Pre-filed Direct Testimony
Brian B. Bird

In the Matter of the Application of
NorthWestern Energy Public Service Corporation, d/b/a NorthWestern Energy

For Authority to Increase Natural Gas Utility Rates
in South Dakota

Docket No. NG24-__

June 21, 2024

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Witness Information

Q. Please identify yourself, your employer, and your job title.

A. My name is Brian B. Bird. I am President and Chief Executive Officer of NorthWestern Energy Public Service Corporation, d/b/a NorthWestern Energy ("NorthWestern" or "Company").

Q. Please provide a description of your relevant employment experience and other professional qualifications.

A. I have 38 years of experience within the fields of corporate finance, treasury, tax, audit, and accounting and was promoted to my current position on January 1, 2023. Prior to that, I served two years as NorthWestern's President and Chief Operating Officer and 18 years as Chief Financial Officer. I have Bachelor's degrees in both Finance and Accounting and a Master's degree in Finance and hold a Certified Public Accountant certificate.

Purpose and Summary of Testimony

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to provide the overarching policy testimony that guides NorthWestern's 2024 Regulatory Rate Review for our South Dakota natural gas utility. I introduce NorthWestern's witnesses who provide a more detailed explanation of NorthWestern's major initiatives and investments in the utility infrastructure needed to provide critical energy services and the reasons why the South Dakota Public Utilities Commission ("Commission") should grant our request.

Q. Please summarize your testimony.

A. NorthWestern's goal in this rate review is to seek recovery of the costs incurred to provide safe and reliable service to our customers. Timely cost recovery is necessary to ensure that NorthWestern is able to continue meeting our customers' needs for safe and reliable service at reasonable rates.

Our last natural gas rate review considered by the Commission (Docket No. NG11-003) was filed in 2011 using a 2010 test year. Since 2010, NorthWestern has invested over $82.1 million in our South Dakota natural gas critical infrastructure business. Currently, NorthWestern is not recovering the costs of these investments. And, quite simply, with the passage of 13 years since our last rate review, increased operating costs driven by inflation support the need for a rate increase at this time.

In pursuit of this goal, NorthWestern includes proposals typically expected in a rate review – a presentation of updated cost of service to support our request for authorized revenue requirement for a 2023 test year with adjustments for known and measurable adjustments for 2024, updated depreciation rates, and an updated rate of return.

NorthWestern Energy's Role and Services

Q. Please provide an overview of NorthWestern and the services it provides.

A. For more than 100 years, NorthWestern has delivered safe, reliable, and innovative energy solutions. We build, maintain, and operate electric and natural gas systems in Montana, South Dakota, Nebraska, and Yellowstone National Park, as reflected in Figure 1 below.

NorthWestern's 1,573 employees serve a total of 775,300 natural gas and electric customers across Montana, South Dakota, and Nebraska, which encompasses electric service to 337 communities and natural gas service to 202 communities. Within South Dakota, NorthWestern's 267 employees serve approximately 64,800 electric and 49,800 customers in 116 communities between its electric and natural gas utilities. This rate review is limited to the cost of service related to our South Dakota natural gas customers in 63 communities.

Figure 1: Our Service Territory

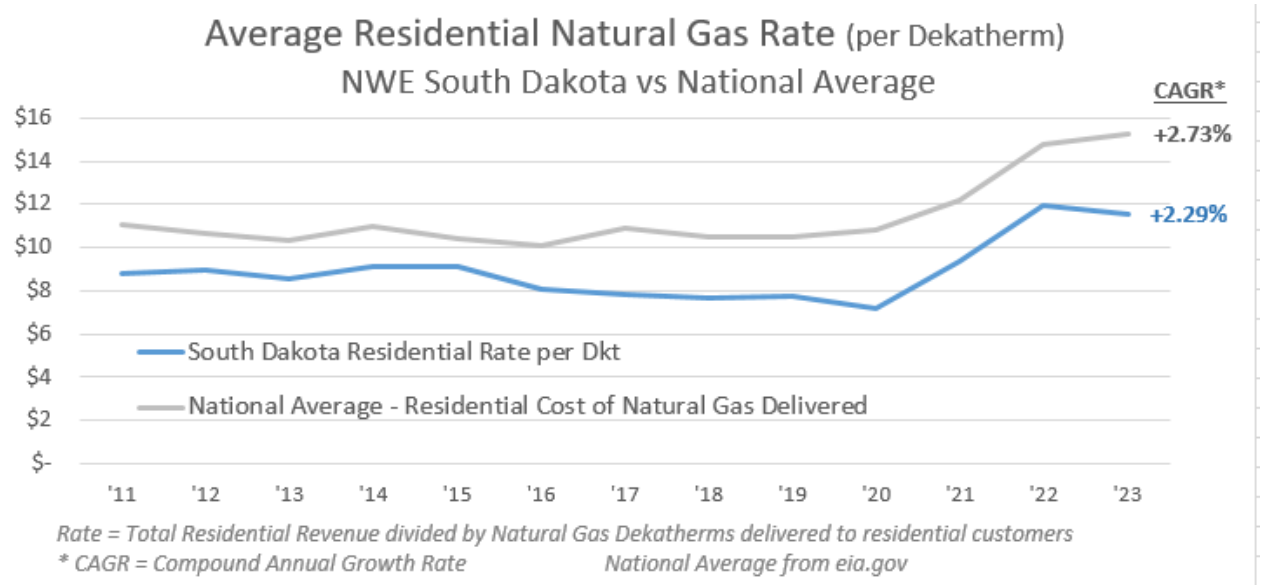
In addition to the ownership and operation of critical natural gas and electric transmission and distribution systems and natural gas production, NorthWestern owns and operates a diverse generation fleet of hydro, wind, natural gas, and coal-fired resources that is 55% carbon free for our utility overall.

As a public utility, NorthWestern is subject to direct government regulation of prices and services in South Dakota by the Commission. Ensuring South Dakota customers receive safe and reliable energy services is the shared responsibility of both NorthWestern and the Commission. As such, NorthWestern requests the Commission consider and approve its request in this 2024 Rate Review.

Q. What is NorthWestern's role?

A. We recognize the critical role that energy services provide in the quality of life for our customers. NorthWestern is guided by three pillars: Reliability, Affordability, and Sustainability. We are continually making investments in maintaining and modernizing our infrastructure to improve safety and reliability. Overall, South Dakota ranks well compared to other states concerning affordability and reliability of natural gas rates and services. We provide affordable natural gas services that have given our average South Dakota customer monthly bills that are below the national average for over a decade as presented in Figure 2 below.

Figure 2: Typical Residential Bill



NorthWestern is committed to our mission of "Working together to deliver safe, reliable and innovative energy solutions that create value for customers, communities, employees and investors."

The testimonies presented by NorthWestern discuss the actions we are taking to achieve these goals and how this rate review supports those actions.

Q. Can you please identify the critical services that NorthWestern provides to its South Dakota customers?

A. The natural gas services we provide are an essential part of modern life and important to the U.S. economy. Our residential customers primarily use natural gas service for heating and cooking. Our commercial and industrial customers use natural gas as a low-cost energy resource for their daily operations to keep

their businesses viable and competitive – not only in South Dakota, but also in our regional and national economic arenas.

According to the Department of Homeland Security, there are "16 critical infrastructure sectors whose assets, systems, and networks, whether physical or virtual, are considered so vital to the United States that their incapacitation would have a debilitating effect on security, national economic security, national public health or safety, or any combination thereof."[1]

The energy sector is uniquely critical because it provides an "enabling function" across all 16 critical infrastructure sectors. In other words, without NorthWestern's natural gas infrastructure, our quality of life would suffer and our security (economic or otherwise) would be severely impacted. Energy is the building block for everyday life.

Q. What challenges does NorthWestern currently face in delivering safe and reliable service to customers?

A. NorthWestern must continue to ensure that our customers receive reliable energy services to meet their critical needs. In order for NorthWestern to meet this essential obligation, continued investment in our South Dakota natural gas distribution infrastructure is required to ensure it is sufficient and safe to meet our customers' energy needs.

[1] *See* Cybersecurity & Infrastructure Security Agency Brief Critical Infrastructure Sectors | CISA (visited April 9, 2022).

To continue to effectively provide safe and reliable energy services to our customers, NorthWestern must be a financially-healthy utility. One of the most essential requirements for a utility's financial health is cost recovery. More timely cost recovery allows better cash flows and earnings to improve rating agency metrics and financial results, which lead to more attractive debt and equity costs that are ultimately passed on to customers. To continue investment in infrastructure to provide safe, reliable, and affordable service, NorthWestern needs affordable access to capital from both debt and equity investors. A financially-healthy utility ultimately delivers lower costs to customers.

The ever-changing federal regulatory landscape is another challenge to our ability to provide reliable and affordable energy services. Energy utilities like NorthWestern need regulatory certainty when making long-term decisions for capital investments. This is especially important, as we need to make continued investment in our natural gas infrastructure to ensure our system meets all pipeline safety regulations and emission-related regulations being imposed by the Environmental Protection Agency (EPA).

Q. What additional services does NorthWestern provide customers and our communities?

A. NorthWestern has a significant impact not only in the 116 communities we serve but across all of South Dakota.

NorthWestern commissions an annual economic impact analysis by Circle Analytics,[2] a Montana-based consultant. The analysis quantifies the financial impact NorthWestern makes on the states and communities it serves. The study found NorthWestern has a noteworthy impact on the financial well-being of South Dakota. Through our investments and services, 1,135 good-paying jobs have been created for other South Dakotans and we have an annual $268.8 million impact on gross economic output in the state.

Our economic impact within our South Dakota service territory extends beyond the analysis described above. NorthWestern is a proud economic development partner with the communities we serve and the State of South Dakota through our active involvement in various economic development partnerships.

Every day our natural gas personnel in the field interact with our customers to restore service or add new services to our communities. Our customer service employees help customers with any questions or complaints they may have. These customer service personnel are located at our call centers and in our eight South Dakota walk-in local offices.

NorthWestern is an active partner in each of the communities we serve. Many of our employees are very active in their communities. For example, our South Dakota employees actively participate on non-profit community boards such as

[2] Circle Analytics Link: https://www.northwesternenergy.com/docs/economicimpact

chamber or economic development-related boards, service clubs, local United Ways, and other community-based charitable organizations.

Q. Is there a relationship between NorthWestern's financial health and the utility's ability to serve customers reliably?

A. Yes. A financially healthy utility drives lower costs for customers and encourages economic development. Utilities compete for capital, and financially healthy utilities attract more capital and at a lower cost for their customers. It is simple supply and demand economics. We have proof of this over the history of this Company. After we emerged from bankruptcy in late 2004, our credit ratings started to rise just as we were increasing the amount of investment as a company. With those higher credit ratings, the amount of credit spread (think premium on our interest cost) came down, which was a reduction in costs for our customers. Unfortunately, as of late, our credit ratings have come down and our credit spreads necessary to pay investors have gone up higher than what our peer utilities have to pay. Thus, the financial health of the Company has a direct impact on customers. NorthWestern Witness Emilie T. Ng speaks more to the importance of financial health to the Company in her testimony.

Q. Why is NorthWestern seeking a rate increase at this time?

A. Since our last rate review 13 years ago, we have invested approximately $82.1 million in capital additions in our natural gas infrastructure. As a result of our investments, our system is more resilient and reliable. The cumulative impact of

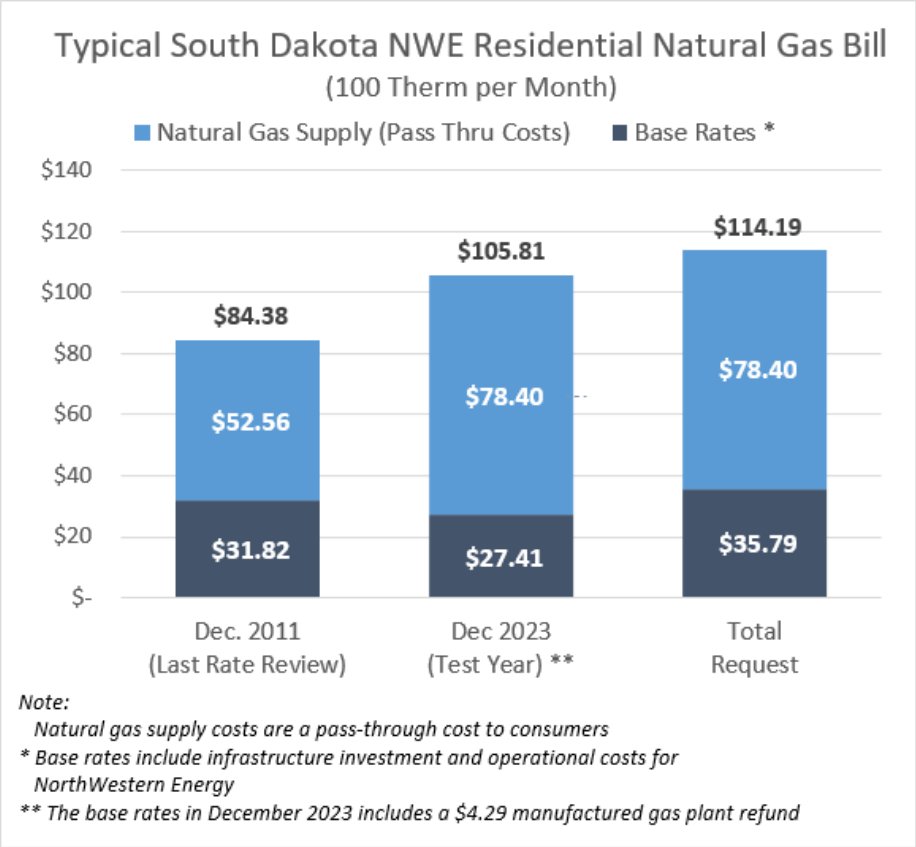
these capital investments is the most significant driver of our need for a general rate review at this time, coupled with cost pressures in key areas including business technology, regulation, and labor.

This rate review filing also includes updated depreciation rates that are described in testimony submitted by NorthWestern consultant, John J. Spanos.

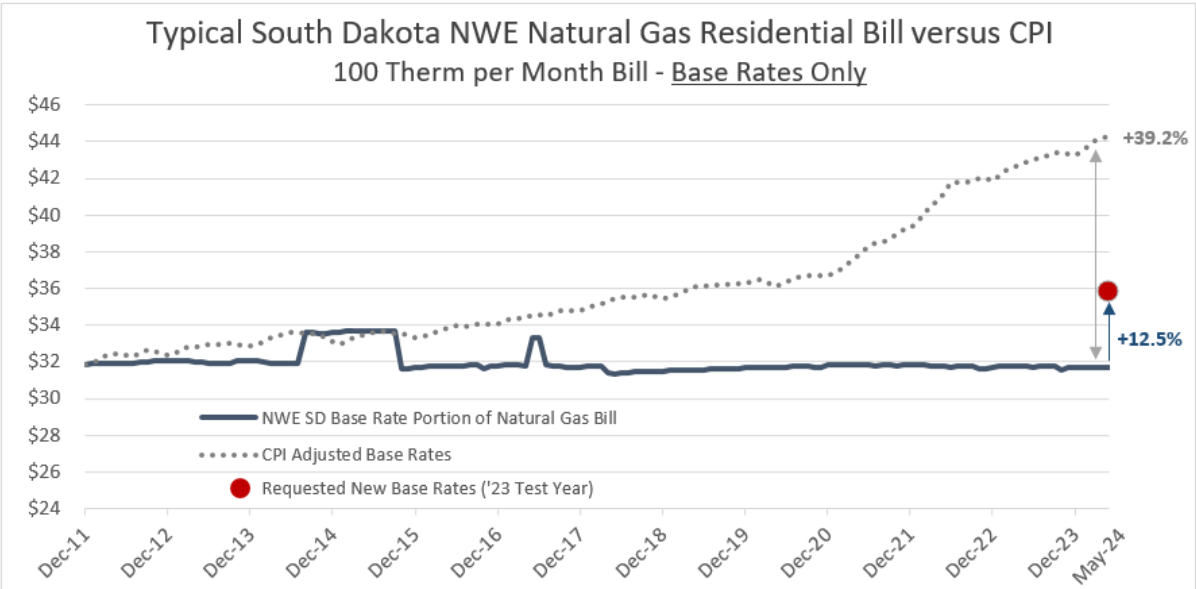
Q. How does the requested rate relief compare with inflation since NorthWestern last filed a rate review?

