,025	40.03	875
2004	26,197.41	8,514	11,693	21,054	40.70	517
2005	35,716.67	11,064	15,196	29,450	41.37	712
2007	122,792.37	34,215	46,992	106,498	42.74	2,492
2008	163,537.72	43,041	59,113	145,309	43.42	3,347
2009	55,608.83	13,763	18,902	50,609	44.11	1,147
2010	129,637.53	30,052	41,274	120,773	44.80	2,696
2011	59,909.79	12,949	17,785	57,102	45.49	1,255
2012	198,552.91	39,755	54,601	193,590	46.19	4,191
2013	391,818.07	72,217	99,184	390,589	46.89	8,330

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 278.20 MEASURING AND REGULATING STATION EQUIPMENT - DISTRICT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2024

YEAR	ORIGINAL COST	CALCULATED ACCRUED	ALLOC. BOOK RESERVE	FUTURE BOOK ACCRUALS	REM. LIFE	ANNUAL ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)
SURVIVOR CURVE.. IOWA 55-R1						
NET SALVAGE PERCENT.. -25						
2014	128,065.73	21,568	29,622	130,460	47.59	2,741
2015	213,163.96	32,508	44,647	221,808	48.29	4,593
2019	188,129.24	16,461	22,608	212,553	51.15	4,155
	2,129,559.01	601,177	823,368	1,838,580		41,530

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 44.3 1.95

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 279.00 MEASURING AND REGULATING STATION EQUIPMENT - CITY GATE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R2						
NET SALVAGE PERCENT.. -30						
2020	1,614,863.55	177,267	13,192	2,086,131	41.20	50,634
2021	22,853.06	1,928	144	29,565	42.08	703
	1,637,716.61	179,195	13,336	2,115,696		51,337

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 41.2 3.13

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 280.10 SERVICES - CAST IRON, COPPER AND ALL VALVES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2024

YEAR	ORIGINAL COST	CALCULATED ACCRUED	ALLOC. BOOK RESERVE	FUTURE BOOK ACCRUALS	REM. LIFE	ANNUAL ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)
SURVIVOR CURVE.. IOWA 38-R1.5						
NET SALVAGE PERCENT.. -40						
1940	0.01					
2008	25,112.39	11,648	4,883	30,274	25.41	1,191
2016	0.01					
2017	0.03		0			
	25,112.44	11,648	4,883	30,274		1,191

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 25.4 4.74

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 280.20 SERVICES - STEEL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 41-R2						
NET SALVAGE PERCENT.. -40						
1930	1,416.60	1,983	1,983			
1937	51.22	72	72			
1938	0.02					
1939	65.93	92	92			
1942	9.38	13	13			
1948	153.92	215	215			
1952	153.92	210	124	91	1.00	91
1955	154.07	206	121	95	1.82	52
1957	233.44	308	181	146	2.38	61
1958	4,327.96	5,666	3,335	2,724	2.66	1,024
1959	1,290.64	1,677	987	820	2.95	278
1960	1,915.90	2,470	1,454	1,228	3.24	379
1961	692.65	886	521	449	3.53	127
1962	1,356.53	1,722	1,014	885	3.82	232
1964	3,984.34	4,979	2,930	2,648	4.40	602
1965	18,570.82	23,025	13,552	12,447	4.69	2,654
1966	6,002.32	7,380	4,344	4,059	4.99	813
1967	5,109.75	6,232	3,668	3,486	5.28	660
1968	3,880.90	4,692	2,762	2,671	5.59	478
1969	7,833.41	9,391	5,527	5,440	5.89	924
1970	6,549.21	7,782	4,580	4,589	6.20	740
1971	10,474.70	12,333	7,259	7,406	6.52	1,136
1972	9,748.91	11,368	6,691	6,957	6.85	1,016
1973	2,810.70	3,245	1,910	2,025	7.19	282
1974	3,214.78	3,673	2,162	2,339	7.54	310
1975	2,192.82	2,479	1,459	1,611	7.89	204
1976	4,296.27	4,803	2,827	3,188	8.26	386
1977	4,450.90	4,917	2,894	3,337	8.65	386
1978	4,950.75	5,403	3,180	3,751	9.04	415
1979	33,102.64	35,662	20,989	25,355	9.45	2,683
1980	43,011.24	45,720	26,909	33,307	9.87	3,375
1981	34,894.95	36,568	21,523	27,330	10.31	2,651
1982	20,446.06	21,112	12,426	16,198	10.76	1,505
1983	31,612.82	32,146	18,920	25,338	11.22	2,258
1984	51,747.32	51,772	30,471	41,975	11.70	3,588
1985	54,335.54	53,434	31,449	44,621	12.20	3,657
1986	65,366.85	63,144	37,164	54,350	12.71	4,276
1987	68,251.03	64,719	38,091	57,460	13.23	4,343
1988	69,210.26	64,352	37,875	59,019	13.77	4,286
1989	171,586.55	156,319	92,003	148,218	14.32	10,350
1990	182,614.65	162,874	95,862	159,799	14.88	10,739

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 280.20 SERVICES - STEEL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 41-R2						
NET SALVAGE PERCENT.. -40						
1991	225,410.01	196,581	115,700	199,874	15.46	12,928
1992	110,260.28	93,898	55,265	99,099	16.06	6,171
1993	241,346.85	200,589	118,059	219,827	16.66	13,195
1994	126,722.87	102,640	60,410	117,002	17.28	6,771
1995	94,814.87	74,724	43,980	88,761	17.92	4,953
1996	87,965.59	67,403	39,671	83,481	18.56	4,498
1997	92,399.76	68,718	40,445	88,915	19.22	4,626
1998	80,660.02	58,142	34,220	78,704	19.89	3,957
1999	66,791.82	46,594	27,423	66,086	20.57	3,213
2000	118,134.36	79,628	46,866	118,522	21.26	5,575
2001	1,595.90	1,037	610	1,624	21.97	74
2003	1,070.42	643	378	1,121	23.41	48
2006	660,760.21	346,113	203,710	721,354	25.66	28,112
2007	12,541.19	6,244	3,675	13,883	26.42	525
2008	25,519.72	12,026	7,078	28,650	27.20	1,053
2009	33,124.95	14,716	8,661	37,714	27.99	1,347
2010	22,884.37	9,549	5,620	26,418	28.78	918
2011	47,686.75	18,579	10,935	55,826	29.59	1,887
2018	92,005.25	17,404	10,243	118,564	35.46	3,344
2019	1,067.52	170	100	1,395	36.33	38
2020	1,002,821.18	130,118	76,583	1,327,367	37.20	35,682
2021	881,359.12	87,582	51,548	1,182,355	38.09	31,041
2022	110,201.63	7,601	4,474	149,808	38.98	3,843
2023	363,971.79	14,043	8,265	501,296	39.87	12,573
2024	749,783.65	8,702	5,122	1,044,575	40.66	25,690
	6,182,972.75	2,578,488	1,518,580	7,137,582		279,023

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 25.6 4.51

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 280.30 SERVICES - PLASTIC

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2024

SURVIVOR CURVE.. IOWA 50-R2.5
NET SALVAGE PERCENT.. -40

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
1965	4,436.04	5,165	5,336	874	8.42	104
1966	442.02	511	528	91	8.74	10
1967	506.48	580	599	110	9.07	12
1968	8,342.71	9,482	9,796	1,884	9.41	200
1969	7,619.86	8,581	8,866	1,802	9.78	184
1970	12,853.71	14,342	14,818	3,177	10.15	313
1971	48,484.55	53,556	55,332	12,546	10.55	1,189
1972	127,827.26	139,731	144,365	34,593	10.96	3,156
1973	124,854.40	134,978	139,454	35,342	11.39	3,103
1974	105,169.09	112,401	116,128	31,109	11.83	2,630
1975	111,705.01	117,916	121,826	34,561	12.30	2,810
1976	53,538.18	55,795	57,645	17,308	12.78	1,354
1977	108,682.81	111,743	115,449	36,707	13.28	2,764
1978	84,268.80	85,438	88,271	29,705	13.79	2,154
1979	323,784.04	323,473	334,200	119,098	14.32	8,317
1980	483,324.47	475,417	491,183	185,471	14.87	12,473
1981	382,738.61	370,368	382,650	153,184	15.44	9,921
1982	369,669.99	351,719	363,383	154,155	16.02	9,623
1983	258,906.88	242,057	250,084	112,386	16.61	6,766
1984	248,720.26	228,285	235,855	112,353	17.22	6,525
1985	386,626.48	348,149	359,694	181,583	17.84	10,178
1986	496,538.88	438,225	452,758	242,396	18.48	13,117
1987	740,926.17	640,427	661,665	375,632	19.13	19,636
1988	927,958.44	784,682	810,704	488,438	19.80	24,669
1989	1,309,786.91	1,082,984	1,118,898	714,804	20.47	34,920
1990	1,987,769.63	1,605,164	1,658,395	1,124,482	21.16	53,142
1991	1,880,616.99	1,481,776	1,530,915	1,101,949	21.86	50,409
1992	1,628,110.66	1,250,454	1,291,922	987,433	22.57	43,750
1993	1,874,946.43	1,402,235	1,448,736	1,176,189	23.29	50,502
1994	1,996,486.67	1,452,324	1,500,486	1,294,595	24.02	53,897
1995	1,439,668.68	1,017,443	1,051,184	964,352	24.76	38,948
1996	1,477,366.79	1,012,646	1,046,228	1,022,086	25.52	40,050
1997	1,917,062.71	1,273,236	1,315,459	1,368,429	26.28	52,071
1998	2,431,757.85	1,562,648	1,614,469	1,789,992	27.05	66,173
1999	847,693.89	526,214	543,664	643,107	27.83	23,108
2000	465,705.92	278,790	288,035	363,953	28.62	12,717
2001	538,286.03	310,182	320,468	433,132	29.42	14,722
2002	2,863,946.94	1,585,366	1,637,940	2,371,586	30.23	78,451
2003	1,541,311.29	818,251	845,386	1,312,450	31.04	42,283
2004	135,017.42	68,540	70,813	118,211	31.87	3,709
2005	10,544.05	5,108	5,277	9,485	32.70	290

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 280.30 SERVICES - PLASTIC

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R2.5						
NET SALVAGE PERCENT.. -40						
2006	37,967,242.07	17,498,343	18,078,628	35,075,511	33.54	1,045,781
2007	5,204,662.56	2,274,854	2,350,293	4,936,235	34.39	143,537
2008	983,050.03	406,000	419,464	956,806	35.25	27,143
2009	25,825,164.39	10,043,923	10,377,003	25,778,227	36.11	713,881
2010	12,831,248.77	4,677,760	4,832,885	13,130,863	36.98	355,080
2012	140.98	44	45	152	38.74	4
2013	13,026.14	3,782	3,907	14,330	39.63	362
2014	40,976.40	10,865	11,225	46,142	40.53	1,138
2015	6,145.67	1,475	1,524	7,080	41.43	171
2016	62,738.51	13,474	13,921	73,913	42.33	1,746
2017	1,427.85	270	279	1,720	43.25	40
2018	130,124.10	21,278	21,984	160,190	44.16	3,627
2019	39,525,380.24	5,433,949	5,614,151	49,721,381	45.09	1,102,714
2020	25,633,682.18	2,863,795	2,958,765	32,928,390	46.01	715,679
2021	10,097,934.16	862,364	890,962	13,246,146	46.95	282,133
2022	402,248.90	23,877	24,669	538,479	47.88	11,246
2023	20,131,901.48	665,158	687,217	27,497,445	48.82	563,241
2024	17,148,695.35	168,057	173,630	23,834,544	49.65	480,051
	225,769,793.78	66,755,650	68,969,416	247,108,295		6,247,924