A. Figure 3 below contains two graphs that show how this requested rate relief compares with inflation since our last rate review in 2011. The first graph compares the impacts of NorthWestern's requested rate relief in this rate review filing on a typical residential customer's bill for natural gas services since December 2011. The second graph shows that based on our current expectations, typical residential customer bills will continue to be below the impacts of inflation.

Figure 3: NorthWestern's Natural Gas Residential Bill Impact



Note:
Natural gas supply costs are a pass-through cost to consumers
** Base rates include infrastructure investment and operational costs for NorthWestern Energy*
*** The base rates in December 2023 includes a $4.29 manufactured gas plant refund*



Notes:
1.) Typical bills include base rates only (excludes gas supply costs) for Dec. 2011 (last rate review) and requested new base rates for '24 rate review
2.) December 2011 base rates inflated by Consumer Price Index (CPI)
3.) Base rates include infrastructure investment and operational costs for NorthWestern Energy and any manufactured gas plant refunds are added back to base rates

Overview of NorthWestern Operations

Q. How do the requests for cost recovery in this rate review support safe and reliable service for South Dakota customers?

A. The scope of this rate review addresses historical 2023 costs NorthWestern incurred in providing service to our customers, with the ability to adjust for "known and measurable" projected 2024 costs. All investments made in our natural gas utility infrastructure were for the purpose of providing safe, reliable, and affordable services to our South Dakota customers. As part of our internal review process, NorthWestern vets project costs to provide justification in expending capital and supporting the project's purpose. Each project was carefully evaluated and thoroughly reviewed to make sure it met not only the needs of the utility, but our customers' needs too.

Q. How does NorthWestern plan to meet the future needs of its customers?

A. NorthWestern continues to make investments with clear benefits for South Dakota customers, including modernizing and securing our systems. We also continue to invest in our natural gas infrastructure to improve the safety and reliability of our natural gas utility services. We continue to implement technologies that will identify problems in our delivery system before they occur and thus better enable us to focus our efforts and dollars. We deployed automated meter reading ("AMR") to enhance our services, decrease our meter reading costs, and to set the stage for future metering technologies. NorthWestern Witness Bradley S. Wenande will provide additional information regarding our continued capital

investments to support and enhance our South Dakota natural gas delivery infrastructure and services to customers.

Rate Review Overview

Q. Please provide a summary of what NorthWestern proposes in this rate review.

A. We are proposing to achieve base cost recovery with a test year revenue requirement, appropriate known and measurable adjustments, and a fair Return on Equity ("ROE"). NorthWestern is requesting a $6.0 million increase to base rates and a 10.7% ROE.

Within this rate review, NorthWestern is also requesting an increase to the economic development cap for rate recovery as established in Docket No. NG11-003. The current economic development cap is set at $30,000 annually and that is split 50/50 between shareholders and our customers for a total of $15,000 to be recovered through rates. As demonstrated in our annual economic development filings, NorthWestern substantially exceeds the $30,000 annual cap each year. NorthWestern is proposing to increase the cap by $20,000 for a total annual budget of $50,000 that will continue to be split 50/50 between shareholders and customers. Witness Jeffrey B. Berzina will provide additional information in support of this request.

NorthWestern's case represents a very important rate review that relies heavily on a reasonable outcome so that we can improve our financial health, which will allow us to better serve our customers going forward. NorthWestern presents witnesses that discuss each of these proposals in greater detail and I introduce those witnesses below.

Introduction of Witnesses

Q. Please identify the additional witnesses testifying on behalf of NorthWestern in this proceeding.

A. The following are the NorthWestern experts who provide the further details supporting proposals in this rate review, listed by key functional areas.

Distribution: For natural gas service, distribution consists of the meters and underground pipelines to customer homes and businesses. NorthWestern is responsible for the distribution up to each customer's meter.

- Bradley S. Wenande provides an overview of investment in our natural gas distribution system and AMR deployment in South Dakota.

Finance: Finance plays the critical role of ensuring sufficient funding and access to capital that are necessary to enable our operations departments to ensure safe and reliable service for our customers given our regulatory environment.

- Emilie T. Ng presents the Company's capital structure and proposed rate of return. She describes what is needed to be a financially healthy

utility and how the Company's financial health is critical to our ability to serve our customers in an affordable manner.

- Jeffrey B. Berzina presents NorthWestern's proposed updated rate base and revenue requirement for our South Dakota natural gas utility based on a 2023 historical test year and known and measurable 2024 adjustments.
- Aaron J. Bjorkman is providing testimony in support of deferred taxes in rate base and tax-related items in the income statement for this filing.
- Consultant Adrien M. McKenzie presents NorthWestern's updated ROE analysis.
- Consultant John J. Spanos presents NorthWestern's updated Depreciation Study.
- Jeffery J. Decker presents our proposed rate design, revenues, and updated tariffs.

Q. Does this complete your pre-filed direct testimony?

A. Yes, it does.

Pre-filed Direct Testimony
Emilie T. Ng

Before the South Dakota Public Utilities Commission
of the State of South Dakota

In the Matter of the Application of
NorthWestern Energy Public Service Corporation, d/b/a NorthWestern Energy

For Authority to Increase Gas Utility Rates
in South Dakota

Docket No. NG24-_____

June 21, 2024

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Witness Information

Q. Please state your name and business address.

A. My name is Emilie T. Ng, and my business address is 3010 W. 69th Street, Sioux Falls, South Dakota 57108.

Q. By whom are you employed and in what capacity?

A. I am the Treasurer of NorthWestern Energy Public Service Corporation d/b/a NorthWestern Energy ("NorthWestern" or "Company").

Q. Please provide a description of your relevant employment experience and other professional qualifications.

A. I have been with NorthWestern since May 2002. As Treasurer, I am responsible for the areas of corporate finance, cash management, credit management, and bank and rating agency relations. Prior to joining NorthWestern, I held various positions in commercial and investment banking. I have a Masters of Business Administration degree from The University of Chicago.

Purpose of Testimony

Q. Please summarize your testimony.

A. My testimony discusses the capital structure, cost of debt, and cost of equity requested by NorthWestern in this proceeding and makes the following recommendations:

- The capital structure recommended is 46.87% debt and 53.13% equity;

- The cost of debt is 4.42%;
- The cost of equity is 10.70%; and
- The rate of return is 7.75%.

This summary is shown on Statement G Page 1 of 4.

My testimony also discusses the importance of having a financially-healthy utility.

Capital Structure

Q. Please summarize your specific recommendations for capital structure and overall rate of return.

A. I recommend approval of the proposed test year capital structure with 53.13% common equity and an overall rate of return of 7.75%, as shown below.

NorthWestern Energy Public Service Corp.

	Capital Structure	Rate	Weighted Rate
Debt to Book Capitalization			
Utility Long-Term Debt	46.87%	4.42%	2.07%
Utility Book Equity	53.13%	10.70%	5.68%
Rate of Return	100.00%		**7.75%**

Note: See Statement G page 1 of 4 for further details.

Q. Please describe the methodology used to calculate the capital structure recommended in this case.

A. NorthWestern reorganized into a holding company structure where its South Dakota and Nebraska ("SD/NE") jurisdictional utilities and the Montana jurisdictional utility became two stand-alone subsidiaries starting on January 1,

2024.[1] The filing reflects the book capitalization of the SD/NE subsidiary as of March 31, 2024, which is presented in its FERC Form 1/3-Q filing (see Statement G Page 1 of 4), capturing the holding company reorganization in the known and measurable period. This book capitalization is comprised of all the long-term debt secured by its assets and the proprietary capital (book equity) of NorthWestern. The ratio is calculated to be 46.87% debt and 53.13% equity.

Q. Please explain why the book capitalization as of March 31, 2024 accurately reflects the regulated capital structure.

A. Although the entity NorthWestern Energy Public Service Corporation existed as a legal entity as of December 31, 2023, the assets of the SD/NE utilities were not transferred until January 1, 2024 and the allocation of the capitalization for NorthWestern was completed during the first quarter of 2024. As such, the book capitalization of NorthWestern as of March 31, 2024 is a more accurate representation of the long-term capitalization of the SD/NE standalone utility subsidiary and thus, appropriate to use as the regulatory capital structure for this filing.

Q. How does this capital structure compare to the capital structure proposed by NorthWestern in the last rate review filed in South Dakota?

[1] Docket GE22-002: Order approving corporate restructuring plan for NorthWestern Corporation pursuant to which (a) NorthWestern Corporation will transfer its public utility operations in South Dakota and Nebraska to a new entity, NorthWestern Energy Public Service Corporation, effective January 1, 2024; and (b) such new entity and NorthWestern Corporation will become wholly-owned subsidiaries of NorthWestern Energy Group, Inc.

A. In the 2023 South Dakota electric rate review, the proposed capital structure was 49.50% debt and 50.50% equity.

Cost of Debt

Q. Please explain the debt amount used in calculating the capital structure presented in this case.

A. I used the total long-term debt secured by assets of the combined electric and natural gas utilities in South Dakota and Nebraska as of March 31, 2024, which was $520.0 million.

Q. Why is the unsecured revolving credit facility debt excluded from the calculation of the capital structure?

A. The unsecured revolving credit facility borrowings of $11 million as of March 31, 2024 is excluded from the capitalization calculation. These borrowings are generally used for ongoing working capital (e.g., energy supply purchases, construction work in process, dividends to parent, taxes, etc.) and therefore, not part of the long-term capitalization of the Company. Borrowings under the unsecured credit facility may be repaid using a combination of internally generated cash flows, equity issuances, and/or long-term debt issuances. Until such time that the unsecured revolving credit facility debt is refinanced as long-term secured debt, this portion of debt should not be considered permanent, long-term capital of the utility.

Q. How did you determine the cost of debt?

A. To derive the total annual cost of long-term debt, the annual interest cost is added to the annual amortization of debt discount and issuance expense associated with each debt component (see Statement G page 1 of 4). This total annual cost of long-term debt amount is then divided by the long-term debt outstanding of $520.0 million, determining a weighted average cost of long-term debt of 4.42%.

Q. How is your cost of debt different from the cost of debt in your last filing?

A. The cost of debt filed in our last South Dakota rate review in 2023 was 4.32%, slightly lower than the 4.42% in this filing. As interest rates have reached all-time highs in recent years, recent debt issuances by the Company have come at a higher cost resulting in a higher overall cost of debt for the utility.

Cost of Equity

Q. How did you determine the cost of equity?

A. I relied on the analysis performed by Adrien McKenzie of FINCAP, Inc., which is explained in his direct testimony. Mr. McKenzie's analysis shows a range of reasonableness for return on equity ("ROE") – using a natural gas utilities proxy group and a low-risk non-utility firms proxy group – to be 10.2% to 11.2%, with a midpoint of the range of 10.7%. I agree with Mr. McKenzie's analysis and recommend using an ROE of 10.7%.

Q. Please describe the importance of the determination of a reasonable authorized ROE.

A. The outcome in this proceeding should provide NorthWestern the opportunity to earn an ROE that is: (1) adequate to attract capital at reasonable terms under a variety of economic and financial market conditions over the period of time that its investment will be recovered; (2) sufficient to reasonably ensure its financial integrity; and (3) commensurate with returns on investments in enterprises with similar risk. Providing the opportunity to earn a market-based cost of capital supports the financial integrity of the utility, which is in the interest of both customers and investors.

Q. What effect do current and prospective market conditions have on the cost of equity?

A. The combination of sustained higher long-term interest rates, significant capital investments required by the utility sector, and uncertainty posed by de-carbonization policies all contribute to an expectation of increased market risk and an increase in the ROE required by investors when investing in utilities. It is essential that these factors be considered in determining an appropriate forward-looking ROE. Inflation recently reached the highest level experienced in approximately 40 years. Interest rates, which have increased significantly from pandemic-related lows in 2020, are expected to continue to remain high as the Federal Reserve uses monetary policy to address inflation. Because there is a strong historical inverse correlation between interest rates and the share prices

of utility stocks (share prices of utility stocks typically fall when interest rates rise), it is reasonable to expect that investors' required ROEs for utility companies will also continue to increase.

Rate of Return

Q. How did you determine the overall cost of capital required for the natural gas utility in South Dakota?

A. The overall cost of capital required for the natural gas utility in South Dakota is derived from the cost of long-term debt and cost of equity appropriate for the utility, weighted by the percentage of debt and equity in the proposed capital structure. The calculation of the weighted average cost of capital is shown on Statement G Page 1 of 4. As indicated on Statement G and summarized earlier in my testimony, the weighted average cost of capital (rate of return or "ROR") is 7.75%.

Q. How does the proposed ROR compare to the current authorized ROR for the South Dakota natural gas utility?

A. This rate of return is slightly lower than the current authorized ROR for the South Dakota natural gas utility of 7.79%, despite the higher returns required by investors given increased risks associated with the unprecedented hike in inflation, higher interest rates, and persistent market instability as described in detail in Mr. McKenzie's testimony. To reiterate Mr. McKenzie's analysis, failure to allow NorthWestern to earn a rate of return commensurate to comparable risks

in the market would result in jeopardizing the financial integrity of the utility and its ability to attract the necessary capital to continue to provide safe and reliable service to its customers.

Utility Financial Health

Q. How does NorthWestern finance its investments and operations?

A. Similar to other utilities, NorthWestern finances its investments and operations by using its internally generated cash flows and by issuing debt (i.e. issuing secured long-term debt in the form of first mortgage bonds and borrowing short-term from the revolving credit facilities) and equity (i.e., offering shares of Company stock). In order to fund continued investment in infrastructure to serve customers in South Dakota at reasonable rates, access to capital on reasonable terms is critical.

Q. How does NorthWestern ensure that it maintains access to these financing options at reasonable rates?

A. In order to ensure access to financing at competitive rates for customers, it is important for NorthWestern to meet debt and equity investors expectations by maintaining a financially-healthy utility. A financially-healthy utility is one that receives timely recovery of its costs of operations and investments as well as a reasonable overall rate of return.

Q. How is financial health important to NorthWestern in providing essential service?

A. Financial health is critical to our ability to provide safe and reliable service at the lowest possible cost because it impacts:

- Liquidity – ability to fund day-to-day operations such as energy supply procurement and maintenance of our infrastructure without disruption or restriction;
- Cost of capital – access to low interest rates for our debt and attractive price for our common stock; and
- Credit availability – ability to do business with vendors under favorable terms.

A strong financial position, supported by a balanced capital structure and stable cash flows, timely recovery of costs of providing service, an appropriate return on equity range relative to market conditions and risk, and the opportunity to earn authorized returns, is critical to our ability to attract capital at a competitive cost in various economic conditions. Ultimately, our financial position is foundational to our obligation to provide affordable, safe, and reliable utility service to customers. As a regulated utility, NorthWestern has a responsibility to provide safe and reliable service to all customers, current and future, within its service territories. This is a responsibility that remains in place no matter the state of the financial or commodity markets and regardless of unexpected external events, such as major storms, economic cycles, and even such unprecedented events as the recent global pandemic.