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 39.6 2.77

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 281.00 METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 20-L0.5						
NET SALVAGE PERCENT.. -3						
1906	174.01	179	179			
1907	5.79	6	6			
1912	54.06	56	56			
1921	9.97	10	10			
1923	262.94	271	271			
1927	7.54	8	8			
1928	197.75	204	204			
1941	37.10	38	38			
1942	10.09	10	10			
1951	113.15	106	88	29	1.76	16
1958	128.59	115	95	37	2.61	14
1960	280.89	248	206	83	2.87	29
1961	314.28	275	228	96	3.01	32
1962	36.09	31	26	11	3.14	4
1963	153.75	132	110	48	3.28	15
1965	27,916.18	23,664	19,638	9,116	3.54	2,575
1966	531.00	447	371	176	3.67	48
1969	2,469.93	2,034	1,688	856	4.01	213
1971	1,344.85	1,093	907	478	4.22	113
1973	356.55	286	237	130	4.42	29
1974	29.73	24	20	11	4.53	2
1975	442.57	350	290	166	4.63	36
1976	918.63	722	599	347	4.74	73
1977	930.87	726	602	357	4.86	73
1979	2,353.25	1,806	1,499	925	5.10	181
1980	4,977.76	3,786	3,142	1,985	5.23	380
1981	10,319.44	7,775	6,452	4,177	5.37	778
1982	4,378.51	3,265	2,710	1,800	5.52	326
1983	19,480.16	14,376	11,930	8,135	5.67	1,435
1984	17,305.68	12,638	10,488	7,337	5.82	1,261
1985	7,106.15	5,127	4,255	3,064	5.99	512
1986	25,555.82	18,215	15,116	11,206	6.16	1,819
1987	21,536.82	15,162	12,583	9,600	6.33	1,517
1988	4,126.11	2,867	2,379	1,871	6.51	287
1989	65,133.95	44,613	37,023	30,065	6.70	4,487
1990	39,733.11	26,806	22,246	18,679	6.90	2,707
1991	31,294.71	20,791	17,254	14,980	7.10	2,110
1992	49,949.56	32,644	27,090	24,358	7.31	3,332
1993	51,161.29	32,882	27,288	25,408	7.52	3,379
1994	31,503.41	19,875	16,494	15,955	7.75	2,059
1995	22,982.58	14,239	11,817	11,855	7.97	1,487

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 281.00 METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 20-L0.5						
NET SALVAGE PERCENT.. -3						
1996	69,146.83	41,985	34,842	36,379	8.21	4,431
1997	71,678.72	42,636	35,382	38,447	8.45	4,550
1998	56,271.87	32,747	27,176	30,784	8.70	3,538
1999	264,544.89	150,546	124,934	147,547	8.95	16,486
2000	215,528.74	119,655	99,298	122,697	9.22	13,308
2001	100,938.62	54,635	45,340	58,627	9.49	6,178
2002	70,177.42	37,009	30,713	41,570	9.76	4,259
2003	18,069.45	9,259	7,684	10,928	10.05	1,087
2004	57,268.31	28,490	23,643	35,343	10.34	3,418
2005	55,098.46	26,560	22,041	34,710	10.64	3,262
2006	47,912.26	22,331	18,532	30,818	10.95	2,814
2007	82,464.11	37,075	30,768	54,170	11.27	4,807
2008	143,035.99	61,877	51,350	95,977	11.60	8,274
2009	14,630.92	6,073	5,040	10,030	11.94	840
2010	239,640.62	95,276	79,067	167,763	12.28	13,661
2011	34,384.75	13,033	10,816	24,600	12.64	1,946
2012	1,095,914.98	394,513	327,396	801,396	13.01	61,598
2013	601,827.47	205,181	170,274	449,608	13.38	33,603
2014	590,174.29	189,051	156,888	450,992	13.78	32,728
2015	256,996.61	76,897	63,815	200,892	14.19	14,157
2016	469,198.38	129,518	107,483	375,791	14.64	25,669
2017	3,611,659.47	907,682	753,261	2,966,748	15.12	196,213
2018	644,029.15	144,279	119,733	543,617	15.65	34,736
2019	7,566.47	1,477	1,226	6,567	16.21	405
2020	1,146,125.70	187,701	155,768	1,024,741	16.82	60,924
2021	88,607.00	11,499	9,543	81,722	17.48	4,675
2022	429,955.37	40,078	33,260	409,594	18.19	22,518
2023	351,112.94	19,167	15,906	345,740	18.94	18,254
2024	10,670,897.07	181,352	150,499	10,840,525	19.67	551,120
	21,950,481.48	3,575,484	2,967,331	19,641,665		1,180,788

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 16.6 5.38

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 281.02 METERS - UoF

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 15-S2.5						
NET SALVAGE PERCENT.. 0						
2020	61,010.98	17,164	27,051	33,960	10.78	3,150
2021	85,089.70	18,379	28,966	56,124	11.76	4,772
2022	428,346.72	64,252	101,265	327,082	12.75	25,653
2023	282,085.42	23,506	37,047	245,038	13.75	17,821
2024	128,743.62	3,176	5,005	123,739	14.63	8,458
	985,276.44	126,477	199,334	785,942		59,854

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 13.1 6.07

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 282.00 METER INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 28-S0.5						
NET SALVAGE PERCENT.. 0						
1964	21.60	22	22			
1965	18.03	18	18			
1966	19.60	20	20			
1967	23.59	24	24			
1968	61.34	61	61			
1969	135.21	134	97	38	0.28	38
1970	165.59	162	118	48	0.63	48
1971	231.82	224	162	70	0.98	70
1972	409.87	391	284	126	1.32	95
1973	714.19	672	487	227	1.66	137
1974	286.73	266	193	94	2.00	47
1975	95.40	87	63	32	2.33	14
1977	138.44	124	90	48	3.00	16
1978	299.56	264	192	108	3.34	32
1979	2,062.62	1,792	1,300	763	3.67	208
1980	4,941.29	4,234	3,071	1,870	4.01	466
1981	4,552.92	3,846	2,790	1,763	4.35	405
1982	3,889.72	3,238	2,349	1,541	4.69	329
1983	3,794.43	3,111	2,257	1,537	5.04	305
1984	5,820.91	4,702	3,411	2,410	5.38	448
1985	9,289.58	7,385	5,357	3,933	5.74	685
1986	9,450.53	7,395	5,364	4,087	6.09	671
1987	18,000.03	13,854	10,050	7,950	6.45	1,233
1988	25,355.63	19,180	13,913	11,443	6.82	1,678
1989	20,319.53	15,102	10,955	9,365	7.19	1,303
1990	58,086.28	42,403	30,759	27,327	7.56	3,615
1991	51,474.27	36,878	26,751	24,723	7.94	3,114
1992	25,527.20	17,933	13,009	12,518	8.33	1,503
1993	98,106.54	67,518	48,978	49,129	8.73	5,628
1994	115,832.91	78,063	56,627	59,206	9.13	6,485
1995	150,933.69	99,509	72,184	78,750	9.54	8,255
1996	296,145.80	190,804	138,409	157,737	9.96	15,837
1997	457,892.90	288,147	209,022	248,871	10.38	23,976
1998	246,984.62	151,542	109,928	137,057	10.82	12,667
1999	80,837.75	48,330	35,059	45,779	11.26	4,066
2000	333,299.95	193,791	140,576	192,724	11.72	16,444
2001	13.80	8	6	8	12.18	1
2002	49,044.78	26,870	19,491	29,554	12.66	2,334
2003	190,386.40	100,973	73,246	117,140	13.15	8,908
2004	281,019.22	144,022	104,473	176,546	13.65	12,934
2005	39,206.27	19,365	14,047	25,159	14.17	1,776

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 282.00 METER INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 28-S0.5						
NET SALVAGE PERCENT.. 0						
2006	306,095.29	145,395	105,469	200,626	14.70	13,648
2007	674,552.79	307,400	222,988	451,565	15.24	29,630
2008	506,339.56	220,617	160,036	346,304	15.80	21,918
2009	378,527.35	157,089	113,952	264,575	16.38	16,152
2010	729,447.26	287,351	208,444	521,003	16.97	30,701
2011	28,255.79	10,505	7,620	20,636	17.59	1,173
2012	2,367,343.31	826,889	599,825	1,767,518	18.22	97,010
2013	270,479.14	88,195	63,977	206,502	18.87	10,943
2018	568,941.78	111,962	81,217	487,725	22.49	21,686
2019	807,780.97	135,877	98,565	709,216	23.29	30,452
2020	4,430,402.18	613,921	445,339	3,985,063	24.12	165,218
2021	500,791.37	54,015	39,182	461,609	24.98	18,479
2022	726,424.10	55,259	40,085	686,339	25.87	26,530
2023	751,142.40	32,457	23,544	727,598	26.79	27,159
2024	603,535.85	7,973	5,784	597,752	27.63	21,634
	16,234,949.68	4,647,369	3,371,240	12,863,710		668,104

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 19.3 4.12

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 283.00 HOUSE REGULATORS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R2						
NET SALVAGE PERCENT.. 0						
1929	3,503.04	3,503	3,503			
1930	203.30	203	203			
1932	13.55	14	14			
1935	19.25	19	19			
1936	169.10	169	169			
1937	299.27	299	299			
1938	503.33	503	503			
1939	325.13	325	325			
1940	139.15	139	139			
1941	471.74	469	472			
1942	327.90	325	328			
1945	5.52	5	6			
1946	536.58	520	537			
1947	625.47	603	625			
1948	2,508.94	2,402	2,509			
1949	3,781.44	3,597	3,781			
1950	3,479.58	3,288	3,480			
1951	5,800.22	5,443	5,800			
1952	4,165.53	3,883	4,166			
1953	4,106.07	3,801	4,106			
1954	3,605.69	3,315	3,606			
1955	5,740.28	5,240	5,740			
1956	5,734.24	5,198	5,734			
1957	2,826.39	2,544	2,826			
1958	8,222.94	7,348	8,223			
1959	6,737.11	5,975	6,737			
1960	5,116.90	4,505	5,117			
1961	5,650.57	4,939	5,651			
1962	9,728.17	8,438	9,728			
1963	10,176.62	8,756	10,177			
1964	10,706.01	9,138	10,706			
1965	6,510.42	5,512	6,510			
1966	13,272.92	11,143	13,273			
1967	9,500.92	7,907	9,501			
1968	8,251.97	6,805	8,252			
1969	18,087.54	14,776	18,088			
1970	19,191.93	15,528	19,145	47	8.59	5
1971	20,943.01	16,773	20,680	263	8.96	29
1972	13,208.97	10,467	12,905	304	9.34	33
1973	7,094.85	5,561	6,856	239	9.73	25
1974	9,236.61	7,157	8,824	413	10.13	41

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 283.00 HOUSE REGULATORS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R2						
NET SALVAGE PERCENT.. 0						
1975	1,308.09	1,001	1,234	74	10.55	7
1976	1,018.32	770	949	69	10.97	6
1977	684.76	511	630	55	11.41	5
1978	4,054.31	2,986	3,682	372	11.86	31
1979	23,549.75	17,097	21,080	2,470	12.33	200
1980	70,810.90	50,653	62,453	8,358	12.81	652
1981	16,799.84	11,834	14,591	2,209	13.30	166
1982	5,841.15	4,049	4,992	849	13.81	61
1983	16,038.13	10,931	13,477	2,561	14.33	179
1984	9,125.08	6,112	7,536	1,589	14.86	107
1985	12,109.24	7,965	9,821	2,288	15.40	149
1986	43,641.62	28,163	34,724	8,918	15.96	559
1987	44,207.90	27,969	34,485	9,723	16.53	588
1988	53,631.80	33,240	40,984	12,648	17.11	739
1989	115,461.68	70,021	86,333	29,129	17.71	1,645
1990	83,715.21	49,634	61,197	22,518	18.32	1,229
1991	71,821.40	41,592	51,281	20,540	18.94	1,084
1992	38,634.67	21,833	26,919	11,716	19.57	599
1993	52,594.38	28,974	35,724	16,870	20.21	835
1994	107,078.68	57,418	70,794	36,285	20.87	1,739
1995	98,435.24	51,340	63,300	35,135	21.53	1,632
1996	60,228.06	30,502	37,608	22,620	22.21	1,018
1997	92,499.55	45,427	56,010	36,490	22.90	1,593
1998	176,296.45	83,840	103,371	72,925	23.60	3,090
1999	205,483.22	94,522	116,542	88,941	24.30	3,660
2002	96,249.56	39,590	48,813	47,437	26.49	1,791
2003	449,724.47	177,493	218,841	230,883	27.24	8,476
2004	681,180.77	257,486	317,469	363,712	27.99	12,994
2005	526,922.75	190,161	234,460	292,463	28.76	10,169
2006	385,325.38	132,467	163,326	221,999	29.53	7,518
2007	531,851.27	173,618	214,063	317,788	30.31	10,485
2008	681,749.18	210,436	259,459	422,290	31.11	13,574
2009	642,936.92	187,024	230,592	412,345	31.91	12,922
2010	559,860.04	152,903	188,523	371,337	32.71	11,352
2012	177,605.83	42,034	51,826	125,780	34.35	3,662
2013	252,509.76	55,103	67,940	184,570	35.18	5,246
2014	107,310.54	21,415	26,404	80,907	36.02	2,246
2018	180,748.91	22,292	27,485	153,264	39.45	3,885
2019	281,829.53	29,310	36,138	245,692	40.32	6,094
2020	98,898.46	8,351	10,296	88,602	41.20	2,151
2021	133,866.59	8,687	10,711	123,156	42.08	2,927

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 283.00 HOUSE REGULATORS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R2						
NET SALVAGE PERCENT.. 0						
2022	130,371.36	5,881	7,251	123,120	42.97	2,865
2023	19,693.82	495	610	19,084	43.87	435
2024	235,804.63	1,783	2,198	233,606	44.66	5,231
	7,810,037.37	2,691,448	3,305,385	4,504,652		145,729
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					30.9	1.87

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 284.00 HOUSE REGULATOR INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R4						
NET SALVAGE PERCENT.. 0						
1938	580.16	580	580			
1939	404.04	404	404			
1942	450.66	448	451			
1946	1,089.96	1,067	1,090			
1947	2,103.45	2,051	2,103			
1948	1,764.54	1,713	1,765			
1949	2,530.97	2,446	2,531			
1950	2,724.27	2,621	2,724			
1951	3,338.10	3,197	3,338			
1952	5,725.56	5,458	5,726			
1953	4,232.65	4,016	4,233			
1954	5,723.09	5,403	5,723			
1955	5,738.30	5,390	5,738			
1956	5,446.91	5,089	5,447			
1957	3,951.92	3,674	3,952			
1958	14,502.57	13,408	14,503			
1959	15,889.48	14,610	15,889			
1960	3,789.33	3,465	3,789			
1961	1,729.14	1,572	1,729			
1962	9,350.28	8,448	9,350			
1963	2,559.32	2,297	2,559			
1964	4,032.47	3,596	4,032			
1965	1,520.17	1,346	1,520			
1966	3,802.45	3,341	3,802			
1967	3,490.92	3,042	3,491			
1968	2,526.03	2,182	2,526			
1969	4,548.74	3,893	4,549			
1970	2,640.52	2,237	2,641			
1971	5,580.73	4,677	5,581			
1972	4,282.54	3,547	4,283			
1973	4,002.20	3,275	4,002			
1974	255.53	206	256			
1975	895.84	713	896			
1976	51.59	40	52			
1977	48.49	37	48			
1978	92.60	70	93			
1979	6,679.65	4,996	6,680			
1980	14,900.40	10,958	14,900			
1981	5,334.23	3,854	5,334			
1982	1,198.48	850	1,198			
1983	2,927.66	2,038	2,928			

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 284.00 HOUSE REGULATOR INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-R4						
NET SALVAGE PERCENT.. 0						
1984	5,274.24	3,599	5,249	25	17.47	1
1985	2,429.75	1,624	2,369	61	18.23	3
1986	15,646.19	10,238	14,932	714	19.01	38
1987	33,838.39	21,657	31,587	2,251	19.80	114
1988	31,654.89	19,799	28,877	2,778	20.60	135
1989	98,046.66	59,862	87,310	10,737	21.42	501
1990	44,176.92	26,305	38,366	5,811	22.25	261
1991	34,696.77	20,130	29,360	5,337	23.09	231
1992	90,636.09	51,169	74,631	16,005	23.95	668
1993	52,944.70	29,062	42,388	10,557	24.81	426
1994	124,228.99	66,203	96,559	27,670	25.69	1,077
1995	120,694.66	62,367	90,964	29,731	26.58	1,119
1996	70,816.73	35,434	51,681	19,136	27.48	696
1997	92,214.98	44,615	65,072	27,143	28.39	956
1998	118,406.43	55,306	80,665	37,741	29.31	1,288
1999	103,465.20	46,597	67,963	35,502	30.23	1,174
2000	134,193.99	58,142	84,801	49,393	31.17	1,585
2001	82,165.15	34,195	49,874	32,291	32.11	1,006
2002	227,428.99	90,724	132,323	95,106	33.06	2,877
2003	405,338.30	154,693	225,623	179,715	34.01	5,284
2004	343,732.10	125,180	182,578	161,154	34.97	4,608
2005	814,546.18	282,281	411,713	402,833	35.94	11,208
2006	539,126.19	177,324	258,631	280,495	36.91	7,599
2007	285,223.22	88,781	129,489	155,734	37.88	4,111
2008	715,097.44	209,845	306,063	409,034	38.86	10,526
2009	400,831.50	110,485	161,145	239,686	39.84	6,016
2010	740,133.73	190,688	278,122	462,012	40.83	11,316
2013	44,335.87	9,037	13,181	31,155	43.79	711
2018	39,188.60	4,446	6,485	32,704	48.76	671
2019	58,302.85	5,555	8,102	50,201	49.76	1,009
2020	21,318.31	1,643	2,396	18,922	50.76	373
2021	34,092.93	2,015	2,939	31,154	51.75	602
2022	14,699.64	601	877	13,823	52.75	262
2023	11,748.70	267	389	11,360	53.75	211
2024	27,505.18	185	270	27,235	54.63	499
	6,140,616.40	2,242,309	3,225,410	2,915,207		79,162

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 36.8 1.29

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 285.00 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R2.5						
NET SALVAGE PERCENT.. -10						
1952	250.87	258	276			
1953	1,403.07	1,433	1,543			
1954	106.00	108	117			
1955	309.42	313	340			
1959	1,029.10	1,018	1,132			
1962	1,004.94	977	1,105			
1963	743.50	719	818			
1965	2,026.70	1,935	2,229			
1966	536.44	509	590			
1967	1,344.27	1,266	1,479			
1968	553.04	517	608			
1969	37,218.79	34,563	40,941			
1970	1,375.85	1,268	1,513			
1971	4,894.93	4,475	5,384			
1972	2,142.73	1,942	2,357			
1973	157.82	142	174			
1979	1,335.60	1,122	1,469			
1980	13,904.37	11,522	15,295			
1983	20,354.71	16,116	22,390			
1984	12,728.85	9,910	14,002			
1985	8,568.64	6,554	9,426			
1986	9,813.01	7,369	10,794			
1987	5,535.59	4,077	6,089			
1988	11,789.80	8,508	12,969			
1989	6,120.05	4,322	6,732			
1990	68,931.92	47,601	75,825			
1991	25,260.80	17,043	27,787			
1992	16,357.02	10,768	17,926	67	18.07	4
1993	21,598.41	13,859	23,072	686	18.75	37
1994	16,831.84	10,517	17,508	1,007	19.44	52
1995	17,312.42	10,516	17,507	1,537	20.15	76
1996	10,462.79	6,171	10,273	1,236	20.87	59
1997	7,822.30	4,474	7,448	1,157	21.60	54
1998	19,439.49	10,768	17,926	3,457	22.34	155
1999	38,358.37	20,535	34,186	8,008	23.10	347
2000	19,522.73	10,089	16,796	4,679	23.86	196
2001	10,892.69	5,421	9,025	2,957	24.64	120
2002	118.73	57	95	36	25.42	1
2003	3,371.40	1,548	2,577	1,132	26.22	43
2004	11,015.52	4,841	8,059	4,058	27.02	150

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 285.00 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R2.5						
NET SALVAGE PERCENT.. -10						
2005	2,158.71	905	1,507	868	27.84	31
2006	10,031.84	4,007	6,670	4,365	28.66	152
2011	10,291.82	3,042	5,064	6,257	32.91	190
	455,026.89	303,105	459,023	41,506		1,667

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 24.9 0.37

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 285.10 INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT - ELECTRONIC

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 25-R2.5						
NET SALVAGE PERCENT.. -10						
1993	29,106.64	27,228	31,671	346	3.74	93
1995	12,620.37	11,478	13,351	531	4.33	123
2007	23,063.81	14,725	17,127	8,243	10.49	786
	64,790.82	53,431	62,149	9,121		1,002

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 9.1 1.55

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 287.00 OTHER EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 20-R3						
NET SALVAGE PERCENT.. 0						
1999	21,446.76	19,141	15,628	5,819	2.15	2,707
2019	33,332.67	8,416	6,871	26,461	14.95	1,770
	54,779.43	27,557	22,499	32,280		4,477

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 7.2 8.17

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 287.10 STREET LIGHTING EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 35-S2.5						
NET SALVAGE PERCENT.. 0						
1996	8,308.51	5,712	7,172	1,137	10.94	104
1997	15,626.37	10,496	13,178	2,448	11.49	213
1998	4,355.23	2,855	3,585	770	12.06	64
	28,290.11	19,063	23,935	4,355		381

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 11.4 1.35

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 291.10 OFFICE FURNITURE AND EQUIPMENT - ELECTRONIC DATA PROCESSING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 5-SQUARE						
NET SALVAGE PERCENT.. 0						
2020	609,514.88	518,088	567,979	41,536	0.75	41,536
2021	1,333.83	867	950	384	1.75	219
2022	84,162.92	37,873	41,520	42,643	2.75	15,507
2023	48,763.71	12,191	13,365	35,398	3.75	9,439
	743,775.34	569,019	623,814	119,961		66,701

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 1.8 8.97

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 291.15 OFFICE FURNITURE AND EQUIPMENT - DATA PROCESSING EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2018	166,838.95	69,517	126,660	40,179	8.75	4,592
2019	133,573.49	46,751	85,180	48,393	9.75	4,963
2020	76,178.91	21,584	39,326	36,853	10.75	3,428
2021	98,770.76	21,401	38,993	59,778	11.75	5,087
	475,362.11	159,253	290,159	185,203		18,070

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 10.2 3.80

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 292.10 TRANSPORTATION EQUIPMENT - TRAILERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 15-R1.5						
NET SALVAGE PERCENT.. +5						
1995	2,620.51	2,440	2,489			
1997	6,264.80	5,575	5,952			
1998	2,573.57	2,251	2,445			
1999	26,146.76	22,488	24,839			
2000	3,385.80	2,861	3,217			
2001	1,683.09	1,394	1,599			
2019	6,499.34	1,696	6,174			
2022	20,774.38	2,395	10,880	8,855	13.18	672
	69,948.25	41,100	57,595	8,855		672

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 13.2 0.96

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 294.00 TOOLS, SHOP AND GARAGE EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 25-SQUARE						
NET SALVAGE PERCENT.. 0						
1999	243,039.24	243,039	243,039			
2001	57,006.96	53,016	57,007			
2002	42,172.04	37,533	42,172			
2003	18,721.21	15,913	18,721			
2004	46,609.77	37,754	46,610			
2005	54,739.69	42,150	54,740			
2006	6,587.17	4,809	6,587			
2007	18,357.55	12,667	18,358			
2021	717,346.44	93,255	369,338	348,008	21.75	16,000
2022	299,068.85	26,916	106,601	192,468	22.75	8,460
2023	192,069.99	9,603	38,033	154,037	23.75	6,486
2024	593,587.44	9,023	35,735	557,852	24.62	22,658
	2,289,306.35	585,678	1,036,941	1,252,365		53,604

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 23.4 2.34

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 296.00 POWER OPERATED EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 11-R2.5						
NET SALVAGE PERCENT.. +10						
2018	168,272.24	74,484	96,283	55,162	5.59	9,868
2021	11,702.53	2,834	3,664	6,869	8.04	854
	179,974.77	77,318	99,947	62,031		10,722
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					5.8	5.96

DUKE ENERGY KENTUCKY
GAS PLANT

ACCOUNT 297.00 COMMUNICATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF SEPTEMBER 30, 2024

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2011	7,340.21	6,484	7,262	78	1.75	45
2015	68.68	42	47	22	5.75	4
2016	37,466.19	20,606	23,080	14,386	6.75	2,131
2019	9,913,112.53	3,469,589	3,886,089	6,027,024	9.75	618,156
2020	461,137.90	130,654	146,338	314,800	10.75	29,284
2021	348,255.46	75,457	84,515	263,740	11.75	22,446
2022	636,496.23	95,474	106,935	529,561	12.75	41,534
2023	282,197.75	23,516	26,339	255,859	13.75	18,608
2024	1,707,474.95	43,250	48,442	1,659,033	14.62	113,477
	13,393,549.90	3,865,072	4,329,047	9,064,503		845,685

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 10.7 6.31

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 NATURAL GAS RATES; 2) APPROVAL OF NEW TARIFFS; AND 3) ALL OTHER REQUIRED APPROVALS, WAIVERS, AND RELIEF.	))))))	CASE NO. 2025-00125

DIRECT TESTIMONY OF

JONATHON C. THORPE

ON BEHALF OF

DUKE ENERGY KENTUCKY, INC.