In times of depressed market conditions and constrained capital supply, generally only financially strong utilities can attract capital under reasonable terms, i.e., lower costs, providing those utilities with significant and potentially critical flexibility. Operating without the flexibility afforded through a strong financial position, (i.e., a strong capital structure, stable cash flows, sufficient return expectations for investors, and sound regulatory recovery mechanisms such as fuel and power cost recovery mechanisms), would expose NorthWestern and our customers to unwarranted and unnecessary financial risk, higher costs, and uncertainty. Financial health ensures that the utility will have the flexibility to withstand unanticipated macroeconomic events outside of its control and maintain access to capital at reasonable costs, allowing for a stable operations of the utility.

On top of its negative effect on financial flexibility, weaker financial health at a utility increases its issued cost of debt and cost of equity, which increases the overall weighted average cost of capital for the utility that is ultimately borne by its customers.

Q. What are the significant factors contributing to overall financial health of a utility?

A. The financial health of a regulated utility is largely a function of a constructive regulatory environment. To maintain a strong financial profile, a utility needs to have the opportunity to recover all prudently-incurred costs in a timely manner,

which includes not only the costs for capital investments and operation and maintenance expenses, but also the costs of servicing debt and providing a fair return for equity investors. This is why balanced and consistent regulatory decisions, mechanisms that facilitate timely recovery of costs, and a healthy capital structure are vitally important to utilities, including NorthWestern.

Q. Does this complete your pre-filed direct testimony?

A. Yes, it does.

BEFORE THE

PUBLIC UTILITIES COMMISSION

OF THE STATE OF SOUTH DAKOTA

IN RE:	)	
	)	
NORTHWESTERN ENERGY PUBLIC SERVICE CORPORATION	)	**Docket No. NG24-_____**
	)	
	)	

DIRECT TESTIMONY OF

ADRIEN M. MCKENZIE, CFA

On behalf of

NORTHWESTERN ENERGY PUBLIC SERVICE CORPORATION

June 21, 2024

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GLOSSARY

CAPM	Capital Asset Pricing Model
Commission	South Dakota Public Service Commission
CPI	Consumer Price Index
DCF	Discounted Cash Flow
DPS	dividends per share
ECAPM	Empirical Capital Asset Pricing Model
EPS	earnings per share
FERC	Federal Energy Regulatory Commission
FOMC	Federal Open Market Committee
GDP	Gross Domestic Product
IBES	Institutional Brokers' Estimate System (now Refinitiv)
MDPSC	Maryland Public Service Commission
Moody's	Moody's Investors Service
NAIC	National Association of Insurance Companies
NASDAQ	The Nasdaq Stock Market LLC
NorthWestern or Company	NorthWestern Energy Public Service Company
NWE	NorthWestern Energy Group, Inc.
PCE	Personal Consumption Expenditure Price Index
ROE	return on equity
RRA	S&P Global Market Intelligence, RRA Regulatory Focus (formerly Regulatory Research Associates, Inc.
S&P	S&P Global Ratings
Value Line	The Value Line Investment Survey
WNA	Weather Normalization Adjustment
Zacks	Zacks Investment Research, Inc.

I. INTRODUCTION

Q1. PLEASE STATE YOUR NAME, POSITION AND BUSINESS ADDRESS.

A1. My name is Adrien M. McKenzie. I am President of Financial Concepts and Applications, Inc. (d/b/a FINCAP, Inc.), a firm providing financial, economic, and policy consulting services to business and government. My business address is 3907 Red River, Austin, Texas, 78751.

Q2. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND QUALIFICATIONS.

A2. A description of my background and qualifications, including a resume containing the details of my experience, is attached as Exhibit AMM-1.

A. Overview

Q3. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY IN THIS CASE?

A3. The purpose of my direct testimony is to present to the Commission my independent assessment of the just and reasonable ROE for the South Dakota jurisdictional gas utility operations of NorthWestern. In addition, I also examine the reasonableness of NorthWestern's capital structure, considering the specific risks faced by the Company and other industry guidelines.

Q4. PLEASE SUMMARIZE THE INFORMATION AND MATERIALS YOU RELY ON TO SUPPORT THE OPINIONS AND CONCLUSIONS CONTAINED IN YOUR TESTIMONY.

A4. To prepare my testimony, I use information from a variety of sources that would normally be relied upon by a person in my capacity. I am familiar with the organization, finances, and operations of NorthWestern from my participation in prior regulatory proceedings on behalf of the Company. In connection with the present filing, I consider and rely upon discussions with corporate management, publicly available financial reports and prior regulatory filings relating to NorthWestern and its parent, NWE. I also

review information relating generally to current capital market conditions and specifically to investor perceptions, requirements, and expectations for NorthWestern's gas utility operations. These sources, coupled with my experience in the fields of finance and utility regulation, have given me a working knowledge of the issues relevant to investors' required return for NorthWestern, and they form the basis of my analyses and conclusions.

Q5. HOW IS YOUR TESTIMONY ORGANIZED?

A5. First, I summarize my conclusions and recommendations, giving special attention to the importance of financial strength and the implications of regulatory mechanisms and other risk factors. I also comment on the reasonableness of the Company's proposed capital structure.

Next, I briefly review NorthWestern's operations and finances. I then discuss current conditions in the capital markets and their implications in evaluating a just and reasonable return for the Company. I then explain the development of the proxy group of utilities used as the basis for my quantitative analyses, including the implications of the Company's regulatory mechanisms and other risk factors. With this as a background, I discuss well-accepted quantitative analyses to estimate the current cost of equity. These include the DCF model, the CAPM, the ECAPM, an equity risk premium approach based on allowed equity returns, and reference to expected earned rates of return for utilities, which are all methods that are commonly relied on in regulatory proceedings.

Based on the results of my analyses, I determine a fair ROE for NorthWestern. My evaluation considers the specific risks for the Company's gas utility operations in South Dakota and NorthWestern's requirements for financial strength. Further, consistent with the fact that utilities must compete for capital with firms outside their

own industry, I corroborate my utility quantitative analyses by applying the DCF model to a group of low-risk non-utility firms.

B. Summary and Conclusions

Q6. WHAT ROE DO YOU RECOMMEND FOR NORTHWESTERN'S NATURAL GAS UTILITY OPERATIONS?

A6. I apply the DCF, CAPM, ECAPM, risk premium, and expected earnings analyses to a proxy group of publicly traded natural gas utilities, with the results being summarized on Exhibit AMM-2. As shown there, based on the results of my analysis, I determine a cost of equity range for the gas utility proxy group of 10.2% to 11.2%. I recommend an ROE at the midpoint of this range, or 10.7% for NorthWestern's jurisdictional natural gas utility operations. As demonstrated in my testimony, the Company's investment risks are higher than those of the proxy companies used to estimate the cost of equity. Accordingly, it is my conclusion that 10.7% is a conservative estimate of the cost of equity that is required to compensate the Company's investors, while maintaining NorthWestern's financial integrity and ability to attract capital on reasonable terms.

II. RETURN ON EQUITY FOR NORTHWESTERN

Q7. WHAT IS THE PURPOSE OF THIS SECTION?

A7. This section presents an overview of the relationship between ROE and preservation of a utility's financial integrity and the ability to attract capital under reasonable terms and presents my conclusions regarding the just and reasonable ROE applicable to NorthWestern's natural gas utility operations. Finally, I discuss the reasonableness of the Company's capital structure request in this case.

A. Importance of Financial Strength

Q8. WHAT IS THE ROLE OF THE ROE IN SETTING A UTILITY'S RATES?

A8. The ROE is the cost of attracting and retaining common equity investment in the utility's physical plant and assets. This investment is necessary to finance the asset base needed

to provide utility service. Investors commit capital only if they expect to earn a return on their investment commensurate with returns available from alternative investments with comparable risks. Moreover, a just and reasonable ROE is integral in meeting sound regulatory economics and the standards set forth by the U.S. Supreme Court. The *Bluefield* case set the standard against which just and reasonable rates are measured:

> 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 reasonable, sufficient to assure 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 money necessary for the proper discharge of its public duties.[1]

The *Hope* case expanded on the guidelines as to a reasonable ROE, reemphasizing its findings in *Bluefield* and establishing that the rate-setting process must produce an end-result that allows the utility a reasonable opportunity to cover its capital costs. The Court stated:

> From the investor or company point of view it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock. . . . By that standard, the 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 credit and attract capital.[2]

In summary, the Supreme Court's findings in *Hope* and *Bluefield* established that a just and reasonable ROE must be sufficient to 1) fairly compensate the utility's investors, 2) enable the utility to offer a return adequate to attract new capital on

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[1] *Bluefield Water Works & Improvement Co. v. Pub. Serv. Comm'n*, 262 U.S. 679 (1923) ("*Bluefield*").

[2] *Fed. Power Comm'n v. Hope Natural Gas Co.*, 320 U.S. 591 (1944) ("*Hope*").

reasonable terms, and 3) maintain the utility's financial integrity. These standards should allow the utility to fulfill its obligation to provide reliable service while meeting the needs of customers through necessary system replacement and expansion, but the Supreme Court's requirements can only be met if the utility has a reasonable opportunity to actually earn its allowed ROE.

While the *Hope* and *Bluefield* decisions did not establish a particular method to be followed in fixing rates (or in determining the allowed ROE),[3] these and subsequent cases enshrined the importance of an end result that meets the opportunity cost standard of finance. Under this doctrine, the required return is established by investors in the capital markets based on expected returns available from comparable risk investments. Coupled with modern financial theory, which has led to the development of formal risk-return models (*e.g.*, DCF and CAPM), practical application of the *Bluefield* and *Hope* standards involves the independent, case-by-case consideration of capital market data in order to evaluate an ROE that will produce a balanced and fair end result for investors and customers.

Q9. THROUGHOUT YOUR TESTIMONY YOU REFER REPEATEDLY TO THE CONCEPTS OF "FINANCIAL STRENGTH," "FINANCIAL INTEGRITY," AND "FINANCIAL FLEXIBILITY." WOULD YOU BRIEFLY DESCRIBE WHAT YOU MEAN BY THESE TERMS?

A9. These terms are generally synonymous and refer to the utility's ability to attract and retain the capital that is necessary to provide service at reasonable cost, consistent with the Supreme Court standards. NorthWestern's plans call for a continuation of capital investments to preserve and enhance service reliability for its customers. The Company

[3] *Id.* at 602 (finding, "the Commission was not bound to the use of any single formula or combination of formulae in determining rates." and, "[I]t is not theory but the impact of the rate order which counts.")

must generate adequate cash flow from operations to fund these requirements and maintain access to capital from external sources.

Rating agencies and potential debt investors tend to place significant emphasis on maintaining strong financial metrics and credit ratings that support access to debt capital markets under reasonable terms. This emphasis on financial metrics and credit ratings is shared by equity investors who also focus on cash flows, capital structure, and liquidity, much like debt investors. Investors understand the important role that a supportive regulatory environment plays in establishing a sound financial profile that will permit the utility access to debt and equity capital markets on reasonable terms in both favorable financial markets and during times of potential disruption and crisis.

Q10. WHAT PART DOES REGULATION PLAY IN ENSURING NORTHWESTERN HAS ACCESS TO CAPITAL UNDER REASONABLE TERMS AND ON A SUSTAINABLE BASIS?

A10. Regulatory signals are a major driver of investors' risk assessment for utilities. Investors recognize that constructive regulation is a key ingredient in supporting utility credit ratings and financial integrity. Security analysts study commission orders and regulatory policy statements to advise investors about where to put their money. As Moody's noted, "the regulatory environment is the most important driver of our outlook because it sets the pace for cost recovery."[4] Similarly, S&P observed that, "Regulatory advantage is the most heavily weighted factor when S&P Global Ratings analyzes a regulated utility's business risk profile."[5] Value Line summarizes these sentiments:

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[4] Moody's Investors Service, *Regulation Will Keep Cash Flow Stable As Major Tax Break Ends*, Industry Outlook (Feb. 19, 2014).

[5] S&P Global Ratings, *Assessing U.S. Investors-Owned Utility Regulatory Environments*, RatingsExpress (Aug. 10, 2016).

> As we often point out, the most important factor in any utility's success, whether it provides electricity, gas, or water, is the regulatory climate in which it operates. Harsh regulatory conditions can make it nearly impossible for the best run utilities to earn a reasonable return on their investment.[6]

Q11. DO CUSTOMERS BENEFIT BY ENHANCING THE UTILITY'S FINANCIAL FLEXIBILITY?

A11. Yes. Providing an ROE that is sufficient to maintain the Company's ability to attract capital under reasonable terms, even in times of financial and market stress, is not only consistent with the economic requirements embodied in the U.S. Supreme Court's *Hope* and *Bluefield* decisions, but it is also in customers' best interests. Customers enjoy the benefits that come from ensuring that the utility has the financial wherewithal to take whatever actions are required to ensure safe and reliable service.

B. Conclusions and Recommendations

Q12. WHAT ARE YOUR FINDINGS REGARDING A FAIR ROE FOR NORTHWESTERN?

A12. Considering the economic requirements necessary to support continuous access to capital under reasonable terms and the results of my analysis, I recommend a 10.7% ROE for NorthWestern's South Dakota jurisdictional natural gas utility operations, which is consistent with the case-specific evidence presented in my testimony. The bases for my conclusion are summarized below:

- In order to reflect the risks and prospects associated with NorthWestern's utility business, my analyses focused on a proxy group of seven publicly traded gas utility firms.
- Because investors' required return on equity is unobservable and no single method should be viewed in isolation, I applied the DCF, CAPM, ECAPM, and risk premium methods to estimate a just and reasonable ROE for NorthWestern, as well as referencing the expected earnings approach.

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[6] Value Line Investment Survey, *Water Utility Industry* (Jan. 13, 2017) at p. 1780.

- As summarized on Exhibit AMM-2, based on the average values resulting from these analyses, and giving less weight to extremes at the high and low ends of the range, I conclude that the cost of equity falls in the 10.2% to 11.2% range.
- My ROE recommendation for NorthWestern's gas utility operations is the midpoint of this ROE range, or 10.7%.

Q13. WHAT OTHER EVIDENCE DO YOU CONSIDER IN EVALUATING A FAIR ROE FOR NORTHWESTERN?

A13. My conclusion that an ROE of 10.7% is fair and reasonable and should be approved is reinforced by the following findings:

- The reasonableness of a 10.7% ROE for NorthWestern is supported by the Company's higher investment risks relative to the proxy group of gas utilities.
- The Company currently operates with a narrower range of regulatory adjustment mechanisms than exist for the utilities in the Gas Group, which makes NorthWestern's utility operations relatively more susceptible to attrition.
- Investors recognize that constructive regulation is a key ingredient in supporting utility credit standing and financial integrity, and providing NorthWestern with the opportunity to earn a return that adequately reflects its risks is an essential ingredient to support the Company's financial position, which ultimately benefits customers by ensuring reliable service at lower long-run costs.
- Continued support for NorthWestern's financial integrity, including the opportunity to earn a reasonable ROE, is imperative to ensure that the Company has the capability to maintain and build its credit standing while confronting potential challenges associated with funding infrastructure development necessary to meet the needs of its customers.

These findings indicate that a 10.7% ROE for NorthWestern is reasonable and should be approved.

Q14. WHAT DID THE DCF RESULTS FOR YOUR SELECT GROUP OF NON-UTILITY FIRMS INDICATE WITH RESPECT TO YOUR EVALUATION?

A14. As shown on page 3 of Exhibit AMM-13, average DCF estimates for a low-risk group of firms in the competitive sector of the economy ranged from 10.4% to 10.9%. While I did not base my recommendations on these results, they confirm that an ROE for

NorthWestern of 10.7% falls in a reasonable range to maintain the Company's financial integrity, provide a return commensurate with investments of comparable risk, and support the ability to attract capital.