June 2, 2025

TABLE OF CONTENTS

PAGE

ATTACHMENTS:

I. INTRODUCTION AND PURPOSE

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Jonathon C. Thorpe. My business address is 411 South Wilmington Street, Raleigh, North Carolina 27601.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by Duke Energy Business Services LLC (DEBS) as a Lead Load Forecasting Analyst in the Load Forecasting group. DEBS provides various administrative and other services to Duke Energy Kentucky, Inc., (Duke Energy Kentucky or Company) and other affiliated companies of Duke Energy Corporation (Duke Energy).

Q. PLEASE BRIEFLY SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL EXPERIENCE.

A. I hold a Bachelor of Arts degree in Economics from the University of North Carolina at Chapel Hill and a Master of Science degree in Economics from the University of Central Florida. I have been employed by Duke Energy Business Services LLC since February of 2022 and have six years of experience in the Utilities sector. In a former role as analyst for the natural gas trading desk at Pacific Gas and Electric Company, I performed a variety of tasks like forecasting monthly average demand, optimizing gas storage, tracking financial hedge positions, and contracting for interstate pipeline transportation capacity. At Duke Energy, I work with the granular forecasting team that produces circuit level forecasts for distribution grid planning, and in 2024 I assumed responsibility for

annual forecast updates to the Ohio and Kentucky natural gas volume forecasts used in financial budgets and general rate cases.

Q. PLEASE BRIEFLY DESCRIBE YOUR DUTIES AND RESPONSIBILITIES AS LEAD LOAD FORECASTING ANALYST IN THE LOAD FORECASTING GROUP.

A. I develop Duke Energy's long-term monthly natural gas demand forecasts for its Midwest service areas, including Duke Energy Kentucky. These forecasts and analyses are provided to departments throughout Duke Energy and are used for budgeting, planning, and for regulatory filings, such as long-term forecast reports, IRPs, and rate cases.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE KENTUCKY PUBLIC SERVICE COMMISSION?

A. No.

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

A. My testimony presents and explains Duke Energy Kentucky's long-term energy and demand forecast prepared and utilized in the Company's rate case filing. This includes a discussion of the level of normal weather utilized in the preparation of the forecast. I sponsor Filing Requirement (FR) 16(7)(h)(5), (14) and (15). I also discuss certain information that I supplied to Duke Energy Kentucky witnesses Ms. Claire C. Hudson and Mr. Bruce L. Sailers for their use in preparing additional testimony.

II. LOAD FORECAST

Q. DID YOU PREPARE THE COMPANY'S NATURAL GAS VOLUME FORECAST?

A. Yes, I did.

Q. HOW IS DUKE ENERGY KENTUCKY'S NATURAL GAS VOLUME FORECAST DEVELOPED?

A. Broadly, the natural gas volume forecast is developed in three steps: first, a service area economic forecast is obtained; second, a customer forecast is obtained; third, an energy forecast is prepared.

Q. PLEASE DESCRIBE HOW THE SERVICE AREA ECONOMIC FORECAST IS OBTAINED.

A. The economic forecast for northern Kentucky and the greater Cincinnati region is obtained from Moody Analytics' (a nationally recognized economic forecasting firm) portal *Economy.com* (Moody's). Based upon its forecast of the national economy, Moody's prepares a forecast of key economic concepts specific to the greater Cincinnati area, including the portion of northern Kentucky served by Duke Energy Kentucky. This forecast provides detailed projections of employment, income, wages, industrial production, inflation, prices, and population. This information serves as a key input into the energy forecast models.

The Duke Energy Kentucky service area is located in northern Kentucky adjacent to the city of Cincinnati, which is within the service area of Duke Energy Ohio, another subsidiary of Duke Energy. The economy of northern Kentucky is

contained within the Cincinnati Primary Metropolitan Statistical Area (PMSA) and is an integral part of the regional economy.

Q. HOW IS THE CUSTOMER FORECAST OBTAINED?

A. A high-level customer growth forecast is delivered to me by Duke Energy's Natural Gas Sales and Delivery Segment that calculates the forecast. I calculate growth rates using this forecast, applying them to historical data to produce forecasts for a more detailed set of customer classes, as well as dividing between "full service" customers and "firm transportation" customers by "sharing them out" at percentages that are in-line with recent historical shares and growth rates.

Q. HOW IS THE ENERGY FORECAST DEVELOPED?

A. The energy forecast projects the natural gas load required to serve Duke Energy Kentucky's retail customer classes - residential, commercial, industrial, government or other public authority (OPA). The projected energy requirements for Duke Energy Kentucky's retail customers are determined through econometric analysis. Econometric models are a means of representing economic behavior through the use of statistical methods, such as regression analysis, which attributes historically measured changes in sales to variation in a series of predictive variables.

Q. WHAT ARE THE PRIMARY FACTORS AFFECTING NATURAL GAS USAGE?

A. The primary driver in all models is weather as measured by heating degree days. Some of the major economic drivers are the number of residential customers and economic activity measures detailed below. For the residential sector, the key

factors are the population of the area, the average household income, and real energy prices. For the commercial sector, the key factors include total (non-farm) employment and real energy prices. The governmental sector model includes government employment, as well as energy prices. In the industrial sector—and a certain group of interruptible customers are modeled this way— the key factors include a weighted average of manufacturing employment and real manufacturing GDP and real energy prices.

Generally, energy use increases with higher economic activity. As energy prices increase, energy usage tends to decrease due to customers' conservation activities, although the relationship is not statistically significant for models of all classes of customers.

Q. HOW ARE THESE FACTORS IMPLEMENTED IN THE EQUATIONS USED TO PROJECT THE ENERGY REQUIREMENTS OF DUKE ENERGY KENTUCKY'S RETAIL CUSTOMERS?

A. The forecasting models are exposed to historical data for these variables. Then, estimated coefficients are used along with projected data to calculate future energy consumption conditional on forecasts of these economic and weather conditions**.** While many economic and weather variables are relevant to the entire greater Cincinnati area, the Duke Energy Kentucky sales forecast is developed by maintaining specific forecasting models for sales only to Duke Energy Kentucky customers in the residential, commercial, industrial, government or OPA.

Q. ARE THERE ANY ADJUSTMENTS MADE TO THE ALLOCATED FORECASTS DERIVED FROM THE ECONOMETRIC MODELS?

A. The Company considers adjustments to the forecast for anticipated increases or decreases in load due to a major new customer, significant expansions, or the loss of a customer. The 2026 test year load forecast did include an adjustment for a large facility expansion and the gas volume associated with the expected expansion was added to the commercial class.

Q. IS DUKE ENERGY KENTUCKY'S LOAD FORECASTING METHODOLOGY SIMILAR TO THAT EMPLOYED AT THE TIME OF THE COMPANY'S LAST NATURAL GAS BASE RATE CASE?

A. Yes, the econometric forecasting methodology used to create the load forecast is basically the same as that used by the Company in prior cases.

Q. ARE YOU FAMILIAR WITH OTHER NATURAL GAS UTILITIES' LONG-TERM LOAD FORECASTS?

A. Yes, I am.

Q. ARE THE FACTORS THAT ARE USED BY DUKE ENERGY KENTUCKY IN FORMULATING ITS NATURAL GAS LOAD FORECASTS SIMILAR TO THE FACTORS USED BY OTHER UTILITIES IN THEIR LOAD FORECASTS?

A. Yes. While other utilities might use a variety of load forecasting approaches, such as econometric, end-use, trend analysis, or time series analysis, nearly all of the utilities I am familiar with use the same factors considered by Duke Energy Kentucky, to varying degrees. Commonly used factors include: weather data,

population, income, industrial production or output measures, employment, and price information. Price forecasts for alternate fuels such as propane and fuel oil are often used as well. I am aware of survey data indicating that many large utilities utilize an approach consistent with this methodology.

Q. HOW DOES MANAGEMENT JUDGMENT FIT INTO THE LOAD FORECASTS?

A. Under any approach to load forecasting, judgment is an essential element. Each utility must use the approach that, in its judgment, best suits its particular situation, taking into account the various factors. Examples of this would be advice from the sales team about conditions on the ground that are related to regional growth, or advice from the managers of energy efficiency and demand side management programs that provide incentives for customers to reduce energy usage.

Q. PLEASE DESCRIBE ATTACHMENT JCT-1.

A. Attachment JCT-1 is a summary of Duke Energy Kentucky's natural gas sales forecast. The projected annualized rate of growth in total retail sales for the five-year period 2026 to 2031 is 0.2% per year.

Q. HOW WOULD YOU CHARACTERIZE THE LONG-TERM TREND IN YOUR EXPECTATIONS FOR THAT GROWTH RATE IN RETAIL SALES?

A. The level of growth is smaller than what was reported in the last natural gas base rate case, but on par with the forecast from 2023. The growth rate reflects a tension between positive and negative growth drivers, where expected increases

in population and economic growth for the service territory are mostly offset by improved energy efficiency for natural gas end use categories. Additionally, total weather normal usage from 2020 through 2024 was mostly flat.

III. DEGREE DAY DATA USED IN THE FORECAST

Q. HOW IS WEATHER MEASURED FOR PURPOSES OF THE FORECAST?

A. Weather is expressed in terms of Heating Degree Days and Cooling Degree Days.

Q. WHAT IS A HEATING DEGREE DAY AND A COOLING DEGREE DAY?

A. A Heating Degree Day (HDD) is calculated using a base temperature measured on the Fahrenheit scale and occurs when the daily average temperature is below the base (it is zero otherwise). HDD measures the difference of the daily average temperature and the base temperature. The formula is:

Heating Degree Days = Base Temperature – Daily Average Temperature

A Cooling Degree Day (CDD) is also calculated using a base temperature measured on the Fahrenheit scale. However, it occurs when the daily average temperature is above the base. CDD measures the difference of the daily average temperature and the base temperature. The formula is:

Cooling Degree Days = Daily Average Temperature – Base Temperature

Any negative result of these calculations is taken to be zero. These generally do not affect the gas volumes forecasts.

Q. PLEASE EXPLAIN "NORMAL" WEATHER.

A. The natural gas forecast projects Duke Energy Kentucky's natural gas volume

sales for the test period. In order to project this—since our econometric models include weather as an independent variable—one must make a judgment about the weather conditions expected to occur during the test period. This is known as "normal" weather. These expected weather conditions are forecast from historical weather data. This usage of an average of prior actual weather to predict what future weather patterns are likely to be experienced is an industry standard methodology.