Q15. WHAT DOES YOUR EVIDENCE SUGGEST WITH RESPECT TO NORTHWESTER'S PROPOSED CAPITAL STRUCTURE?

A15. NorthWestern's capital structure is consistent with industry benchmarks and reflects the need to address the funding of ongoing capital expenditures and support the Company's financial integrity and access to capital on reasonable terms. Based on this evidence, I conclude that the Company's capital structure represents a reasonable mix of capital sources from which to calculate the overall rate of return.

III. FUNDAMENTAL ANALYSES

Q16. WHAT IS THE PURPOSE OF THIS SECTION?

A16. As a foundation for my opinions and subsequent quantitative analyses, this section briefly reviews the operations and finances of NorthWestern and examines conditions impacting todays' capital markets and the general economy. An understanding of the fundamental factors driving the risks and prospects of utilities is essential in developing an informed opinion of investors' expectations and requirements that are the basis of a fair ROE.

C. NorthWestern Energy

Q17. BRIEFLY DESCRIBE NORTHWESTERN AND ITS SOUTH DAKOTA NATURAL GAS UTILITY OPERATIONS.

A17. A subsidiary of NWE, NorthWestern provides electric and natural gas utility service to approximately 157,000 customers in South Dakota and Nebraska.[7] Natural gas is distributed to approximately 49,800 customers in sixty-three South Dakota communities

[7] Unless otherwise noted, the information in this section comes from the NorthWestern Corporation, SEC Form 10-K, for the fiscal year ended December 31, 2023.

over a system of approximately 1,800 miles of underground distribution and transmission pipelines. In addition, the Company transports natural gas for nine gas-marketing firms and three large end-user accounts. Estimated rate base attributable to NorthWestern's South Dakota natural gas operations is approximately $96 million**,** with total annual revenues of approximately $63 million.[8]

Q18. WHERE DOES NORTHWESTERN OBTAIN THE CAPITAL USED TO FINANCE ITS INVESTMENT IN UTILITY PLANT?

A18. Common equity capital supporting the South Dakota natural gas utility operations is provided through retained earnings and from NWE, whose common stock is publicly traded on NASDAQ. NorthWestern also issues long-term debt in its own name and has been assigned a long-term rating of Baa2 from Moody's and an issuer rating of BBB by S&P. Meanwhile, Fitch has affirmed the Company's long-term issuer default rating of BBB.

Q19. DOES NORTHWESTERN ANTICIPATE THE NEED FOR CAPITAL GOING FORWARD?

A19. Yes. The Company must undertake investments to meet growing demand and provide for necessary maintenance and replacements of its utility systems as it continues to provide safe and reliable service to its customers. Capital additions for NorthWestern's gas utility systems are expected to total more than $83 million for the years 2024 through 2028. Continued support for NorthWestern's financial integrity and flexibility will be instrumental in attracting the capital necessary to fund these projects in an effective manner.

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[8] NorthWestern Energy, *BofA Power, Utilities & Clean Energy Conference* (Mar. 5, 2024).

D. Outlook for Capital Costs

Q20. PLEASE SUMMARIZE CURRENT ECONOMIC CONDITIONS.

A20. U.S. real GDP contracted 2.2% during 2020, but with the easing of COVID-19 lockdowns, the economic outlook improved significantly in 2021, with GDP growing at a pace of 5.8%, though growth was more subdued in 2022 at 1.9%.[9] More recently, increases in spending by consumers and the federal government led real GDP to grow by 2.5% in 2023.[10] Meanwhile, indicators of employment remain relatively stable, with the national unemployment rate falling slightly to 3.8% in March 2024.[11]

The underlying risk and price pressures associated with the COVID-19 pandemic were overshadowed by a dramatic increase in geopolitical threats following Russia's invasion of Ukraine in February 2022. More recently, these risks have been compounded by heightened uncertainties prompted by the resurgence of conflict in the Middle East. Apart from disrupting global trade, the potential for escalating military confrontation threatens to constrain crude oil supplies and lead to supply-side price shocks that could reignite inflation.

Stimulative monetary and fiscal policies, supply-chain disruptions and rapid price rises in the energy and commodities markets, led to increasing concern that inflation would remain significantly above the Federal Reserve's longer-run benchmark of 2%. In June 2022, CPI inflation peaked at its highest level since November 1981. Since then, CPI inflation has generally moderated, but remained elevated at 3.5% in March 2024.[12] The so-called "core" price index, which excludes more volatile energy

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[9] https://fred.stlouisfed.org/series/A191RL1A225NBEA (last visited Apr. 25, 2024).

[10] *Id.*

[11] https://www.bls.gov/news.release/empsit.nr0.htm (last visited Apr. 25, 2024).

[12] https://www.bls.gov/news.release/cpi.nr0.htm (last visited Apr. 25, 2024).

and food costs, rose at an annual rate of 3.8% in March 2024.[13] PCE inflation rose 2.5% in February 2024, or 2.8% after excluding more volatile food and energy costs.[14] As Federal Reserve Chair Powell recently noted, "inflation is still too high, ongoing progress in bringing it down is not assured, and the path forward is uncertain."[15]

Investor confidence has also been tested by turmoil in the banking sector, which led to increased volatility in bond and equity markets. The Federal Reserve and U.S. Treasury took quick and dramatic action to shore up banks' liquidity needs and strengthen public confidence in the banking system, but as Moody's noted, "bank stress has added uncertainty to the outlook."[16]

Q21. WHAT IMPACT DO INFLATION EXPECTATIONS HAVE ON THE RETURN THAT EQUITY INVESTORS REQUIRE FROM NORTHWESTERN?

A21. Implicit in the required rate of return for long-term capital—whether debt or common equity—is compensation for expected inflation. This is highlighted in the textbook, *Financial Management, Theory and Practice*:

> The four most fundamental factors affecting the cost of money are (1) production opportunities, (2) time preferences for consumption, (3) risk, and (4) inflation.[17]

In other words, a part of investor's required return is intended to compensate for the erosion of purchasing power due to rising price levels. This inflation premium is added to the real rate of return (pure risk-free rate plus risk premium) to determine the nominal

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[13] *Id.*

[14] https://www.bea.gov/news/2024/personal-income-and-outlays-february-2024 (last visited Apr. 25, 2024).

[15] Federal Reserve, *Transcript of Chair Powell's Press Conference* (Mar. 20, 2024), https://www.federalreserve.gov/mediacenter/files/FOMCpresconf20240320.pdf.

[16] Moody's Investors Service, *Baseline US macro forecasts unchanged but outlook more uncertain*, Sector Comment (Apr. 12, 2023).

[17] Eugene F. Brigham, Louis C. Gapenski, and Michael C. Ehrhardt, *Financial Management, Theory and Practice*, Ninth Edition (1999) at 126.

required return. As a result, higher inflation expectations lead to an increase in the cost of equity capital.

Q22. HAVE THESE DEVELOPMENTS IMPACTED THE RISKS FACED BY UTILITIES AND THEIR INVESTORS?

A22. Yes. S&P recently revised its outlook for the utility sector to "negative," noting that:

> Credit quality for North American investor-owned regulated utilities has weakened over the past four years, with downgrades outpacing upgrades by more than three times. We expect downgrades to again surpass upgrades in 2024 for the fifth consecutive year.[18]

S&P cited rising physical risks, as well as weakening financial measures due to rising capital spending and cash flow deficits, and observed that "much of the industry operates with minimal financial cushion from their downgrade threshold."[19]

Meanwhile, Fitch noted that its deteriorating outlook for utilities "reflects continuing macroeconomic headwinds and elevated capex that are putting pressure on credit metrics in the high-cost funding environment."[20] Value Line echoed these sentiments for utilities, concluding that:

> **A Challenging Macroeconomic Backdrop Remains**
> Inflationary pressure, rising interest rates, and high energy and raw material prices will likely remain a significant burden for most utilities. Inflationary headwinds are raising operating and maintenance costs, as well as fuel prices. Meanwhile, the rising interest rate environment is leading income-oriented investors to the bond market, as well as increasing borrowing costs, which is especially significant for utilities as they usually have low returns on total capital and rely heavily on debt borrowings. We think many of these companies will continue to struggle

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[18] S&P Global Ratings, *Rising Risks: Outlook For North American Investor-Owned Regulated Utilities Weakens*, Comments (Feb. 14, 2024).

[19] *Id.*

[20] Fitch Ratings, Inc., *North American Utilities, Power & Gas Outlook 2024* (Dec. 6, 2023).

with the higher costs related to the challenging macroeconomic climate in the near term.[21]

Q23. DO TRENDS IN BOND YIELDS INDICATE THAT THE COST OF EQUITY HAS INCREASED?

A23. Yes. While the cost of equity is unobservable, the yields on long-term bonds provide a widely referenced benchmark for the direction of capital costs, including required returns on common stocks. Table 1 below compares the average yields on Treasury securities and Baa-rated public utility bonds in March 2024 with those required during 2021.

TABLE 1
BOND YIELD TRENDS

Series	March 2024	2021	Change (bps)
10-Year Treasury Bonds	4.21%	1.44%	277
30-Year Treasury Bonds	4.36%	2.05%	231
Baa Utility Bonds	5.79%	3.35%	244

Source: https://fred.stlouisfed.org/series/GS30; Moody's Credit Trends.

As shown above, trends in bond yields document a substantial increase in the returns on long-term capital demanded by investors.

Q24. WHAT IMPLICATIONS DO THESE TRENDS HAVE IN EVALUATING A FAIR ROE FOR NORTHWESTERN?

A24. The upward move in interest rates demonstrates that long-term capital costs—including the cost of equity—have increased significantly. Exposure to higher interest rates, inflation, and capital expenditure requirements also reinforce the importance of buttressing NorthWestern's credit standing. Considering the potential for financial

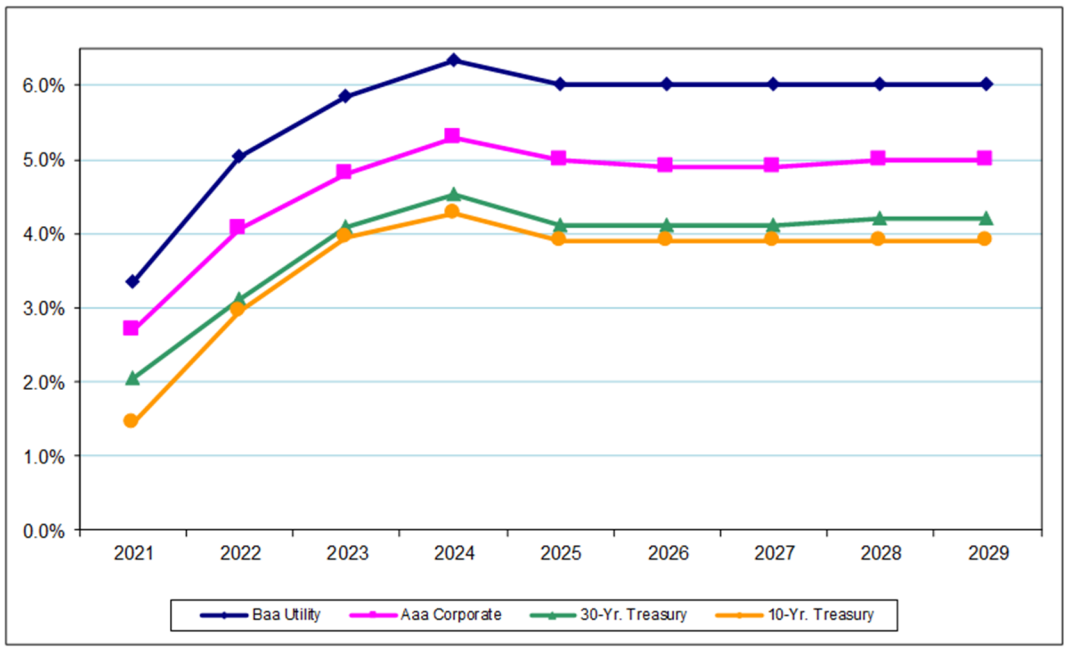
[21] The Value Line Investment Survey, *Electric Utility (Central) Industry* (Sep. 8, 2023) (emphasis original).

market instability, competition with other investment alternatives, and investors' sensitivity to risk exposures in the utility industry, greater credit strength is a key ingredient in maintaining access to capital at reasonable cost.

Q25. DO INVESTORS ANTICIPATE THAT THESE HIGHER BOND YIELDS WILL BE SUSTAINED?

A25. Yes. As illustrated in Figure 1 below, the most recent long-term consensus projections from top economists published by Blue Chip document that long-term bond yields are expected to remain elevated when compared to recent historical levels.

FIGURE 1
PROJECTED INTEREST RATES



Source: Wolters Kluwer, Blue Chip Financial Forecasts (Dec. 1, 2023); Moody's Investors Service; https://fred.stlouisfed.org/.

This evidence shows that long-term capital costs—including the ROE—have increased substantially, and that investors expect these higher capital costs to be sustained at least through 2029.

Q26. WOULD IT BE REASONABLE TO DISREGARD THE IMPLICATIONS OF CURRENT CAPITAL MARKET CONDITIONS IN ESTABLISHING A FAIR ROE FOR NORTHWESTERN?

A26. No. Current capital market conditions reflect the reality of the situation in which NorthWestern must attract and retain capital. The standards underlying a fair rate of return require an authorized ROE for the Company that is competitive with other investments of comparable risk and sufficient to preserve its ability to maintain access to capital on reasonable terms. These standards can only be met by considering the requirements of investors over the time period when the rates established in this proceeding will be in effect. If the upward shift in investors' risk perceptions and required rates of return for long-term capital is not incorporated in the allowed ROE, the results will fail to meet the comparable earnings standard that is fundamental in determining the cost of capital. From a more practical perspective, failing to provide investors with the opportunity to earn a rate of return commensurate with NorthWestern's risks will weaken its financial integrity, while hampering the Company's ability to attract the capital necessary to provide safe and reliable service at the lowest reasonable cost.

IV. DETERMINATION OF THE PROXY GROUP

Q27. WHAT IS THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY?

A27. This section explains the basis of the proxy group of publicly traded companies I use to estimate the cost of equity, examines alternative objective indicators of investment risk for these firms, and compares the investment risks applicable to NorthWestern with my reference group.

Q28. WHAT KEY PRINCIPLES UNDERPIN THE EVALUATION OF A PROXY GROUP?

A28. The United States Supreme Court's *Hope* and *Bluefield* decisions establish a standard of comparison between a subject utility and other companies based on comparable risk. The generally accepted approach is to select a group of companies that are of similar risk to the subject utility, and then to perform various quantitative analyses based on this proxy group to estimate investors' required returns. The results of these analyses are then used to evaluate a range of reasonableness and a final recommendation for the ROE attributable to the subject utility.

A. Determination of the Proxy Group

Q29. HOW DO YOU IMPLEMENT QUANTITATIVE METHODS TO ESTIMATE THE COST OF COMMON EQUITY FOR NORTHWESTERN?

A29. Application of quantitative methods to estimate the cost of common equity requires observable capital market data, such as stock prices and beta values. Moreover, even for a firm with publicly traded stock, the cost of common equity can only be estimated. As a result, applying quantitative models using observable market data only produces an estimate that inherently includes some degree of observation error. Thus, the accepted approach to increase confidence in the results is to apply quantitative methods to a proxy group of publicly traded companies that investors regard as risk comparable. The results of the analysis on the sample of companies are relied upon to establish a range of reasonableness for the cost of equity for the specific company at issue.

Q30. HOW DO YOU IDENTIFY THE PROXY GROUP OF GAS UTILITIES RELIED ON FOR YOUR ANALYSES?