Q. PLEASE DESCRIBE HOW DUKE ENERGY KENTUCKY CALCULATED NORMAL WEATHER?

A. Duke Energy Kentucky uses a rolling 30-year period to calculate the Normal Weather in its electric and natural gas forecasts.

Q. DOES THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA) PROVIDE NORMAL WEATHER DATA FOR DUKE ENERGY KENTUCKY'S SERVICE AREA?

A. Yes. NOAA is responsible for monitoring climate conditions in the United States. Additional information about NOAA is available at https://www.noaa.gov. The standard period prescribed by the United Nations World Meteorological Organization for measuring climate conditions is 30 years, and NOAA updates its calculations for the United States for these 30-year periods at the end of each decade. The current 30-year period used by NOAA is 1991-2020.

Because of its infrequent updates, Duke Energy Kentucky's forecast does not use the NOAA calculations. Rather, the Company uses more

contemporaneous weather data for performing its forecasts, rolling in the latest year available when computing the forecast.

Q. WHAT YEARS ARE USED TO CALCULATE THE ROLLING 30-YEAR WEATHER NORMAL FOR THE MOST RECENT DUKE ENERGY KENTUCKY NATURAL GAS FORECAST?

A. The years 1994-2023 were used to calculate normal weather. As a new year of weather data—subject to a delay—becomes available, it is our practice to roll off the oldest year and replace it. The natural gas volumes forecast is refreshed once annually, most recently during the second half of 2024.

Q. WHAT HAS BEEN THE LONG-TERM TREND IN HDD AND CDD FOR COVINGTON, KENTUCKY?

A. With respect to cooling, the years 1992-2024 appear to hint at a slight upward trend. There is a slight decreasing trend in heating degree days over the same period—also consistent with warmer temperatures—and these both are robust to statistical testing for a non-zero long-term trend. The graph in attachment JCT-2 shows these charts.

Q. WHAT HAS BEEN THE TREND IN HDD AND CDD FOR COVINGTON, KENTUCKY, OVER THE LAST TEN YEARS?

A. The years 2015-2024 are slightly warmer than the previous years in the sample. Statistical work suggests a warming trend during those years, although it cannot rule out that this trend emerges from random temperature variation. The data on winter heating degree days show a small decline upon visual inspection.

Q. HOW DO THE ACTUAL ANNUAL HEATING DEGREE DAYS FOR THE RECENT 10-YEAR NORMALS FOR COVINGTON, KENTUCKY, COMPARE TO 30-YEAR NORMALS?

A. See Attachment JCT-2 for a graph comparing the annual degree days in heating to the forecasts of the 30-year normal scheme, as well as the ten-year normal scheme and the NOAA static 30-year normal. The ten-year normal calls for slightly warmer winter weather than the thirty-year normal. Annual weather is much more variable than the degree to which the various normal projections vary from each other.

Q. DID YOU MEASURE HOW RELIABLE THE VARIOUS WEATHER NORMALS ARE?

A. Yes. One way to compare the relationship between the expected normal level of degree days to the actual number of degree days is to use a statistic known as the Mean Percent Error (MPE). MPE indicates whether the measure of normal degree days contains any bias to over-estimate or under-estimate the actual weather conditions. If MPE is positive, this indicates that there is a bias for the measure of normal to be higher than the actual. The formula to calculate MPE is the sum of (Normal Degree Days minus Actual Degree Days) divided by Actual Degree Days. The sum is then divided by the number of observations. Mathematically:

$$\text{MPE} = \frac{1}{\text{N}} \sum_{t=1}^{N} \frac{\hat{Y}_t - Y_t}{Y_t}$$

Where $\hat{Y}$ = Normal Annual Degree Days

and Y = Actual Annual Degree Days

A difficulty with using this sum to compare the options for weather normalization is data availability: because so many years are required to compute the thirty-year weather normal, this statistic basically compares normal over a narrow sample space, implying a large standard error relative to any measurement difference. Because standard errors shrink for larger samples, the standard error of a 30-year forecast for normal weather should have a confidence interval that is 40 percent as large as the confidence interval around 10-year estimates. Because so many years are required for calculating the 30-year normal, it is really only possible to compare accuracy for years beginning with 2015 (which implies too small a sample for conclusive statistical testing). An informal comparison of the two forecasts for degree days shows slightly greater mean square error for the weather in years beginning with 2015 when using the 30-year normal instead of the 10-year normal.

IV. WEATHER NORMALIZATION ADJUSTMENT

Q. PLEASE BRIEFLY DESCRIBE THE COMPANY'S WEATHER NORMALIZATION ADJUSTMENT MECHANISM.

A. The Weather Normalization Adjustment mechanism is intended to eliminate the impact of unexpected weather fluctuations on the volume of energy sold during the test period. It involves applying a calculation to change the volumetric sales based on the extent to which weather diverges from normal weather via parameters estimated separately for each class of customers. There are two parameters: a Base Load estimate (BL) and a sensitivity to heating degree days estimate (HSF). The HSF represents the extent to which a change in heating

degree days predicts a change in the volume of sales.

Q. PLEASE EXPLAIN YOUR CALCULATION OF THE BL AND HSF FOR THE MECHANISM.

A. The most recent estimates were computed using 36 months of data (from January 2022 through December 2024) and are based on the meter read cycle. We estimate a linear model that predicts how volume sales billed to customers vary with weather conditions as measured through heating degree days and weighted to match the billing cycle for the time period of the sales. The factors that Company witness Mr. Sailers presents were separately computed for each rate class.

The BL Factor equals the estimated intercept of this model, intuitively the volume of sales that can be expected in a month with negligible weather (as measured by heating degree days), while the HSF represents the weather coefficient, *i.e*. the degree to which a change in heating degree days predicts a change in the volume of sales. The standard errors of these coefficients were sufficiently low that all are statistically significant. The proposed values for BL and HSF are 0.986070 Mcf and 0.014698 Mcf/DD, respectively, for Rate RS. For Rate GS, they are 11.921161 Mcf and 0.100621 Mcf/DD, respectively. Mr. Sailers also requested a "Correlation Factor"—commonly referred to as the "R-Squared" by statisticians—which gives the extent to which variation in sales is explained by these models, and all of these were quite high, with Rate RS above 0.99, with Rate GS above 0.92.

V. FILING REQUIREMENTS AND INFORMATION SPONSORED BY WITNESS

Q. PLEASE DESCRIBE FR 16(7)(h)(5), (14), AND (15).

A. FR 16(7)(h)(5) consists of the kWh electric load forecast. FR 16(7)(h)(14) and (15) are the natural gas customer and natural gas load forecasts described earlier in my testimony.

Q. DID YOU SUPPLY ANY INFORMATION TO OTHER WITNESSES IN THIS PROCEEDING?

A. Yes, I supplied Ms. Hudson with the natural gas Mcf sales for the forecasted portion of the base period, consisting of the twelve months ending August 31, 2025, and the forecasted test period, consisting of the twelve months ending December 31, 2026.

Q. DO YOU BELIEVE THE FORECAST IS A REASONABLE AND ACCURATE DEPICTION OF THE COMPANY'S ANTICIPATED FUTURE GAS SALES VOLUMES?

A. Yes.

VI. CONCLUSION

Q. WERE FR 16(7)(h)(5), (14), AND (15), THE INFORMATION YOU PROVIDED TO MS. HUDSON AND ATTACHMENTS JCT-1 THROUGH JCT-2 PREPARED BY YOU OR UNDER YOUR SUPERVISION?

A. Yes.

Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?

A. Yes.

VERIFICATION

STATE OF North Carolina)
) **SS:**
COUNTY OF Wake)

The undersigned, Jonathon C. Thorpe, Senior Load Forecasting Analyst, 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.

PEGGY HOLTON NOTARY PUBLIC WAKE COUNTY, N.C.

Jonathon C. Thorpe

Jonathon C. Thorpe Affiant

Subscribed and sworn to before me by Jonathon C. Thorpe on this ____ day of May, 2025.