A30. To reflect the risks and prospects associated with NorthWestern's natural gas utility operations, I examine quantitative estimates of investors' required ROE for a group of seven natural gas utilities. To identify this group, I begin with those companies included

in the Natural Gas Utility industry group compiled by Value Line. Value Line is one of the most widely available sources of investment advisory information, and its industry groups provide an objective source to identify publicly traded firms that investors would regard to be similar in operations.

Q31. WHAT OTHER FACTORS DO YOU CONSIDER IN EVALUATING YOUR PROXY GROUP?

A31. From the list of gas utilities compiled by Value Line, I eliminate Southwest Gas due to the planned initial public offering for an infrastructure services subsidiary, which accounted for over 52% of Southwest Gas' total revenues in 2023 and 22% of total assets. As a result of its significance, the restructuring complicates the evaluation of investors' expectations concerning the ongoing gas utility operations of Southwest Gas. Value Line concluded that common stock of Southwest Gas has been "trading with high volatility amid recent corporate restructuring activities,"[22] and noted that, "Our forecasts do not account for pending deals until they are completed."[23] The stock price volatility related to the restructuring and the disconnect between growth expectations for the current and future business operations support excluding Southwest Gas from the proxy group.

I also exclude UGI because it is primarily engaged in international sales and marketing of liquid propane gas, as well as energy marketing in the United States and Europe, midstream infrastructure, storage, natural gas gathering and processing, and natural gas production. During 2023, UGI's regulated gas and electric utility operations combined accounted for just 20% of total revenues. Accordingly, UGI's primary

[22] The Value Line Investment Survey, *Southwest Gas* (Aug. 25, 2023).
[23] The Value Line Investment Survey, *Southwest Gas* (Feb. 23, 2024).

business activities are not directly comparable to the Company's gas distribution operations, and I excluded UGI from the proxy group on this basis.

I then confirmed that all of the proxy group firms have investment-grade credit ratings.[24] While Chesapeake Utilities does not have published credit ratings from Moody's or S&P, it has privately placed bonds that were rated "2.B" by NAIC.[25] Under NAIC guidelines, a 2.B rating is equivalent to a rating of Baa2 or BBB on the Moody's and S&P rating scales, respectively.[26] Finally, I verified that the remaining firms have not cut dividend payments during the past six months and have not announced a dividend cut since that time. As shown in Table 2 below, application of these criteria results in a proxy group composed of seven companies, which I refer to as the "Gas Group:"

TABLE 2
GAS GROUP

Atmos Energy Corp.
Chesapeake Utilities
New Jersey Resources
NiSource Inc.
Northwest Natural
ONE Gas, Inc.
Spire Inc.

[24] Credit rating firms, such as Moody's and S&P, use designations consisting of upper- and lower-case letters 'A' and 'B' to identify a bond's credit quality rating. 'Aaa', 'Aa', 'A', and 'Baa' ratings are considered investment grade. Credit ratings for bonds below these designations ('Ba', 'B', 'Caa', etc.) are considered speculative grade, and are commonly referred to as "junk bonds." The term "investment grade" refers to bonds with ratings in the 'Baa' category ('BBB' by S&P) and above.

[25] See, Quarterly Statement of the Metropolitan Life Insurance Company (Jun. 30, 2023) at 257. https://s201.q4cdn.com/280976757/files/doc_downloads/2023/MLIC-Q2-2023-Final-Statement.pdf (last visited Mar. 17, 2024).

[26] NAIC, *Purposes & Procedures Manual of the NAIC Investment Analysis Office* (December 2023). https://content.naic.org/sites/default/files/ppm-oss-2023_0.pdf (last visited Mar. 17, 2024).

B. Relative Risks of the Gas Group and NorthWestern

Q32. HOW DO YOU EVALUATE THE INVESTMENT RISKS OF THE GAS GROUP?

A32. My evaluation of relative risk considers five objective, published benchmarks that are widely relied on by investors—credit ratings from Moody's and S&P, along with Value Line's Safety Rank, Financial Strength Rating, and beta values. Credit ratings are assigned by independent rating agencies for the purpose of providing investors with a broad assessment of the creditworthiness of a firm. Ratings generally extend from triple-A (the highest) to D (in default). Other symbols (*e.g.*, "+" or "-") are used to show relative standing within a category. Because the rating agencies' evaluation includes all of the factors normally considered important in assessing a firm's relative credit standing, corporate credit ratings provide a broad, objective measure of overall investment risk that is readily available to investors. Widely cited in the investment community and referenced by investors, credit ratings are also frequently used as a primary risk indicator in establishing proxy groups to estimate the cost of common equity.

While credit ratings provide the most widely referenced benchmark for investment risks, Value Line is one of the most widely available source of investment advisory information and its quality rankings provide an important and objective assessment of investors' risk perceptions for common stocks. Value Line's primary risk indicator is its Safety Rank, which ranges from "1" (Safest) to "5" (Riskiest). This overall risk measure is intended to capture the total risk of a stock and incorporates elements of stock price stability and financial strength. Meanwhile, the Financial Strength Rating is designed as a guide to overall financial strength and creditworthiness, with the key inputs including financial leverage, business volatility measures, and company size. Value Line's Financial Strength Ratings range from "A++" (strongest)

down to "C" (weakest) in nine steps. These objective, published indicators incorporate consideration of a broad spectrum of risks, including financial and business position, relative size, and exposure to firm-specific factors.

Finally, beta measures a utility's stock price volatility relative to the market as a whole and reflects the tendency of a stock's price to follow changes in the market. A stock that tends to respond less to market movements has a beta less than 1.00, while stocks that tend to move more than the market have betas greater than 1.00. Beta is the only relevant measure of investment risk under modern capital market theory and is widely cited in academics and in the investment industry as a guide to investors' risk perceptions. Moreover, in my experience Value Line is the most widely referenced source for beta in regulatory proceedings. As noted in *New Regulatory Finance*:

> Value Line is the largest and most widely circulated independent investment advisory service, and influences the expectations of a large number of institutional and individual investors. … Value Line betas are computed on a theoretically sound basis using a broadly based market index, and they are adjusted for the regression tendency of betas to converge to 1.00.[27]

Q33. HOW DO THE OVERALL RISK OF THE GAS GROUP COMPARE TO NORTHWESTERN?

A33. Table 3 compares the Gas Group to the Company across the five key indices of investment risk discussed above. Because NorthWestern has no publicly traded common stock, the Value Line risk measures shown reflect those published for its parent, NWE.

[27] Roger A. Morin, *New Regulatory Finance*, Pub. Utils. Reports (2006) at 71.

TABLE 3
COMPARISON OF RISK INDICATORS

	Credit Ratings		Value Line		
			Safety	Financial	
Proxy Group	S&P	Moody's	Rank	Strength	Beta
Gas Group	A-	A3	2	A	0.86
NorthWestern	BBB	Baa2	3	B+	0.95

The single-A ratings corresponding to the Gas Group place their credit risks solidly within the investment grade range. NorthWestern's triple-B ratings are two notches lower and indicate greater risk. The average Value Line Safety Rank, Financial Strength indicator, and beta values corresponding to NorthWestern also uniformly indicate greater risk. Considered together, a comparison of these objective measures indicates that the overall investment risks corresponding to NorthWestern are greater than those of the Gas Group.

Q34. WOULD INVESTORS ALSO CONSIDER THE IMPLICATIONS OF REGULATORY MECHANISMS IN EVALUATING THE COMPANY'S RELATIVE RISKS?

A34. Yes. In response to the increasing sensitivity over fluctuations in costs and the importance of advancing other public interest goals such as reliability, energy conservation, and safety, utilities and their regulators have sought to mitigate cost recovery uncertainty and align the interest of utilities and their customers. As a result, adjustment mechanisms, cost trackers, and future test years have become increasingly prevalent, along with alternatives to traditional ratemaking such as formula rates and multi-year rate plans. RRA concluded in its most recent review of adjustment clauses that:

> More recently and with greater frequency, commissions have approved mechanisms that permit the costs associated with the construction of new generation or delivery infrastructure to be used, effectively including these items in rate base without the need for a full rate case. In some

> instances, these mechanisms may even provide the utilities a cash return on construction work in progress.
>
> . . . [C]ertain types of adjustment clauses are more prevalent than others. For example, those that address electric fuel and gas commodity charges are in place in all jurisdictions. Also, about two-thirds of all utilities have riders in place to recover costs related to energy efficiency programs, and roughly half of the utilities have some type of decoupling mechanism in place.[28]

As shown on Exhibit AMM-3, and reflective of this trend, the companies in the Gas Group operate under a wide variety of regulatory provisions, including future test years, multi-year rate plans, revenue decoupling mechanisms, and WNAs. The proxy utilities also benefit from adjustment clauses to include new capital investment without requiring a traditional rate case and recover costs of environmental compliance measures, as well as riders for energy conservation programs.

Q35. HAVE YOU SUMMARIZED THE REGULATORY MECHANISMS AVAILABLE TO THE GAS GROUP?

A35. Yes. As summarized on Exhibit AMM-3, these mechanisms are ubiquitous and wide ranging. For example, of the twenty-three separate utilities controlled by the companies in the Gas Group, eighteen operate under some form of decoupling mechanism that accounts for the impact of various factors affecting sales volumes and revenues. In addition, a WNA has been approved for seventeen of these utilities,[29] while sixteen benefit from trackers designed to address rising capital investment in utility infrastructure outside of a traditional rate case.

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[28] S&P Global Market Intelligence, *Adjustment Clause: A state-by-state overview*, RRA Regulatory Focus (Jul. 18, 2022).

[29] Weather risks are also offset by other forms of rate design, including decoupling and straight-fixed-variable pricing.

Q36. WHAT REGULATORY MECHANISMS ARE APPLICABLE TO NORTHWESTERN'S GAS UTILITY OPERATIONS IN SOUTH DAKOTA?

A36. Like all companies represented in the Gas Group, NorthWestern has a gas cost adjustment mechanism that allows it to pass the prudently-incurred cost of gas through to the customer between rate reviews. In addition, NorthWestern benefits from a tracker that allows for recovery of Ad Valorem taxes. No other regulatory mechanisms are currently in place for the Company in South Dakota.

Q37. DOES THE COMPANY'S LACK OF REGULATORY MECHANISMS SET IT APART FROM THE FIRMS IN THE GAS GROUP?

A37. Yes. In evaluating a reasonable ROE, it is important to note that the mechanisms currently in place for NorthWestern in South Dakota are more limited than those approved for other firms in the industry. Unlike many gas utilities, NorthWestern does not benefit from elasticity or decoupling mechanisms that insulate utility margins from declining usage. Nor does the Company have a WNA to account for the impacts of abnormal weather. A WNA moderates the impact of extreme weather on customers and, at the same time, dampens the volatility of a gas utility's revenues. All of the utilities in the Gas Group have some form of weather mitigant, including decoupling mechanisms, adjustment clauses, insurance, and/or rate design features that make revenues less susceptible to variations in gas consumption due to weather. As Value Line noted:

> Weather is a factor that affects the demand for natural gas, especially from small commercial businesses and consumers. Not surprisingly, earnings for utilities are susceptible to seasonal temperature patterns, with consumption normally at its peak during the winter heating months. Unseasonably warm or cold weather can cause substantial volatility in quarterly operating results. But some companies strive to counteract this exposure through temperature-adjusted rate mechanisms, which are available in many states. Therefore, investors interested in utilities with

> more-stable profits from one year to the next are advised to look for companies that are able to hedge this risk.[30]

As a result, while the Company remains exposed to the risks associated with abnormal weather and declining usage, the reduced uncertainties associated with decoupling and weather mitigants are considered by investors and reflected in my cost of equity estimates.

C. Capital Structure

Q38. WHAT IS THE ROLE OF CAPITAL STRUCTURE IN SETTING A UTILITY'S RATE OF RETURN?

A38. Capital structure reflects the mix of capital—debt, preferred securities, and common equity—used to finance a utility's assets. The proportions of the total capitalization attributable to each source of capital are typically used to weight the costs of investor-supplied capital in calculating an overall rate of return.

Q39. HOW DO COMPANIES DETERMINE AN APPROPRIATE CAPITAL STRUCTURE FOR THEIR OPERATIONS?

A39. There are many considerations in the capital structure decision. In general, the goal is to employ the mix of capital that minimizes the weighted average cost of capital. Given the interplay between costs of debt and equity, the impact of taxes, bankruptcy costs, and the level of business risks, determining a firm's optimal capital structure is an imprecise exercise. In practice, capital structure decisions must be made by combining managements' judgment, numerical analysis, and considering investors' risk perceptions.

It is generally accepted that the norms established by comparable firms provide a valid benchmark to evaluate a reasonable capital structure for a utility. The capital structure maintained by other utilities should reflect their collective efforts to finance

[30] The Value Line Investment Survey at 541 (Jun. 3, 2016).

themselves so as to minimize capital costs while preserving their financial integrity and ability to attract capital. Moreover, these industry capital structures should also incorporate the requirements of investors (both debt and equity), as well as the influence of regulators.

Q40. WHAT COMMON EQUITY RATIO IS IMPLICIT IN NORTHWESTERN'S CAPITAL STRUCTURE?

A40. NorthWestern's capital structure is presented in the direct testimony of Company witness Emilie Ng. As summarized in her testimony, the common equity ratio applicable to the Company is 53.13%.

Q41. HOW DOES THIS COMPARE TO THE RANGE OF EQUITY RATIOS MAINTAINED BY THE GAS GROUP?

A41. Exhibit AMM-4 presents the sources of long-term capital (long-term debt and common equity) used by the publicly traded firms in the group of natural gas utilities used to estimate the cost of equity. As shown on page 1 of this exhibit, over the four quarters ended December 31, 2023 the average common equity ratios for the utilities in the Gas Group ranged from 39.8% to 58.9%.

As shown on page 2 of Exhibit AMM-4, Value Line expects common equity ratios for the Gas Group to range between 37.5% and 60.0% over its three-to-five year forecast horizon.

Q42. WHAT OTHER EVIDENCE SUPPORTS THE REASONABLENESS OF THE COMPANY'S REQUESTED CAPITAL STRUCTURE?

A42. Reference to recent findings for gas utilities in other regulatory proceedings also supports the reasonableness of NorthWestern's 53.13% common equity ratio. The table below presents the range of common equity ratios approved for gas utilities over the past eight quarters, as reported by RRA:

TABLE 4
GAS UTILITY ALLOWED COMMON EQUITY RATIOS

	Low		High	Average
Q1-22	48.00%	--	51.60%	50.24%
Q2-22	48.00%	--	60.59%	52.77%
Q3-22	47.00%	--	52.20%	50.52%
Q4-22	45.00%	--	58.22%	51.75%
Q1-23	45.16%	--	59.74%	53.89%
Q2-23	50.00%	--	62.20%	56.18%
Q3-23	48.00%	--	59.63%	52.88%
Q4-23	48.00%	--	56.06%	51.27%
Average	47.40%	--	57.53%	52.44%

Source: S&P Global Market Intelligence, *Major Rate Case Decisions* , RRA Regulatory Focus (Feb. 6, 2024 and Feb. 2023). Excludes capital structures that include cost-free items.

As demonstrated in the table above, the Company's requested 53.13% common equity ratio falls well within the range of capital structures recently approved for other gas utilities.

Q43. DO ONGOING ECONOMIC AND CAPITAL MARKET UNCERTAINTIES ALSO INFLUENCE THE APPROPRIATE CAPITAL STRUCTURE FOR NORTHWESTERN?

A43. Yes. Financial flexibility plays a crucial role in ensuring the wherewithal of a utility to meet funding needs, and utilities with higher financial leverage may be foreclosed or have limited access to additional borrowing, especially during times of financial market stress. As Moody's observed:

> Utilities are among the largest debt issuers in the corporate universe and typically require consistent access to capital markets to assure adequate sources of funding and to maintain financial flexibility. During times of distress and when capital markets are exceedingly volatile and tight,

> liquidity becomes critically important because access to capital markets may be difficult.[31]

More recently, Moody's emphasized that the utility sector "is likely to continue to generate negative free cash flow and credit quality is likely to suffer unless utilities fund this negative free cash flow appropriately with a balance of debt and equity financing."[32]

S&P confirmed the financial challenges associated with funding heightened investment in the utility sector, noting that, "[a]bout one-third of the industry is strategically managing their financial performance with only minimal financial cushion," and warning that "when unexpected risks occur or base-case assumptions deviate from expectations, the utility's credit quality can weaken."[33] More recently, S&P added that "given the current high percentage of negative outlooks, we anticipate that 2024 will be another challenging year for the industry's credit quality."[34]

As a result, the Company's capital structure must maintain adequate equity to preserve the flexibility necessary to maintain continuous access to capital even during times of unfavorable energy or financial market conditions.

Q44. WHAT OTHER FACTORS DO INVESTORS CONSIDER IN THEIR ASSESSMENT OF A COMPANY'S CAPITAL STRUCTURE?

A44. Utilities, including NorthWestern, are facing significant capital investment plans. Coupled with the potential for turmoil in capital markets, this warrants a stronger balance sheet to deal with an uncertain environment. As S&P noted:

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[31] Moody's Investors Service, *FAQ on credit implications of the coronavirus outbreak*, Sector Comment (Mar. 26, 2020).

[32] Moody's Investors Service, *Regulate Electric and Gas Utilities – US, Rising capital expenditures will require higher annual equity funding*, Sector In-Depth (Nov. 8, 2023).

[33] S&P Global Ratings, *The Outlook For North American Regulated Utilities Turns Stable* (May 18, 2023).

[34] S&P Global Ratings, *Rising Risks: Outlook For North American Investor-Owned Regulated Utilities Weakens*, Comments (Feb. 14, 2024).

> Under our base case, we expect that by 2024 the industry's capital spending will exceed $180 billion. Because of the industry's continued robust capital spending, we expect that [the] industry will continue to generate negative discretionary cash flow. This requires that the industry has consistent access to the capital markets to finance capital spending and dividends requirements.[35]

More recently, S&P noted that, "[w]ithout a commensurate focus on balance sheet preservation through equity support of discretionary negative cash flow deficits, limited financial cushion could give rise to another round of negative rating actions."[36] Similarly, Moody's noted that higher interest rates and the pressure of maintaining credit metrics while funding capital investments were leading to greater reliance on common equity.[37] Moody's concluded that the utility sector "is likely to continue to generate negative free cash flow and credit quality is likely to suffer unless utilities fund this negative free cash flow appropriately with a balance of debt and equity financing."[38]

In addition, the investment community also considers the impact of other considerations, such as leases and postretirement benefit and asset retirement obligations in its evaluation of a utility's financial standing. Considering the Company's relative lack of regulatory mechanisms and ongoing exposure to attrition, a conservative financial profile, in the form of a reasonable common equity ratio, is warranted to maintain the continuous access to capital under reasonable terms that is required to fund operations and necessary system investment, even during times of adverse capital market conditions.

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[35] S&P Global Ratings, *For The First Time Ever, The Median Investor-Owned Utility Ratings Falls To The 'BBB' Category*, Ratings Direct (Jan. 20, 2022).

[36] S&P Global Ratings, *Record CapEx Fuels Growth Along With Credit Risk For North American Investor-Owned Utilities*, Comments (Sep. 12, 2023).

[37] Moody's Investors Service, *Regulated Electric and Gas Utilities – US; Rising capital expenditures will require higher annual equity funding*, Sector In-Depth (Nov. 8, 2023).

[38] *Id.*

Q45. WHAT DOES THIS EVIDENCE SUGGEST WITH RESPECT TO NORTHWESTERN'S CAPITAL STRUCTURE?

A45. Based on my evaluation, I conclude that NorthWestern's requested common equity ratio of approximately 53% represents a reasonable basis on which to calculate the Company's overall rate of return. While industry averages provide one benchmark for comparison, each firm must select its capitalization based on the risks and prospects it faces, as well as its specific needs to access the capital markets. NorthWestern's capital structure is consistent with the range of industry benchmarks reflected in the capital structure ratios for the Gas Group, as well as the common equity ratios authorized for other gas utilities. The Company's capital structure reflects the need to address the funding of ongoing capital expenditures and support NorthWestern's financial integrity and access to capital on reasonable terms. Based on this evidence, and considering the importance of maintaining the Company's financial strength and credit standing, I conclude that NorthWestern's capital structure represents a reasonable mix of capital sources from which to calculate the overall rate of return.

V. CAPITAL MARKET ESTIMATES

Q46. WHAT IS THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY?

A46. This section presents capital market estimates of the cost of equity. First, address the concept of the cost of common equity, along with the risk-return tradeoff principle fundamental to capital markets. I then describe the quantitative analyses I conducted to estimate the cost of common equity for the Gas Group.

A. Economic Standards

Q47. WHAT FUNDAMENTAL ECONOMIC PRINCIPLE UNDERLIES THE COST OF EQUITY CONCEPT?

A47. The fundamental economic principle underlying the cost of equity concept is the notion that investors are risk averse. In capital markets where relatively risk-free assets are

available (*e.g.*, U.S. Treasury securities), investors can be induced to hold riskier assets only if they are offered a premium, or additional return, above the rate of return on a risk-free asset. Because all assets compete for investor funds, riskier assets must yield a higher expected rate of return than safer assets to induce investors to invest and hold them.

Given this risk-return tradeoff, the required rate of return (k) from an asset (i) can generally be expressed as:

$$k_i = R_f + RP_i$$

where: R_f = Risk-free rate of return, and
RP_i = Risk premium required to hold riskier asset i.

Thus, the required rate of return for a particular asset at any time is a function of: (1) the yield on risk-free assets, and (2) the asset's relative risk, with investors demanding correspondingly larger risk premiums for bearing greater risk.

Q48. IS THERE EVIDENCE THAT THE RISK-RETURN TRADEOFF PRINCIPLE OPERATES IN THE CAPITAL MARKETS?

A48. Yes. The risk-return tradeoff can be documented in segments of the capital markets where required rates of return can be directly inferred from market data and where generally accepted measures of risk exist. Bond yields, for example, reflect investors' expected rates of return, and bond ratings measure the risk of individual bond issues. Comparing the observed yields on government securities, which are considered free of default risk, to the yields on bonds of various rating categories demonstrates that the risk-return tradeoff does, in fact, exist.

Q49. DOES THE RISK-RETURN TRADEOFF OBSERVED WITH FIXED INCOME SECURITIES EXTEND TO COMMON STOCKS AND OTHER ASSETS?

A49. It is widely accepted that the risk-return tradeoff evidenced with long-term debt extends to all assets. Documenting the risk-return tradeoff for assets other than fixed income securities, however, is complicated by two factors. First, there is no standard measure of risk applicable to all assets. Second, for most assets—including common stock—required rates of return cannot be observed. Nevertheless, there is every reason to believe that investors demonstrate risk aversion in deciding whether to hold common stocks and other assets, just as when choosing among fixed-income securities.

Q50. IS THIS RISK-RETURN TRADEOFF LIMITED TO DIFFERENCES BETWEEN FIRMS?

A50. No. The risk-return tradeoff principle applies not only to investments in different firms, but also to different securities issued by the same firm. The securities issued by a utility vary considerably in risk because they have different characteristics and priorities. As noted earlier, the last investors in line are common shareholders. They share in the net earnings, if any, that remain after all other claimants have been paid. As a result, the rate of return that investors require from a utility's common stock, the most junior and riskiest of its securities, must be considerably higher than the yield offered by the utility's senior, long-term debt.

Q51. WHAT ARE THE CHALLENGES IN DETERMINING A JUST AND REASONABLE ROE FOR A UTILITY?

A51. The actual return investors require is not directly observable. Different methodologies have been developed to estimate investors' expected and required return on capital, but these theoretical tools produce a range of estimates, based on different assumptions and inputs. The DCF method, which is frequently referenced and relied on by regulators, is only one theoretical approach to gain insight into the return investors require. There are

a number of other accepted methodologies for estimating the cost of capital and the ranges produced by these approaches can vary widely.

Q52. IS IT CUSTOMARY TO CONSIDER THE RESULTS OF MULTIPLE APPROACHES WHEN EVALUATING A JUST AND REASONABLE ROE?

A52. Yes. In my experience, financial analysts and regulators routinely consider the results of alternative approaches in determining allowed ROEs. It is widely recognized that no single method can be regarded as failsafe; with all approaches having advantages and shortcomings. As FERC has noted, "[t]he determination of rate of return on equity starts from the premise that there is no single approach or methodology for determining the correct rate of return."[39] Similarly, a publication of the Society of Utility and Regulatory Financial Analysts concluded that:

> Each model requires the exercise of judgment as to the reasonableness of the underlying assumptions of the methodology and on the reasonableness of the proxies used to validate the theory. Each model has its own way of examining investor behavior, its own premises, and its own set of simplifications of reality. Each method proceeds from different fundamental premises, most of which cannot be validated empirically. Investors clearly do not subscribe to any singular method, nor does the stock price reflect the application of any one single method by investors.[40]

As this treatise succinctly observed, "no single model is so inherently precise that it can be relied on solely to the exclusion of other theoretically sound models."[41] Similarly, *New Regulatory Finance* concluded that:

> There is no single model that conclusively determines or estimates the expected return for an individual firm. Each methodology possesses its own way of examining investor behavior, its own premises, and its own set of simplifications of reality. Each method proceeds from different

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[39] *Northwest Pipeline Co.*, Opinion No. 396-C, 81 FERC ¶ 61,036 at 4 (1997).

[40] David C. Parcell, *The Cost of Capital – A Practitioner's Guide*, Society of Utility and Regulatory Financial Analysts (2010) at 84.

[41] *Id*.

> fundamental premises that cannot be validated empirically. Investors do not necessarily subscribe to any one method, nor does the stock price reflect the application of any one single method by the price-setting investor. There is no monopoly as to which method is used by investors. In the absence of any hard evidence as to which method outdoes the other, all relevant evidence should be used and weighted equally, in order to minimize judgmental error, measurement error, and conceptual infirmities.[42]

Thus, while the DCF model is a recognized approach to estimating the ROE, it is not without shortcomings and does not otherwise eliminate the need to ensure that the "end result" is fair. The Indiana Utility Regulatory Commission has recognized this principle:

> There are three principal reasons for our unwillingness to place a great deal of weight on the results of any DCF analysis. One is. . . the failure of the DCF model to conform to reality. The second is the undeniable fact that rarely if ever do two expert witnesses agree on the terms of a DCF equation for the same utility – for example, as we shall see in more detail below, projections of future dividend cash flow and anticipated price appreciation of the stock can vary widely. And, the third reason is that the unadjusted DCF result is almost always well below what any informed financial analysis would regard as defensible, and therefore require an upward adjustment based largely on the expert witness's judgment. In these circumstances, we find it difficult to regard the results of a DCF computation as any more than suggestive.[43]

More recently, FERC recognized the potential for any application of the DCF model to produce unreliable results.[44]

As this discussion indicates, considering results from alternative approaches reduces the potential for error associated with any single quantitative method. Just as investors inform their decisions using a variety of methodologies, my evaluation of a fair ROE for NorthWestern considers the results of multiple financial models.

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[42] Roger A. Morin, *New Regulatory Finance*, Pub. Utils. Reports, Inc. (2006) at 429.

[43] *Ind. Michigan Power Co.*, Cause No. 38728, 116 PUR4th, 1, 17-18 (IURC 8/24/1990).

[44] *Coakley v. Bangor Hydro-Elec. Co.*, Opinion No. 531, 147 FERC ¶ 61,234 at P 41 (2014).

Q53. DOES THE FACT THAT NORTHWESTERN IS A SUBSIDIARY OF NWE IN ANY WAY ALTER THESE FUNDAMENTAL STANDARDS UNDERLYING A JUST AND REASONABLE ROE?

A53. No. While the Company has no publicly traded common stock and NWE is the Company's only shareholder, this does not change the standards governing the determination of a just and reasonable ROE. Ultimately, the common equity required to support NorthWestern's utility operations must be raised in the capital markets, where investors consider the Company's ability to offer a rate of return that is competitive with other risk-comparable alternatives. NorthWestern must compete with other investment opportunities and unless there is a reasonable expectation that investors will have the opportunity to earn returns commensurate with the underlying risks, capital will be allocated elsewhere, the Company's financial integrity will be weakened, and investors will demand an even higher rate of return. NorthWestern's ability to offer a reasonable return on investment is a necessary ingredient to ensure that customers continue to enjoy economical rates and reliable service.

Q54. WHAT DOES THE ABOVE DISCUSSION IMPLY WITH RESPECT TO ESTIMATING THE COST OF EQUITY FOR A UTILITY?

A54. Although the cost of equity cannot be observed directly, it is a function of the returns available from other investment alternatives and the risks of the investment. Because it is not readily observable, the cost of equity for a particular utility must be estimated by analyzing information about capital market conditions generally, assessing the relative risks of the Company specifically, and employing alternative quantitative methods that focus on investors' required rates of return. These methods typically attempt to infer investors' required rates of return from stock prices, interest rates, or other capital market data.

B. Discounted Cash Flow Analysis

Q55. HOW IS THE DCF MODEL USED TO ESTIMATE THE COST OF COMMON EQUITY?

A55. DCF models assume that the price of a share of common stock is equal to the present value of the expected cash flows (i.e., future dividends and stock price) that will be received while holding the stock, discounted at investors' required rate of return. Rather than developing annual estimates of cash flows into perpetuity, the DCF model can be simplified to a "constant growth" form:[45]

$$P_0 = \frac{D_1}{k_e - g}$$

where: P_0 = Current price per share;
D_1 = Expected dividend per share in the coming year;
k_e = Cost of equity; and,
g = Investors' long-term growth expectations.

The cost of common equity (k_e) can be isolated by rearranging terms within the equation:

$$k_e = \frac{D_1}{P_0} + g$$

This constant growth form of the DCF model recognizes that the rate of return to stockholders consists of two parts: 1) dividend yield (D_1/P_0); and 2) growth (g). In other words, investors expect to receive a portion of their total return in the form of current dividends and the remainder through price appreciation.

[45] The constant growth DCF model is dependent on a number of strict assumptions, which in practice are never met. These include a constant growth rate for both dividends and earnings; a stable dividend payout ratio; the discount rate exceeds the growth rate; a constant growth rate for book value and price; a constant earned rate of return on book value; no sales of stock at a price above or below book value; a constant price-earnings ratio; a constant discount rate (*i.e.*, no changes in risk or interest rate levels and a flat yield curve); and all the above extend to infinity. Nevertheless, the DCF method provides a workable and practical approach to estimate investors' required return that is widely referenced in utility ratemaking.

Q56. WHAT STEPS ARE REQUIRED TO APPLY THE CONSTANT GROWTH DCF MODEL?

A56. The first step is to determine the expected dividend yield (D_1/P_0) for the firm in question. This is usually calculated based on an estimate of dividends to be paid in the coming year divided by the current price of the stock. The second, and more controversial, step is to estimate investors' long-term growth expectations (*g*) for the firm. The final step is to add the firm's dividend yield and estimated growth rate to arrive at an estimate of its cost of common equity.

Q57. HOW DO YOU DETERMINE THE DIVIDEND YIELDS FOR THE GAS GROUP?

A57. I rely on Value Line's estimates of dividends to be paid by each of these utilities over the next twelve months as D_1. This annual dividend was then divided by a 30-day average stock price for each utility to arrive at the expected dividend yield. The expected dividends, stock prices and resulting dividend yields for the firms in the Gas Group are presented on Exhibit AMM-5. As shown on the first page of this exhibit, dividend yields for the firms in the Gas Group ranged from 2.4% to 5.3% and averaged 4.0%.