Peggy Holton

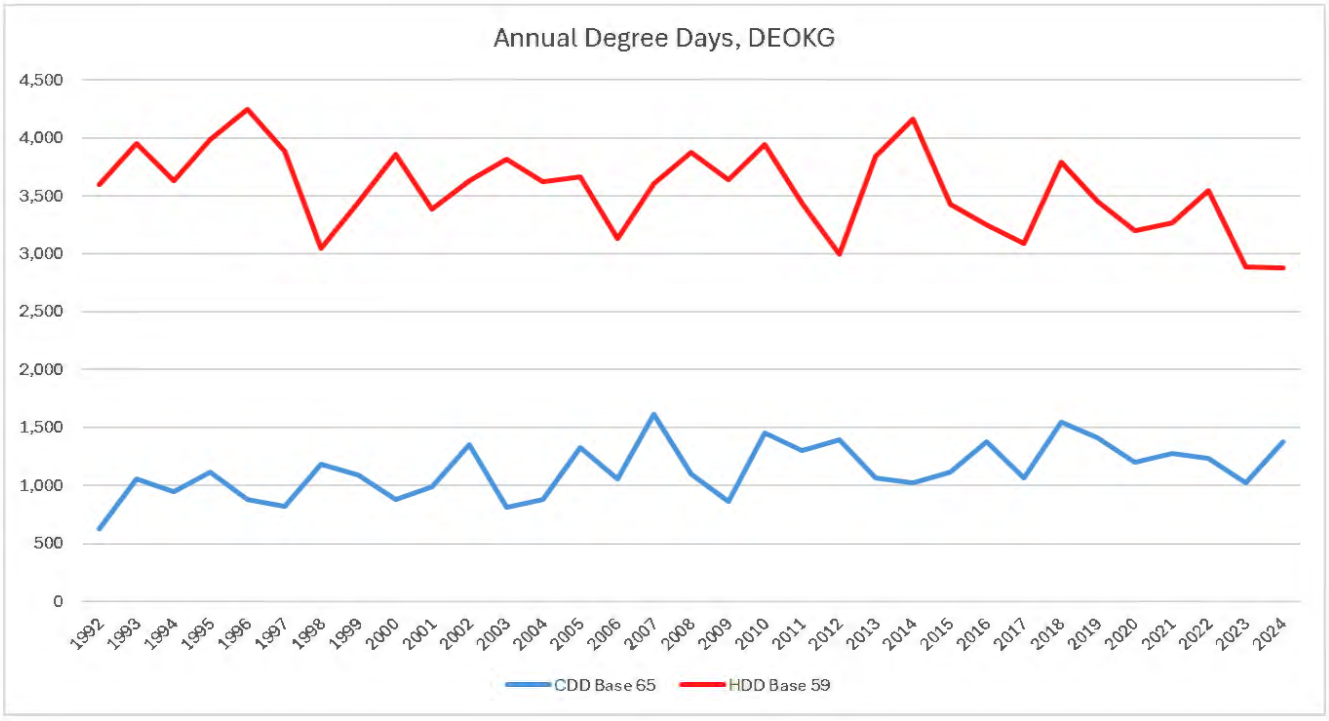
NOTARY PUBLIC

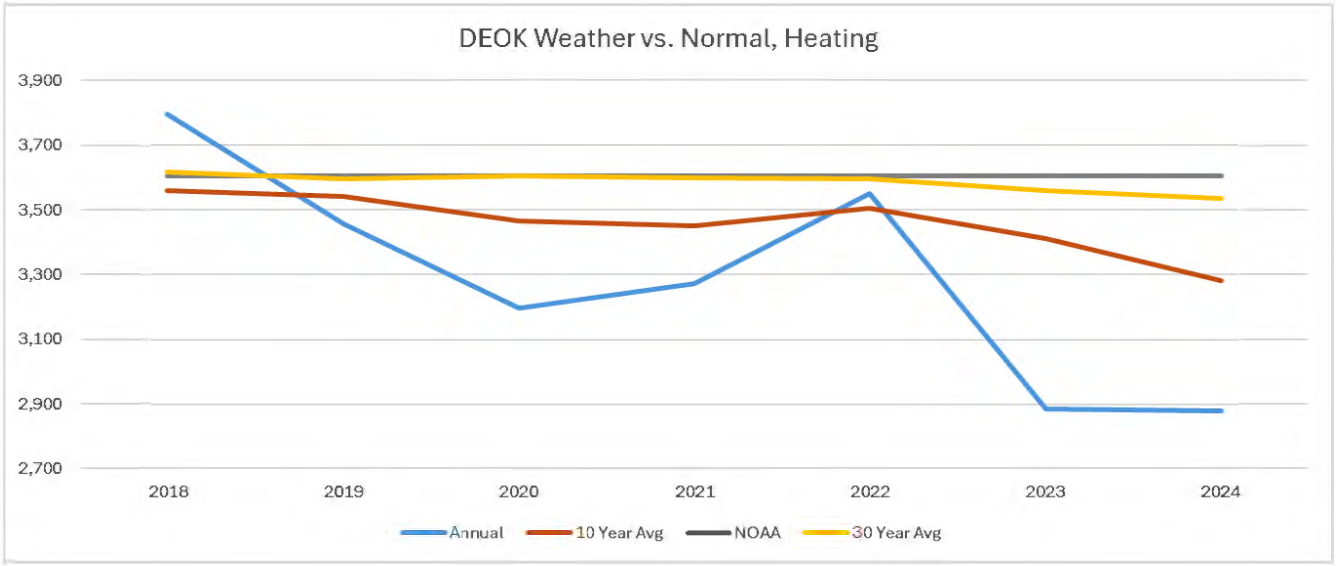
My Commission Expires: 12/22/2026

DUKE ENERGY KENTUCKY
SERVICE AREA ENERGY FORECAST (Volume in MCF) (a)

		(1)	(2)	(3)	(4)	(5)	(6)	(7) (1+2+3+4+5+6)
	YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	STREET-HWY LIGHTING/ID /OEU	OPA	OTHER	TOTAL CONSUMPTION
-5	2020	6,187,366	3,757,350	1,797,058	1,642,312	418,484		13,802,570
-4	2021	6,116,956	4,044,686	1,808,512	1,642,188	274,463		13,886,806
-3	2022	6,314,760	3,764,421	2,065,973	1,632,294	499,507		14,276,954
-2	2023	5,984,516	3,640,108	1,961,028	1,564,859	473,591		13,624,103
-1	2024	5,927,395	3,864,286	1,952,804	1,539,477	467,348		13,751,310
0	2025	6,118,576	3,966,316	1,953,894	1,658,406	497,782		14,194,974
1	2026	6,146,143	3,965,792	1,954,297	1,658,979	497,988		14,223,199
2	2027	6,176,431	3,982,011	1,958,745	1,661,404	498,099		14,276,690
3	2028	6,249,561	4,008,107	1,966,460	1,665,310	499,742		14,389,180
4	2029	6,224,322	3,984,151	1,970,455	1,668,420	498,843		14,346,191
5	2030	6,254,750	3,963,040	1,975,272	1,672,068	499,245		14,364,375
6	2031	6,285,450	3,940,273	1,980,178	1,675,856	499,605		14,381,361

(a) Figures in years -5 through -1 are weather-normalized history
(b) Figures in year 0 are forecast values


Annual Degree Days, DEOKG
4,500
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024
CDD Base 65
HDD Base 59


DEOK Weather vs. Normal, Heating
3,900
3,700
3,500
3,300
3,100
2,900
2,700
2018 2019 2020 2021 2022 2023 2024
Annual
10 Year Avg
NOAA
30 Year Avg

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 NATURAL GAS RATES; 2) APPROVAL OF NEW TARIFFS; AND 3) ALL OTHER REQUIRED APPROVALS, WAIVERS, AND RELIEF.	))))))	CASE NO. 2025-00125

DIRECT TESTIMONY OF

BRIAN R. WEISKER

ON BEHALF OF

DUKE ENERGY KENTUCKY, INC.

June 2, 2025

TABLE OF CONTENTS

PAGE

I. INTRODUCTION AND PURPOSE

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Brian R. Weisker, and my business address is 525 South Tryon Street, Charlotte, North Carolina 28202.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by Duke Energy Business Services LLC (DEBS) as Senior Vice President and President, Natural Gas Business Unit. DEBS provides various administrative and other services to Duke Energy Kentucky, Inc. (Duke Energy Kentucky or Company) and other affiliated companies of Duke Energy Corporation (Duke Energy).

Q. PLEASE BRIEFLY DESCRIBE YOUR EDUCATION AND PROFESSIONAL EXPERIENCE.

A. I received a Bachelor of Sciences degree from the United States Naval Academy in 1994 and an MBA degree from Tulane University in 2001. From 1996 through 2002, I worked in the United States Navy as a Division Officer, an Assistant Professor of Naval Science and as a Navigation/Operations Department Head. From 2002 through 2006, I worked at Cinergy as a Manager. In 2006, I became a power plant Station Manager following Duke Energy's acquisition of Cinergy. In 2014, I became General Manager of Carolina West Outages & Maintenance Services. In 2015, I became Vice President of Coal Combustion Products Operations & Maintenance. In 2018, I became Vice President of Natural Gas Operational Excellence within Duke Energy's Natural Gas Business Unit. In January 2020, I became Senior Vice President and Chief Operating Officer of

Duke Energy's Natural Gas Business Unit. In April 2024, I assumed my current role as Senior Vice President and President of Duke Energy's Natural Gas Business Unit.

Q. PLEASE DESCRIBE YOUR DUTIES AS SENIOR VICE PRESIDENT, CHIEF OPERATING OFFICER NATURAL GAS.

A. I am responsible for safe, reliable, and efficient natural gas delivery, safe work execution, investment prioritization, compliance with all state and federal natural gas regulations, natural gas supply, wholesale marketing, transportation and pipeline services, field customer service, sales and delivery, and business development. for the Natural Gas Business Unit within Duke Energy.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE KENTUCKY PUBLIC SERVICE COMMISSION?

A. Yes.

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

A. The purpose of my testimony is to provide an overview of Duke Energy's Natural Gas Business Unit and Duke Energy Kentucky's natural gas utility operations. I also discuss the major safety, reliability and efficiency initiatives for the Company's natural gas operations. In doing so, I will discuss the progress of and changes to Duke Energy Kentucky's safety initiatives: the Transmission Integrity Management Program and the Distribution Integrity Management Program.

I support the operation and maintenance (O&M), purchased fuel mixture information, and purchased gas expense for the base period and the forecasted test

period. I discuss how the gas capital expenditure budget is prepared, and I support the natural gas capital budget, including retirements, supplied to Duke Energy Kentucky witness Ms. Claire C. Hudson for her preparation of the Company's forecast. I describe and explain the Company's efforts to comply with regulations promulgated by the U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration (PHMSA) and support the Company's request to continue and expand its Pipeline Modernization Mechanism (Rider PMM).

I sponsor and support data provided in satisfaction of Filing Requirements (FR) 16(7)(b), FR 16(7)(d), FR 16(7)(f) and FR 16(7)(g). Finally, I sponsor Filing Requirement (FR) 16(7)(h)(8), which provides the mix of gas supply utilized in the financial forecast, and the O&M information relied on by Ms. Hudson.

II. DUKE ENERGY'S NATURAL GAS BUSINESS UNIT

Q. PLEASE DESCRIBE DUKE ENERGY'S NATURAL GAS BUSINESS UNIT.

A. The Natural Gas Business Unit is responsible for ensuring safe, reliable, adequate, reasonable, and affordable natural gas services to Duke Energy Kentucky's customers and that these services are provided in accordance with applicable federal and state laws and regulations. The Natural Gas Business Unit is designed to maintain and expand customer-centered strategies and support models, and to enable organic growth by focusing on the customer and core values. This is accomplished through engaging and enabling our workforce by establishing clear metric driven accountabilities, facilitating people development, linking workforce strategies to our goals of safe, reliable, adequate, reasonable, and affordable

service. The Natural Gas Business Unit employs approximately 2000 individuals who manage the day-to-day operations of the Kentucky, Ohio, Tennessee, North Carolina, and South Carolina businesses. Additionally, the Natural Gas Business Unit has approximately 2,500 contract employees to assist in our mission.

Duke Energy's Natural Gas Business Unit is organized into six major segments which are further defined by function within each segment. The six major segments of the Natural Gas Business Unit are Field and Utility Operations, Planning & Optimization, Sales and Delivery, Gas Supply and Wholesale Marketing, Regulatory Affairs, and Community Relations.

A. Natural Gas Business Unit's Field and Utility Operations Segment

Q. PLEASE DESCRIBE THE FIELD AND UTILITY OPERATIONS SEGMENT.

A. The Field and Utility Operations Segment is responsible for safe and reliable natural gas delivery, safe work execution, investment prioritization, and compliance at an affordable cost. Field and Utility Operations Segment is defined by six functions: Customer Field Operations, Pipeline Operations, Engineering and Pipeline Integrity, Major Projects, Distribution Construction, and Pipeline Safety. Adam Long's testimony will describe these Field and Utility Operations functions in greater detail.

B. Natural Gas Business Unit's Sales and Delivery Segment

Q. PLEASE DESCRIBE THE SALES AND DELIVERY SEGMENT.

A. The Sales and Delivery Segment is primarily responsible for driving customer growth through system expansion projects designed to serve new construction

residential and commercial markets in addition to existing homes and businesses desiring to convert to natural gas from alternative fuel sources. The Sales and Delivery Segment is also responsible for initiating and administering projects and contracts to serve large industrial end users and gas-fired power generation facilities across the Company's footprint as well as contracts for off-system natural gas deliveries to directly connected municipal customers.

C. Natural Gas Business Unit's Planning and Optimization Function

Q. PLEASE DESCRIBE THE PLANNING AND OPTIMIZATION SEGMENT.

A. Planning and Optimization is responsible for planning, scheduling, controlling, and managing field activities to meet or exceed customer expectations and maintain compliance while meeting financial targets without jeopardizing safety.

In addition, customer satisfaction is monitored and measured using surveys at various levels (transaction, employee, company levels). Customer feedback is also gathered and utilized to support efforts to continuously improve customer satisfaction.

D. Natural Gas Business Unit's Gas Supply and Wholesale Marketing Segment

Q. PLEASE DESCRIBE THE GAS SUPPLY AND WHOLESALE MARKETING FUNCTION.

A. The Natural Gas Supply and Wholesale Marketing Segment is responsible for: 1) Pipeline Services; 2) Natural Gas Scheduling; 3) Citygate Operations; and 4) Natural Gas Trading. The Pipeline Services division is responsible for all aspects of Duke Energy Kentucky's pipeline management including capacity planning,

forecasting, and oversight of Federal activities. Citygate Operations is responsible for management of third-party shipper business on the Duke Energy Kentucky system. As the name implies, the Natural Gas Scheduling group is responsible for scheduling all physical wholesale natural gas sales and purchases for Duke Energy Kentucky. Finally, Natural Gas Trading provides physical natural gas supply to meet customers' demands, ensures optimal storage levels to meet current and forecasted demand, and when not needed, optimizes pipeline, storage, and supply assets.

E. Natural Gas Business Unit's Regulatory Affairs Segment

Q. PLEASE DESCRIBE THE REGULATORY AFFAIRS SEGMENT.

A. The Regulatory Affairs function is responsible for regulatory reporting and other rate and tariff support activities, including rate adjustment support. These activities for Kentucky and Ohio are supported by the Duke Energy Kentucky and Duke Energy Ohio rates and regulatory department.

F. Natural Gas Business Unit's Community Relations Segment

Q. PLEASE DESCRIBE THE COMMUNITY RELATIONS SEGMENT.

A. The Community Relations Segment provides stakeholder engagement to enhance community relations within the locations served by the Natural Gas Business Unit. These activities for Kentucky and Ohio are supported by the Duke Energy Kentucky and Duke Energy Ohio community relations department.