Q58. WHAT IS THE NEXT STEP IN APPLYING THE CONSTANT GROWTH DCF MODEL?

A58. The next step is to evaluate long-term growth expectations, or "*g*", for the firm in question. In constant growth DCF theory, earnings, dividends, book value, and market price are all assumed to grow in lockstep, and the growth horizon of the DCF model is infinite. But implementation of the DCF model is more than just a theoretical exercise; it is an attempt to replicate the mechanism investors used to arrive at observable stock prices. A wide variety of techniques can be used to derive growth rates, but the only "*g*" that matters in applying the DCF model is the value that investors expect.

Q59. WHAT ARE INVESTORS MOST LIKELY TO CONSIDER IN DEVELOPING THEIR LONG-TERM GROWTH EXPECTATIONS?

A59. Implementation of the DCF model is solely concerned with replicating the forward-looking evaluation of real-world investors. In the case of utilities, dividend growth rates are not likely to provide a meaningful guide to investors' current growth expectations. Utility dividend policies reflect the need to accommodate business risks and investment requirements in the industry, as well as potential uncertainties in the capital markets. As a result, dividend growth in the utility industry has generally lagged growth in earnings as utilities conserve financial resources.

A measure that plays a pivotal role in determining investors' long-term growth expectations is future trends in EPS, which provide the source for future dividends and ultimately support share prices. The importance of earnings in evaluating investors' expectations and requirements is well accepted in the investment community, and surveys of analytical techniques relied on by professional analysts indicate that growth in earnings is far more influential than trends in DPS.

The availability of projected EPS growth rates is also key to investors relying on this measure as compared to future trends in DPS. Apart from Value Line, investment advisory services do not generally publish comprehensive DPS growth projections, and this scarcity of dividend growth rates relative to the abundance of earnings forecasts attests to their relative influence. The fact that securities analysts focus on EPS growth, and that DPS growth rates are not routinely published, indicates that projected EPS growth rates are likely to provide a superior indicator of the future long-term growth expected by investors.

Q60. DO THE GROWTH RATE PROJECTIONS OF SECURITY ANALYSTS ALSO CONSIDER HISTORICAL TRENDS?

A60. Yes. Professional security analysts study historical trends extensively in developing their projections of future earnings. To the extent there is any useful information in historical patterns, that information is incorporated into analysts' growth forecasts.

Q61. WHAT ARE SECURITY ANALYSTS CURRENTLY PROJECTING IN THE WAY OF GROWTH FOR THE FIRMS IN THE PROXY GROUP?

A61. The EPS growth projections for each of the firms in the Gas Group reported by Value Line, IBES,[46] and Zacks are displayed on page 2 of Exhibit AMM-5.

Q62. HOW ELSE ARE INVESTORS' EXPECTATIONS OF FUTURE LONG-TERM GROWTH PROSPECTS SOMETIMES ESTIMATED WHEN APPLYING THE CONSTANT GROWTH DCF MODEL?

A62. In constant growth theory, growth in book equity will be equal to the product of the earnings retention ratio (one minus the dividend payout ratio) and the earned rate of return on book equity. Furthermore, if the earned rate of return and the payout ratio are constant over time, growth in earnings and dividends will be equal to growth in book value. Despite the fact that these conditions are never met in practice, this "sustainable growth" approach may provide a rough guide for evaluating a firm's growth prospects.

The sustainable growth rate is calculated by the formula, g = br+sv, where "b" is the expected retention ratio, "r" is the expected earned return on equity, "s" is the percent of common equity expected to be issued annually as new common stock, and "v" is the equity accretion rate. Under DCF theory, the "sv" factor is a component of the growth rate designed to capture the impact of issuing new common stock at a price above, or below, book value. The sustainable, "br+sv" growth rates for each firm in the

[46] Formerly I/B/E/S International, Inc., IBES growth rates are now compiled and published by Refinitiv.

proxy group are summarized on page 2 of Exhibit AMM-5, with the underlying details being presented on Exhibit AMM-6.

The sustainable growth rate analysis shown in Exhibit AMM-6 incorporates an "adjustment factor" because Value Line's reported returns are based on year-end book values. Since earnings is a flow over the year while book value is determined at a given point in time, the measurement of earnings and book value are distinct concepts. It is this fundamental difference between a flow (earnings) and point estimate (book value) that makes it necessary to adjust to mid-year in calculating the ROE. Given that book value will increase or decrease over the year, using year-end book value (as Value Line does) understates or overstates the average investment that corresponds to the flow of earnings. To address this concern, earnings must be matched with a corresponding representative measure of book value, or the resulting ROE will be distorted. The adjustment factor determined in Exhibit AMM-6, is solely a means of converting Value Line's end-of-period values to an average return over the year, and the formula for this adjustment is supported in recognized textbooks and has been adopted by other regulators.[47]

Q63. WHAT COST OF COMMON EQUITY ESTIMATES WERE IMPLIED FOR THE GAS GROUP USING THE DCF MODEL?

A63. After combining the dividend yields and respective growth projections for each utility, the resulting cost of common equity estimates are shown on page 3 of Exhibit AMM-5.

[47] *See,* Roger A. Morin, *New Regulatory Finance*, Pub. Utils. Reports, Inc. (2006) at 305-306; *Bangor Hydro-Electric Co. et al*., 122 FERC ¶ 61,265 at n.12 (2008).

Q64. IN EVALUATING THE RESULTS OF THE CONSTANT GROWTH DCF MODEL, IS IT APPROPRIATE TO ELIMINATE ILLOGICAL ESTIMATES?

A64. Yes. It is essential that the cost of equity estimates produced by quantitative methods pass fundamental tests of reasonableness and economic logic. Accordingly, DCF estimates that are implausibly low or high should be eliminated.

Q65. HOW DO YOU EVALUATE DCF ESTIMATES AT THE LOW END OF THE RANGE?

A65. My evaluation of DCF estimates at the low end of the range is based on the fundamental risk-return tradeoff, which holds that investors will only take on more risk if they expect to earn a higher rate of return to compensate them for the greater uncertainly. Because common stocks lack the protections associated with an investment in long-term bonds, a utility's common stock imposes far greater risks on investors. As a result, the rate of return that investors require from a utility's common stock is considerably higher than the yield offered by senior, long-term debt. Consistent with this principle, DCF results that are not sufficiently higher than the yield available on less risky utility bonds must be eliminated.

Q66. HAVE SIMILAR TESTS BEEN APPLIED BY OTHER REGULATORS?

A66. Yes. FERC has noted that adjustments are justified where applications of the DCF approach and other methods produce illogical results. FERC evaluates low-end DCF results against observable yields on long-term public utility debt and has recognized that it is appropriate to eliminate estimates that do not sufficiently exceed this threshold.[48] FERC's current practice is to exclude low-end cost of estimates that fall below the six-month average yield on Baa-rated utility bonds, plus 20% of the CAPM market risk

[48] See, *e.g.*, *Southern California Edison Co*., 131 FERC ¶ 61,020 at P 55 (2010).

premium.[49] In addition, FERC also excludes estimates that are "irrationally or anomalously high."[50] Similarly, the Staff of the Maryland Public Service Commission has also eliminated DCF values where they do not offer a sufficient premium above the cost of debt to be attractive to an equity investor.[51]

Q67. DO YOU EXCLUDE ANY ESTIMATES AT THE LOW OR HIGH END OF THE RANGE OF DCF RESULTS?

A67. Yes. As highlighted on page 3 of Exhibit AMM-5, I remove one low-end DCF cost of equity estimate of 7.4%. After removing this illogical value, the lower end of the DCF results is set by a cost of equity estimate of 8.1%, while the upper end is established by a cost of equity estimate of 13.5%. While a 13.5% cost of equity estimate may exceed the majority of the remaining values, low-end DCF estimates in the 8.1% to 8.3% range are assuredly far below investors' required rate of return. Taken together and considered along with the balance of the results, the remaining values provide a reasonable basis on which to frame the range of plausible DCF estimates and evaluate investors' required rate of return.

Q68. WHAT ROE ESTIMATES ARE IMPLIED BY YOUR DCF RESULTS FOR THE GAS GROUP?

A68. As shown on page 3 of Exhibit AMM-5 and summarized in Table 5, application of the constant growth DCF model results in the following ROE estimates:

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[49] Based on the six-month average yield at March 2024 of 5.98% and the 7.5% market risk premium shown on Exhibit AMM-7, this implies a current low-end threshold of approximately 7.5%.

[50] *Ass'n of Bus. Advocating Tariff Equity v. Midcontinent Indep. Sys. Operator, Inc*., 171 FERC ¶ 61,154 at P 152 (2020).

[51] See, *e.g.*, Maryland Public Service Commission, Case No. 9702, *Direct Testimony and Exhibits of Anson R. Justi* (Dec. 15, 2023) at 33.

TABLE 5
DCF RESULTS – GAS GROUP

Growth Rate	Average	Midpoint
Value Line	10.3%	10.9%
IBES	10.1%	9.8%
Zacks	9.8%	9.7%
br + sv	10.2%	10.3%

C. Capital Asset Pricing Model

Q69. PLEASE DESCRIBE THE CAPM.

A69. The CAPM is a theory of market equilibrium that measures risk using the beta coefficient. Assuming investors are fully diversified, the relevant risk of an individual asset (*e.g.*, common stock) is its volatility relative to the market as a whole, with beta reflecting the tendency of a stock's price to follow changes in the market. A stock that tends to respond less to market movements has a beta less than 1.0, while stocks that tend to move more than the market have betas greater than 1.0. The CAPM is mathematically expressed as:

$$R_j = R_f + \beta_j(R_m - R_f)$$

where: R_j = required rate of return for stock j;
R_f = risk-free rate;
R_m = expected return on the market portfolio; and,
β_j = beta, or systematic risk, for stock j.

Under the CAPM formula above, a stock's required return is a function of the risk-free rate (R_f), plus a risk premium that is scaled to reflect the relative volatility of a firm's stock price, as measured by beta (β). Like the DCF model, the CAPM is an *ex-ante,* or forward-looking model based on expectations of the future. As a result, to produce a meaningful estimate of investors' required rate of return, the CAPM must be applied using estimates that reflect the expectations of actual investors in the market, not with backward-looking, historical data.

Q70. WHY IS THE CAPM A RELEVANT APPROACH TO EVALUATE THE COST OF EQUITY FOR NORTHWESTERN?

A70. The CAPM approach (which also forms the foundation of the ECAPM) generally is considered the most widely referenced method for estimating the cost of equity among academicians and professional practitioners, with the pioneering researchers of this method receiving the Nobel Prize in 1990. Because this is the dominant model for estimating the cost of equity outside the regulatory sphere, the CAPM (and ECAPM) provides important insight into investors' required rate of return for utility stocks, including the Company.

Q71. HOW DO YOU APPLY THE CAPM TO ESTIMATE THE ROE?

A71. Application of the CAPM to the proxy group is based on a forward-looking estimate for investors' required rate of return from common stocks presented in Exhibit AMM-7. To capture the expectations of today's investors in current capital markets, the expected market rate of return was estimated by conducting a DCF analysis on the dividend paying firms in the S&P 500.

The dividend yield for each firm is obtained from Value Line, and the growth rate is equal to the average of the earnings growth projections from IBES, Value Line, and Zacks for each firm, with each firm's dividend yield and growth rate being weighted by its proportionate share of total market value. After removing companies with growth rates that were negative or greater than 20%, the weighted average of the projections for the individual firms implies an average growth rate over the next five years of 10.1%. Combining this average growth rate with a year-ahead dividend yield of 1.9% results in a current cost of common equity estimate for the market as a whole (R_m) of 12.0%. Subtracting a 4.5% risk-free rate based on the average yield on 30-year Treasury bonds for the six month period ending March 2024 produced a market equity risk premium of 7.5%.

Q72. WHAT BETA VALUES DO YOU USE?

A72. As indicated earlier in my discussion of risk measures for the Gas Group, I relied on the beta values reported by Value Line, which in my experience is the most widely referenced source for beta in regulatory proceedings.

Q73. WHAT ELSE SHOULD BE CONSIDERED IN APPLYING THE CAPM?

A73. Financial research indicates that the CAPM does not fully account for observed differences in rates of return attributable to firm size. Accordingly, a modification is required to account for this size effect. As explained by Morningstar:

> One of the most remarkable discoveries of modern finance is the finding of a relationship between firm size and return. On average, small companies have higher returns than large ones. . . . The relationship between firm size and return cuts across the entire size spectrum; it is not restricted to the smallest stocks.[52]

According to the CAPM, the expected return on a security should consist of the riskless rate, plus a premium to compensate for the systematic risk of the particular security. The degree of systematic risk is represented by the beta coefficient. The need for the size adjustment arises because differences in investors' required rates of return that are related to firm size are not fully captured by beta. To account for this, researchers have developed size premiums that need to be added to account for the level of a firm's market capitalization in determining the CAPM cost of equity.[53] Accordingly, my CAPM analyses also incorporated an adjustment to recognize the impact of size distinctions, as measured by the market capitalization for the firms in the Gas Group.

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[52] Morningstar, *2015 Ibbotson SBBI Classic Yearbook*, at 99.

[53] Originally compiled by Ibbotson Associates and published in their annual yearbook entitled, *Stocks, Bonds, Bills and Inflation*, these size premia are now developed by Kroll and presented in its *Cost of Capital Navigator.*

Q74. WHAT IS THE BASIS FOR THE SIZE ADJUSTMENT?

A74. The size adjustment required in applying the CAPM is based on the finding that *after controlling for risk differences reflected in beta*, the CAPM overstates returns to companies with larger market capitalizations and understates returns for relatively smaller firms. The size adjustments utilized in my analysis are sourced from Kroll, who now publish the well-known compilation of capital market series originally developed by Professor Roger G. Ibbotson of the Yale School of Management. Calculation of the size adjustments involve the following steps:

1. Divide all stocks traded on the NYSE, NYSE MKT, and NASDAQ indices into deciles based on their market capitalization.
2. Using the average beta value for each decile, calculate the implied excess return over the risk-free rate using the CAPM.
3. Compare the calculated excess returns based on the CAPM to the actual excess returns for each decile, with the difference being the increment of return that is related to firm size, or "size adjustment."

New Regulatory Finance observed that "small market-cap stocks experience higher returns than large market-cap stocks with equivalent betas," and concluded that "the CAPM understates the risk of smaller utilities, and a cost of equity based purely on a CAPM beta will therefore produce too low an estimate."[54] As FERC has recognized, "[t]his type of size adjustment is a generally accepted approach to CAPM analyses."[55]

Q75. IS THIS SIZE ADJUSTMENT RELATED TO THE RELATIVE SIZE OF NORTHWESTERN AS COMPARED WITH THE PROXY GROUP?

A75. No. I am not proposing to apply a general size risk premium in evaluating a just and reasonable ROE for the Company and my recommendation does not include any adjustment related to the relative size of NorthWestern. Rather, this size adjustment is

[54] Roger A. Morin, *New Regulatory Finance*, Pub. Utils. Reports, Inc. (2006) at 187.

[55] Opinion No. 531-B at P 117.

specific to the CAPM and merely corrects for an observed inability of the beta measure to fully reflect the risks perceived by investors for the firms in the proxy group.

Q76. WHAT IS THE IMPLIED ROE FOR THE GAS GROUP USING THE CAPM APPROACH?