III. DUKE ENERGY KENTUCKY'S LOCAL NATURAL GAS UTILITY OPERATIONS

Q. PLEASE DESCRIBE DUKE ENERGY KENTUCKY'S LOCAL NATURAL GAS OPERATIONS.

A. Duke Energy Kentucky serves a relatively densely populated territory that, though not heavily industrialized, consists of a diverse mix of industrial customers. Duke Energy Kentucky currently provides natural gas distribution service to customers in Boone, Bracken, Campbell, Gallatin, Grant, Kenton and Pendleton counties in northern Kentucky. Duke Energy Kentucky has approximately 1,581 miles of gas mains on its natural gas distribution system. There are approximately 400 employees in Duke Energy's Natural Gas Business Unit located in Kentucky and Ohio, many of whom perform services for Duke Energy Kentucky. The capital expenditures for Duke Energy Kentucky's natural gas operations in 2024 were approximately $91 million.

Duke Energy Kentucky purchases and delivers natural gas to approximately 106,142 customers.

Q. PLEASE SUMMARIZE HOW DUKE ENERGY KENTUCKY PROCURES NATURAL GAS.

A. During the 2024/2025 winter period, Duke Energy Kentucky purchased all of its gas supply under a firm supply contract from its asset manager and firm city gate delivered peaking from marketers. These firm agreements are composed of day-ahead swing supply agreements which provide Duke Energy Kentucky with the flexibility to accommodate daily temperature-sensitive fluctuations in customer demand. Duke Energy Kentucky sources its asset management contract through a

competitive bidding process to enable it to obtain the optimal mix of gas supply pricing and asset management value for its customers.

Duke Energy Kentucky contracts with interstate pipelines for firm transportation and storage services. During 2024, Duke Energy Kentucky contracted for firm storage services with Columbia Gas Transmission Corporation (Columbia Gas) which allows Duke Energy Kentucky to utilize storage as a natural physical hedge against high price volatility. Duke Energy Kentucky also contracted for firm transportation service from Tennessee Gas Pipeline Company (Tennessee Pipeline), Columbia Gulf Transmission Corporation (Columbia Gulf), Texas Gas Transmission Company and Columbia Gas Transmission Corporation (Columbia Gas). This diverse group of interstate pipeline companies allows Duke Energy Kentucky to negotiate lower transportation rates than it otherwise would be able to obtain from a smaller group of transportation providers.

The Company's natural gas procurement policies and practices have traditionally resulted in competitive gas cost adjustment (GCA) rates in the Commonwealth. Using techniques such as "expected value analysis", Duke Energy Kentucky has successfully made the transition from being a pre-Order 636[1] pipeline-supply dependent customer to an independent, aggressive buyer managing a diversified gas supply portfolio.

Duke Energy Kentucky has used asset management agreements, where the Company has contracted with a third-party, to provide Duke Energy Kentucky's

[1] Docket No. RD91-11-000 In Re Pipeline Service Obligations and Revisions to Regulations Governing Self-Implementing Transportation Under Part 284 of the Commission's Regulations. (FERC Order No. 636).

gas supply and to manage interstate pipeline transportation and storage contracts in exchange for a monthly fee that the asset manager credits to Duke Energy Kentucky. This fee, which Duke Energy Kentucky flows through 100 percent to customers through the quarterly GCA, allows Duke Energy Kentucky to optimize the value of these assets.

Q. WHAT STEPS HAS DUKE ENERGY KENTUCKY TAKEN TO HELP ASSURE THAT NATURAL GAS COSTS ARE REASONABLE?

A. Duke Energy Kentucky utilizes a "Best Cost" approach to purchasing natural gas. This approach involves five components: the price of natural gas, the security of natural gas supply, the flexibility of natural gas supply, natural gas deliverability, and supplier relationships. Duke Energy Kentucky has taken a number of steps to manage its natural gas costs consistent with its best cost policy including active participation at FERC, restructuring of supply and capacity contracts to adjust to market conditions, and utilizing an asset manager to promote more efficient use of its system and of its capacity and commodity rights.

Additionally, the Company offers various bill management and payment options to assist customers with managing their Duke Energy Kentucky bills. Company witnesses Amy B. Spiller and Lindsay Philemon describe these options in their testimony.

IV. SYSTEM SAFETY, INTEGRITY, RELIABILITY AND EFFICIENCY INITIATIVES

Q. PLEASE IDENTIFY THE REGULATIONS THAT DRIVE DUKE ENERGY KENTUCKY'S DISTRIBUTION AND TRANSMISSION INTEGRITY MANAGEMENT INITIATIVES.

A. Natural gas local distribution companies are required by federal regulations to ensure that natural gas infrastructure is fit for service. These regulations, Code of Federal Regulations (CFR) Part 192, are administered by PHMSA.

CFR 192 Subpart P – Gas Distribution Pipeline Integrity Management defines the required Integrity Management Program as "an overall approach by an operator to ensure the integrity of its gas distribution system" and the Company's Distribution Integrity Management Program (DIMP) addresses the requirements.

CFR 192 Subpart O – Gas Transmission Pipeline Integrity Management states that "an operator of a covered pipeline segment must develop and follow a written integrity management program that contains all the elements described in §192.911 and that addresses the risks on each covered transmission pipeline segment" and the Company's Transmission Integrity Management Program (TIMP) addresses the requirements.

Q. WHY IS DISTRIBUTION AND TRANSMISSION INTEGRITY MANAGEMENT IMPORTANT?

A. As stated previously, integrity management is an overall approach to ensure the integrity and enhance the safety of the natural gas distribution and transmission system. These regulations impose upon the Company an obligation to

continuously evaluate the reliability of its natural gas distribution and transmission system and to maintain and improve its safety and performance.

Q. PLEASE DESCRIBE DUKE ENERGY KENTUCKY'S CURRENT DIMP.

A. Duke Energy Kentucky's DIMP is summarized in a written document that meets all the requirements of CFR 192 Subpart P – Gas Distribution Pipeline Integrity Management and follows the following seven elements outlined in the regulation:

1) Knowledge of the natural gas distribution system;
2) Identify threats;
3) Evaluate and rank risk;
4) Identify and implement measures to address risks;
5) Measure performance, monitor results, and evaluate effectiveness;
6) Periodic evaluation and improvement; and
7) Report results.

These elements support the basis of the DIMP and provide direction in evaluating initiatives to reduce risks in the distribution system.

Q. PLEASE EXPLAIN HOW DUKE ENERGY KENTUCKY IDENTIFIES, DESIGNS, PRIORITIZES, AND IMPLEMENTS PROJECTS BASED ON ITS DIMP.

A. Duke Energy Kentucky identifies, evaluates, and ranks risks in its distribution system and prioritizes measures to address these risks based on a relative risk model that takes into consideration threats to the system as defined in CFR 192.1007, which include corrosion, natural forces, excavation damage, other outside force damage, material or welds, equipment failure, incorrect operations,

and other issues that could threaten the integrity of the pipeline. The method used to determine the risk in Duke Energy Kentucky's distribution system is based on the relative risk associated with repaired leaks. This risk is then aggregated for the entire system. The model is configured to utilize consequence values and a probability of one for each individual leak repair. Risk is calculated for each repair along with the inclusion of facility and location data. Individual leak risk is then summed up to develop risk scores at a system level. Threats with the highest total risk scores are then reviewed to determine appropriate measures to reduce and/or eliminate the risk.

Q. PLEASE DESCRIBE THE NATURAL GAS BUSINESS UNIT'S MAJOR DISTRIBUTION INTEGRITY, SAFETY AND RELIABILITY INITIATIVES.

A. All of the activities within the Natural Gas Business Unit incorporate safety and reliability considerations. Safety and reliability are organizational responsibilities and not the purview of any one part of the organization. For example, the Natural Gas Supply & Wholesale Marketing group w purchases natural gas that meets current pipeline quality standards. Natural Gas Engineering, Planning, and Pipeline Integrity designs and installs Duke Energy Kentucky's natural gas system in accordance with applicable safety codes promulgated in Title 49 of the CFR. The Natural Gas Business Unit follows PHMSA and Commission safety regulations when installing, operating, and maintaining transmission and distribution facilities. This deliberate focus on safety and reliability is also

demonstrated by the Company's exemplary safety record for natural gas distribution service in the Commonwealth.

In addition to these daily safety measures, the Natural Gas Business Unit is constantly exploring opportunities for the implementation of programs that focus on safety and reliability, all of which are relevant to these proceedings. The first such program was Duke Energy Kentucky's very successful Accelerated Main Replacement Program (AMRP), which was designed to replace the Company's cast iron and bare steel mains and associated services on an accelerated basis. The AMRP significantly reduced leak repairs on Duke Energy Kentucky's natural gas distribution system and the costs associated with such repairs. Duke Energy Kentucky was the first natural gas utility to implement such a program and operated the program such that it was completed on schedule. Duke Energy Kentucky maintained a replacement rate that allowed it to complete the program by 2010, as originally anticipated. Additionally, Duke Energy Kentucky efficiently managed the program by awarding the construction contracts for the AMRP through an annual bidding process. This allowed Duke Energy Kentucky to reduce the program costs.

The second major program was the Accelerated Riser Replacement Program (RRP), which was designed to replace certain types of service head adapter-style risers that have been associated with riser leaks. The RRP was completed in 2012.

The third major program was the Accelerated Service Replacement Program (ASRP). The ASRP, like its predecessor AMRP, was designed to replace

an out-of-date and aging natural gas delivery service line (main to curb and curb to meter) infrastructure that had a high likelihood of developing leaks or even failure. By installing new and current industry standard facilities, ASRP improved the safety and reliability of the natural gas delivery system. As a component to the ASRP, the Company assumed ownership of these services replaced. Rider ASRP was implemented in 2016 as a five-year program. Duke Energy Kentucky worked diligently to manage the costs of this program and completed this program in 2019.

Finally, as part of the Company's last natural gas rate case, Case No. 2021-00190, the Company proposed, and the Commission approved, the Company's AM07 Pipeline replacement program with recovery through a discrete surcharge, Rider PMM. This ongoing replacement program enhances the distribution system by removing an identified integrity risk due to the age and material of the existing pipeline. To date, the Company has received approval for the first three phases of the replacement program, which is expected to be completed in 2027.

Duke Energy Kentucky has been focused on Integrity Management, which is a comprehensive, risk-based approach to managing pipeline safety that is required for both transmission and distribution systems. Again, integrity management requires the entire organization's focus.

Q. PLEASE EXPLAIN THE TRANSMISSION INTEGRITY MANAGEMENT PROGRAM (TIMP).

A. Duke Energy Kentucky's TIMP is summarized in a written document that meets all the requirements of CFR 192 Subpart O – Gas Transmission Pipeline Integrity Management. TIMP consists of these high-level steps:

1) High Consequence Area (HCA) identification;
2) Threat identification;
3) Risk Assessment;
4) Baseline and Reassessment Planning;
5) Assessments;
6) Response to assessment findings;
7) Prevention and Mitigation; and
8) Improve.

As a whole, this is a continuous evaluation and assessment process. As stated in 49 CFR 192, "An operator's initial integrity management program begins with a framework and evolves into a more detailed and comprehensive integrity management program, as information is gained and incorporated into the program. An operator must make continual improvements to its program."

PHMSA emphasizes the importance of the operator's management responsibility to fully understand and acknowledge the implications of these program evaluations and to take the necessary steps to address deficiencies and make continuous program improvements. Program evaluation is one of the key required program elements established in the Integrity Management rules.

Additionally, operator senior management is required to certify the TIMP performance information submitted annually to PHMSA.

Q. PLEASE DESCRIBE THE NATURAL GAS BUSINESS UNIT'S MAJOR TRANSMISSION INTEGRITY, SAFETY AND RELIABILITY INITIATIVES.

A. Currently, Duke Energy Kentucky uses direct assessment techniques as the primary method of transmission pipeline integrity assessments. Duke Energy Kentucky is focused on increasing the percentage of in-line inspection (ILI) assessments as ILI provides more data for detecting defects, is recognized as the best assessment method available in the industry and is a requirement of federal regulations and prudent operations. When the final phase of the AM07 pipeline replacement completes, 80% of Duke Energy Kentucky's transmission pipelines will be capable of an ILI.

In compliance with Pipeline Safety Act of 2011 (Public Law 112-90), to maintain the integrity of its natural gas delivery system, and to ensure that it continues to operate the system at the appropriate maximum allowable operating pressure (MAOP), Duke Energy Kentucky conducted a very thorough segment-by-segment review for all transmission pipelines and facilities. Using the data from the review, Duke Energy Kentucky has developed work plans for addressing each segment with inadequate records. The verification process includes developing a plan segment by segment, ranking the importance of each segment, planning a schedule for the work to be conducted based on importance and resource logistics, and execution of the work. During this work, no major

interruptions are planned to service Duke Energy Kentucky customers and the Company will inform stakeholders of the work.

Q. HOW HAS THE NATURAL GAS BUSINESS UNIT PERFORMED ON ITS MAJOR SAFETY AND RELIABILITY MEASURES?

A. Duke Energy's Natural Gas Business Unit in Kentucky and Ohio have consistently performed as a leader in safety. Duke Energy was honored as an industry leader in employee safety having received the American Gas Association (AGA) Safety Achievement Award for achieving below industry average DART (Days Away, Restricted, or Transferred) incident rate in 2021, 2022, 2023, and 2024. Duke Energy also received the 2024 AGA Safety Achievement Award for the use of leading indicators. In addition, Duke Energy's OSHA Total Incident Case Rate (TICR) was in the top 10% of our AGA peer group in 2021, 2022, 2023, and 2024.

The Natural Gas Business Unit's major safety and reliability measures are excavation damages and leaks repaired for its gas distribution system. Duke Energy Kentucky's number of leaks identified and repaired has declined significantly with the programs implemented, from a peak in 2014 to an approximate 85 percent reduction in 2024. The backlog of leaks requiring repair has decreased by 95% over this same timeline. The Company's safety and reliability programs have resulted in a significant reduction in the number of system damages due to excavation. For example, in 2011, the Company experienced approximately 6.69 damages per thousand locates. In the first 3 months of 2025, this number has been reduced to 1.74.

Q. PLEASE DISCUSS THE COMPANY'S EFFICIENT MANAGEMENT OF ITS NATURAL GAS BUSINESS UNIT.

A. Duke Energy Kentucky has aggressively investigated and, where justified, implemented new products, technologies, and work methods to increase our productivity. Duke Energy Kentucky and Ohio participate in the AGA's Gas Utility Operations Best Practices Benchmarking Program. In this program, gas distribution companies from the United States and Canada routinely benchmark three to five distribution operations topics each year. Duke Energy Kentucky has implemented process improvements and utilized new technology, materials, and equipment as a result of what it has learned through participating in this program.

The Company also participates in the AGA Peer to Peer review program. This voluntary safety initiative is for local natural gas utilities throughout North America. The National AGA Peer Review Program is a peer-to-peer safety and operational practices review program that allows AGA member companies to observe their peers, share leading practices and identify opportunities to better serve customers and communities.

Q. CAN YOU PLEASE BRIEFLY EXPLAIN THE CHANGES IN STATE OR FEDERAL REGULATIONS THAT HAVE OCCURRED IN RECENT YEARS THAT IMPACT THE COMPANY'S NATURAL GAS BUSINESS UNIT?

A. In December 2011, Congress passed the Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011, an amendment of Title 49 United States Code 60101 (Pipeline Safety Act of 2011). The resulting federal regulations required

more stringent safety and reliability protocols for both Department of Transportation and Owners/Operators. Among other things, the Pipeline Safety Act of 2011, and advisory bulletins by PHMSA clarified expectations of requirements for operators of gas transmission lines to verify accuracy of records of their system which includes providing traceable, verifiable, and complete documentation to support MAOP.

A major new set of regulations for transmission pipelines (New Transmission Rule) was large and PHMSA split these regulations into three separate rules. The first part of the New Transmission Rule, RIN 1, was adopted in October 2019 with an effective date of July 2020 and focused on Safety of Gas Transmission Pipelines: MAOP Reconfirmation, Expansion of Assessment Requirements, and Other Related Amendments. The second part of the New Transmission Rule, RIN 3, was published on November 15, 2021, with an effective date of May 16, 2022, and focused on improving the safety of onshore gas gathering pipelines. RIN 3 does not impact Duke Energy Kentucky. The third part of the New Transmission Rule, RIN 2, was published on August 24, 2022, with an effective date of May 24, 2023, and focused on Repair Criteria, Integrity Management Improvements, Cathodic Protection, Management of Changes, and Other Related Amendments.

Among other things, the newly adopted RIN 1 of the New Transmission Rule includes expanded and ongoing assessment requirements in specifically identified areas. This will be an ongoing program with no end date. Additionally, the new rule reconfirms requirements for maintaining traceable, verifiable, and

complete records for confirming MAOP. The rule requires 50% MAOP re-confirmation be completed by July 2028 and 100% completion by July 2035. Finally, the new rule also contains a requirement for operators to validate pipeline component material specifications under various conditions in accordance with new regulations (Material Verification Program), however there is no deadline to reconfirm material records.

These new regulations have greatly expanded the scope of impacted pipelines, in terms of overall miles of pipes, that are now subject to these regulations. Also, the reconfirmation of MAOP via pressure test records and material documentation will be an extensive effort that may result in component and pipeline replacements. The ongoing, never ending "opportunistic" material verification effort will also impact operational costs and processes. New regulatory language limits the use of Direct Assessment for evaluating pipelines to assess only external corrosion, internal corrosion, and third-party damage threats. This will require operators to utilize ILI as a primary assessment tool going forward and to incur capital costs associated with either retrofitting or replacing pipelines to accommodate ILI tools.

In addition to the New Transmission Rule, PHMSA published a new rule in April 2022 that focuses on Pipeline Safety: Requirement of Valve Installation and Minimum Rupture Detection Standards and will require more remote-control valves on transmission systems. The Valve Rule provides additional regulatory requirements associated with Subpart O and throughout Part 192 and had an effective date of October 5, 2022. While these new regulations are necessary for

enhancing the safety of the natural gas system, it cannot be ignored that they will also drive future investments, maintenance, and upgrades.

V. OPERATIONS AND MAINTENANCE BUDGET

Q. PLEASE DISCUSS HOW DUKE ENERGY KENTUCKY'S BUDGET WAS PREPARED FOR USE IN THE COMPANY'S FORECASTED TEST PERIOD DATA.

A. The Natural Gas Business Unit prepares a detailed monthly budget every year for O&M costs. Duke Energy Kentucky reviews every aspect of the Natural Gas Business Unit's O&M activities by individual FERC account. The Company then performs a historical analysis of the O&M accounts and uses this as a starting point. The Company analyzes whether any unusual conditions caused any category of O&M costs to be higher than normal and adjusts estimates accordingly. The Natural Gas Business Unit also analyzes whether there are any new O&M activities or requirements that will occur in future years that are not reflected in previous years' costs.

Detailed estimates of O&M costs were prepared for the 2025annual budget, which were provided to Ms. Hudson for her use in the preparation of the last six months of the base period and the forecasted test period in this proceeding.

VI. CAPITAL EXPENDITURE BUDGET PROCESS

Q. PLEASE GENERALLY DESCRIBE THE PROCESS FOLLOWED TO DEVELOP DUKE ENERGY KENTUCKY'S NATURAL GAS BUSINESS UNIT CAPITAL BUDGET FOR THE NEXT FIVE YEARS.

A. Ms. Hudson supports this information in her direct testimony. Blanket projects consist of customer growth projects, equipment replacement projects, government mandated projects and capital expenditures associated with capital tools and building upgrades. Customer growth projects involve new main installations related to general growth in Duke Energy Kentucky's customer load. Prior-period customer and load growth is used to estimate how much incremental infrastructure will be required in future periods. Government mandated projects consist of street improvement projects and other construction projects Duke Energy Kentucky is required to undertake by permit.

We develop the blanket capital expenditure budget for these projects through a qualitative and quantitative review of historical data. We use historical average installation footage and determine whether any unusual factors existed during any year for the historical data, such that the data for that year should be discounted or a forecasted footage for the current year should be used. We then prepare a five-year future look. We use specific cost projections related to a particular project, to the extent that such information is available. For example, government entities notify us about many street improvement projects well in advance, and we prepare the capital budget for these items by incorporating the projected cost for the known parameters of these projects.

Specific projects are larger projects that Duke Energy Kentucky can identify in advance which are needed to maintain the integrity of the system, strengthen infrastructure to meet design-day requirements, or are initiated by governmental entities for public improvements. Integrity projects consist of casing projects, corrosion control and general transmission and distribution integrity projects required to maintain a safe pipeline system. These projects are driven by prior-period O&M work done to inspect the system for safety and reliability. System infrastructure projects are projected by computer modeling when areas of the distribution system have deficient minimum pressure levels.

The Company prepares a five-year forecast for these capital expenditures, including retirements, each year. This information is used for the annual budget and the five-year forecasts discussed by Ms. Hudson. The Natural Gas Business Unit is responsible for preparing the capital expenditures budget (except for natural gas meters, information technology and corporate initiatives) used by Ms. Hudson to develop the forecasted test period financial data. I am also responsible for reviewing the capital expenditure budget (except for information technology and corporate initiatives) for 2025, 2026 and 2027.

VII. SCHEDULES SPONSORED BY WITNESS

Q. WHAT PORTIONS OF THE COMPANY'S FILING REQUIREMENTS 16(7)(d) AND 16(7)(h)(8) DO YOU SPONSOR?

A. I co-sponsor the O&M information used by Ms. Hudson, which is the annual and monthly budget for the twelve months preceding the filing date, and the monthly budget detail used in the preparation of the base and the forecasted test period.

Q. PLEASE EXPLAIN FR 16(7)(b).

A. FR 16(7)(b) provides the budget for Duke Energy Kentucky's natural gas capital expenditures for 2025, 2026 and 2027. The Natural Gas Business Unit provided, and I reviewed the underlying information for this filing requirement, to Ms. Hudson, using the methodology I discussed earlier in my testimony. Ms. Hudson used this information to prepare Duke Energy Kentucky's forecasted test period financial data.

Q. PLEASE EXPLAIN FR 16(7)(f).

A. FR 16(7)(f) requires the applicant to list all major construction projects, defined as projects five percent or more of the annual construction budget within the three-year forecast.

Q. PLEASE EXPLAIN FR 16(7)(g).

A. FR 16(7)(g) requires the applicant to list certain cost information, in aggregate form, for all other construction projects not listed on FR 16(7)(f) within the three-year forecast. The Natural Gas Business Unit provided, and I reviewed, the information for these projects, using the methodology I discussed earlier in my testimony for preparing the Natural Gas Business Unit capital expenditure budget.

VIII. CONCLUSION

Q. WERE (FR) 16(7)(b), FR 16(7)(f), FR 16(7)(g), (FR) 16(7)(h)(8) AND THE INFORMATION YOU PROVIDED TO MS. HUDSON FOR (FR) 16(7)(d) OBTAINED OR PREPARED BY YOU OR UNDER YOUR DIRECTION AND CONTROL?

A. Yes.

Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?

A. Yes.

VERIFICATION

STATE OF NORTH CAROLINA)
)
COUNTY OF MECKLENBURG)

SS:

The undersigned, Brian R. Weisker, SVP and President, Natural Gas Business, 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.

B R. Wei

Brian R. Weisker Affiant

Subscribed and sworn to before me by Brian R. Weisker on this 22nd day of May, 2025.

Janet P. Cureton

NOTARY PUBLIC

My Commission Expires: March 11, 2030

JANET P CURETON
NOTARY PUBLIC
Mecklenburg County
State of North Carolina