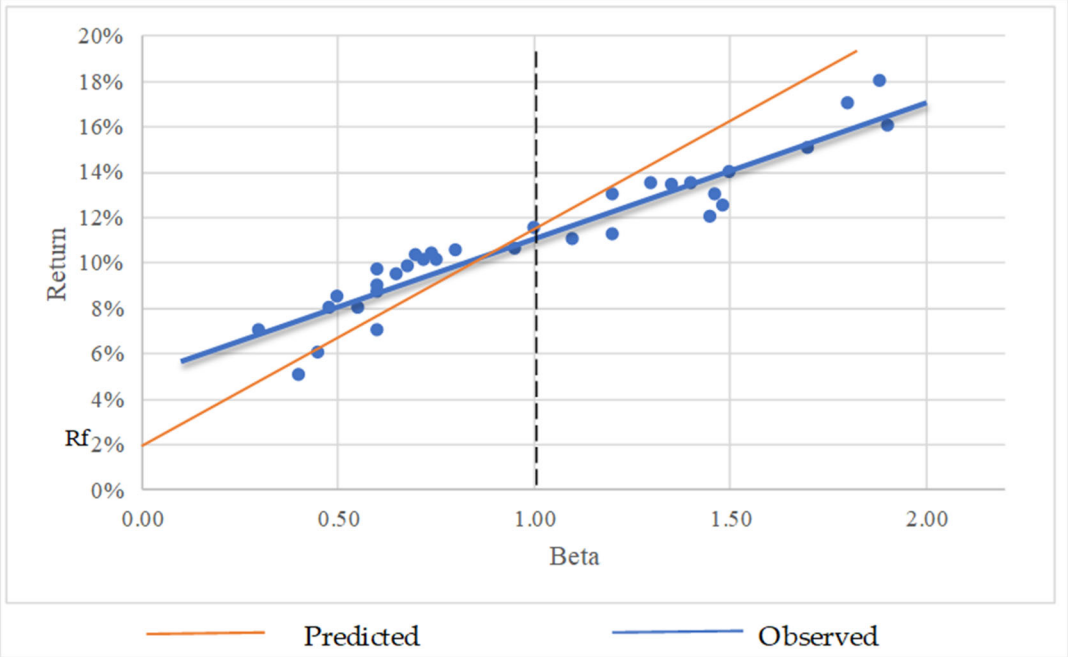
A76. As shown on Exhibit AMM-7, the CAPM approach implies an average ROE for the Gas Group of 11.0%, or 11.9% after adjusting for the impact of firm size.

D. Empirical Capital Asset Pricing Model

Q77. HOW DOES THE ECAPM APPROACH DIFFER FROM TRADITIONAL APPLICATIONS OF THE CAPM?

A77. Empirical tests of the CAPM have shown that low-beta securities earn returns somewhat higher than the CAPM would predict, and high-beta securities earn less than predicted. In other words, the CAPM tends to overstate the actual sensitivity of the cost of capital to beta, with low-beta stocks tending to have higher returns and high-beta stocks tending to have lower risk returns than predicted by the CAPM. This is illustrated graphically in Figure 2:

FIGURE 2
CAPM – PREDICTED VS. OBSERVED RETURNS



Because the betas of utility stocks, including those in the proxy group, are generally less than 1.0, this implies that cost of equity estimates based on the traditional CAPM would understate the cost of equity. This empirical finding is widely reported in the finance literature, as summarized in *New Regulatory Finance*:

> As discussed in the previous section, several finance scholars have developed refined and expanded versions of the standard CAPM by relaxing the constraints imposed on the CAPM, such as dividend yield, size, and skewness effects. These enhanced CAPMs typically produce a risk-return relationship that is flatter than the CAPM prediction in keeping with the actual observed risk-return relationship. The ECAPM makes use of these empirical relationships.[56]

Based on a review of the empirical evidence, *New Regulatory Finance* concluded the expected return on a security is represented by the following formula:

$$R_j = R_f + 0.25(R_m - R_f) + 0.75[\beta_j(R_m - R_f)]$$

[56] Roger A. Morin, *New Regulatory Finance*, Pub. Utils. Reports (2006) at 189.

Like the CAPM formula presented earlier, the ECAPM represents a stock's required return as a function of the risk-free rate (R_f), plus a risk premium. In the formula above, this risk premium is composed of two parts: (1) the market risk premium (R_m - R_f) weighted by a factor of 25%, and (2) a company-specific risk premium based on the stock's relative volatility [$\beta_j(R_m - R_f)$] weighted by 75%. This ECAPM equation, and its associated weighting factors, recognizes the observed relationship between standard CAPM estimates and the cost of capital documented in the financial research, and corrects for the understated returns that would otherwise be produced for low beta stocks.

Q78. WHAT COST OF EQUITY IS INDICATED BY THE ECAPM?

A78. My application of the ECAPM is based on the same forward-looking market rate of return, risk-free rates, and beta values discussed earlier in connections with the CAPM. As shown on Exhibit AMM-8, applying the forward-looking ECAPM approach to the firms in the Gas Group results in an average cost of equity estimate of 11.2%, or 12.2% after incorporating the size adjustment.

E. Utility Risk Premium

Q79. BRIEFLY DESCRIBE THE RISK PREMIUM METHOD.

A79. The risk premium approach is based on the fundamental risk-return principle that is central to finance, which holds that investors will require a premium in the form of a higher return to assume additional risk. The risk premium method extends the risk-return tradeoff observed with bonds to estimate investors' required rate of return on common stocks. The cost of equity is estimated by first determining the additional return investors require to forgo the relative safety of bonds and to bear the greater risks associated with common stock, and then adding this equity risk premium to the current yield on bonds. Like the DCF model, the risk premium method is capital market oriented. However, unlike DCF models, which indirectly impute the cost of equity, risk

premium methods directly estimate investors' required rate of return by adding an equity risk premium to observable bond yields.

Q80. IS THE RISK PREMIUM APPROACH A WIDELY ACCEPTED METHOD FOR ESTIMATING THE COST OF EQUITY?

A80. Yes. This method is routinely referenced by the investment community and in academia and regulatory proceedings and provides an important tool in estimating a just and reasonable ROE for NorthWestern.

Q81. HOW DO YOU IMPLEMENT THE RISK PREMIUM METHOD?

A81. Estimates of equity risk premiums for utilities are based on surveys of previously authorized ROEs. Authorized ROEs presumably reflect regulatory commissions' best estimates of the cost of equity, however determined, at the time they issued their final order. Such ROEs should represent a balanced and impartial outcome that considers the need to maintain a utility's financial integrity and ability to attract capital. Moreover, allowed returns are an important consideration for investors and have the potential to influence other observable investment parameters, including credit ratings and borrowing costs. Thus, when considered in the context of a complete and rigorous analysis, this data provides a logical and frequently referenced basis for estimating equity risk premiums for regulated utilities.

Q82. HOW DO YOU CALCULATE EQUITY RISK PREMIUMS BASED ON ALLOWED RETURNS?

A82. The ROEs authorized for gas utilities by regulatory commissions across the U.S. are compiled and published by RRA. On pages 2-4 of Exhibit AMM-9, the average yield on single-A public utility bonds is subtracted from the average allowed return for gas utilities to calculate equity risk premiums for each quarter between 1980 and 2023. As shown on page 4 of Exhibit AMM-9, over this period, these equity risk premiums for

gas utilities averaged 3.80%, and the yields on single-A public utility bonds averaged 7.56%.

Q83. WHAT CAPITAL MARKET RELATIONSHIP MUST BE CONSIDERED WHEN IMPLEMENTING THE RISK PREMIUM METHOD?

A83. The magnitude of equity risk premiums is not constant and equity risk premiums tend to move inversely with interest rates. In other words, when interest rate levels are relatively high, equity risk premiums narrow, and when interest rates are relatively low, equity risk premiums widen. The implication of this inverse relationship is that the cost of equity does not move as much as, or in lockstep with, interest rates. Accordingly, for a 1% increase or decrease in interest rates, the cost of equity may only rise or fall some fraction of 1%. When implementing the risk premium method, adjustments may be required to incorporate this inverse relationship if current interest rates differ from the average interest rate level represented in the data set.

Current bond yields are lower than those prevailing over the risk premium study periods. Given that equity risk premiums move inversely with interest rates, these lower bond yields also imply an increase in the equity risk premium that investors require to accept the higher uncertainties associated with an investment in utility common stocks versus bonds. In other words, higher required equity risk premiums offset the impact of declining interest rates on the ROE.

Q84. IS THIS INVERSE RELATIONSHIP CONFIRMED BY PUBLISHED FINANCIAL RESEARCH?

A84. Yes. The inverse relationship between equity risk premiums and interest rates has been widely reported in the financial literature. As summarized by *New Regulatory Finance*:

> Published studies by Brigham, Shome, and Vinson (1985), Harris (1986), Harris and Marston (1992, 1993), Carleton, Chambers, and Lakonishok (1983), Morin (2005), and McShane (2005), and others demonstrate that, beginning in 1980, risk premiums varied inversely with

the level of interest rates – rising when rates fell and declining when rates rose.[57]

Other regulators have also recognized that, while the cost of equity trends in the same direction as interest rates, these variables do not move in lockstep.[58] This relationship is illustrated in the figure on page 5 of Exhibit AMM-9.

Q85. WHAT ROE IS IMPLIED BY THE RISK PREMIUM METHOD USING SURVEYS OF ALLOWED RETURNS?

A85. Based on the regression output between the interest rates and equity risk premiums displayed on page 5 of Exhibit AMM-9, the equity risk premium for gas utilities increases by approximately 48 basis points for each percentage point drop in the yield on average public utility bonds. As shown on page 1 of Exhibit AMM-9, with an average yield on single-A public utility bonds for the six-months ending March 2024 of 5.74%, this implies a current equity risk premium of 4.67%. Adding this equity risk premium to the average yield on Baa-rated utility bonds of 5.98% results in an indicated cost of equity for NorthWestern of 10.65%.

F. Expected Earnings Approach

Q86. WHAT OTHER ANALYSES DO YOU CONDUCT TO EVALUATE A FAIR ROE FOR NORTHWESTERN?

A86. I also evaluate the ROE using the expected earnings method. Reference to rates of return available from alternative investments of comparable risk can provide an important benchmark in assessing the return necessary to assure confidence in the financial integrity of a firm and its ability to attract capital. This expected earnings approach is consistent with the economic underpinnings for a just and reasonable rate

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[57] Roger A. Morin, *New Regulatory Finance*, Pub. Utils. Reports (2006) at 128.

[58] *See, e.g.*, California Public Utilities Commission, Decision 08-05-035 (May 29, 2008); Entergy Mississippi Formula Rate Plan FRP-7, https://cdn.entergy-mississippi.com/userfiles/content/price/tariffs/eml_frp.pdf (last visited Apr. 7, 2024); *Martha Coakley et al.*, 147 FERC ¶ 61,234 at P 147 (2014).

of return established by the U.S. Supreme Court in *Bluefield* and *Hope*. Moreover, it avoids the complexities and limitations of capital market methods and instead focuses on the returns earned on book equity, which are readily available to investors.

Q87. WHAT ECONOMIC PREMISE UNDERLIES THE EXPECTED EARNINGS APPROACH?

A87. The expected earnings approach is based on the concept that investors compare each investment alternative with the next best opportunity. If the utility is unable to offer a return similar to that available from other opportunities of comparable risk, investors will become unwilling to supply the capital on reasonable terms. For existing investors, denying the utility an opportunity to earn what is available from other similar risk alternatives prevents them from earning their opportunity cost of capital. This outcome would violate the *Hope* and *Bluefield* standards and undermine the utility's access to capital on reasonable terms.

Q88. HOW IS THE EXPECTED EARNINGS APPROACH TYPICALLY IMPLEMENTED?

A88. The traditional comparable earnings test identifies a group of companies that are believed to be comparable in risk to the utility. The actual earnings of those companies on the book value of their investment are then compared to the allowed return of the utility. While the traditional comparable earnings test is implemented using historical data taken from the accounting records, it is also common to use projections of returns on book investment, such as those published by recognized investment advisory publications (*e.g.*, Value Line). Because these returns on book value equity are analogous to the allowed return on a utility's rate base, this measure of opportunity costs results in a direct, "apples to apples" comparison.

Q89. WHAT OTHER CONSIDERATION SUPPORTS REFERENCE TO EXPECTED RETURNS ON BOOK VALUE?

A89. Regulators do not set the returns that investors earn in the capital markets, which are a function of dividend payments and fluctuations in common stock prices—both of which are outside their control. Regulators can only establish the allowed ROE, which is applied to the book value of a utility's investment in rate base, as determined from its accounting records. This is analogous to the expected earnings approach, which measures the return that investors expect the utility to earn on book value. As a result, the expected earnings approach provides a meaningful guide to ensure that the allowed ROE is similar to what other utilities of comparable risk will earn on invested capital. This expected earnings test does not require theoretical models to indirectly infer investors' perceptions from stock prices or other market data. As long as the proxy companies are similar in risk, their expected earned returns on invested capital provide a direct benchmark for investors' opportunity costs that is independent of fluctuating stock prices, market-to-book ratios, debates over DCF growth rates, or the limitations inherent in any theoretical model of investor behavior.

Q90. WHAT ROE IS INDICATED FOR NORTHWESTERN BASED ON THE EXPECTED EARNINGS APPROACH?

A90. For the firms in the Gas Group, the year-end returns on common equity projected by Value Line over its forecast horizon are shown on Exhibit AMM-10. As I explained earlier in my discussion of the br+sv growth rates used in applying the DCF model, Value Line's returns on common equity are calculated using year-end equity balances, which understates the average return earned over the year.[59] Accordingly, these year-

[59] For example, to compute the annual return on a passbook savings account with a beginning balance of $1,000 and an ending balance of $5,000, the interest income would be divided by the average balance of $3,000. Using the $5,000 balance at the end of the year would understate the actual return.

end values were converted to average returns using the same adjustment factor discussed earlier and developed on Exhibit AMM-6. As shown on Exhibit AMM-10, Value Line's projections suggest an average ROE of 10.3% for the Gas Group.

VI. NON-UTILITY BENCHMARK

Q91. WHAT IS THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY?

A91. This section presents the results of my DCF analysis applied to a group of low-risk firms in the competitive sector, which I refer to as the "Non-Utility Group." This analysis was not relied on to arrive at my recommended ROE range of reasonableness; however, it is my opinion that this is a relevant consideration in evaluating a just and reasonable ROE for the Company's utility operations.

Q92. DO UTILITIES HAVE TO COMPETE WITH NON-REGULATED FIRMS FOR CAPITAL?

A92. Yes. The cost of capital is an opportunity cost based on the returns that investors could realize by putting their money in other alternatives. Clearly, the total capital invested in utility stocks is only the tip of the iceberg of total common stock investment, and there is an abundance of alternatives available to investors. Utilities must compete for capital, not just against firms in their own industry, but with other investment opportunities of comparable risk. Indeed, modern portfolio theory is built on the assumption that rational investors will hold a diverse portfolio of stocks, not just companies in a single industry.

Q93. IS IT CONSISTENT WITH THE *BLUEFIELD* AND *HOPE* CASES TO CONSIDER INVESTORS' REQUIRED ROE FOR NON-UTILITY COMPANIES?

A93. Yes. The cost of equity capital in the competitive sector of the economy forms the underpinning for utility ROEs because regulation purports to serve as a substitute for the actions of competitive markets. The Supreme Court has recognized that it is the degree of risk, not the nature of the business, which is relevant in evaluating an allowed

ROE for a utility. The *Bluefield* case refers to "business undertakings attended with comparable risks and uncertainties." It does not restrict consideration to other utilities. Similarly, the *Hope* case states:

> By that standard the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks.[60]

As in the *Bluefield* decision, there is nothing to restrict "other enterprises" solely to the utility industry.

Q94. DOES CONSIDERATION OF THE RESULTS FOR THE NON-UTILITY GROUP IMPROVE THE RELIABILITY OF DCF RESULTS?

A94. Yes. Growth estimates used in the DCF model depend on analysts' forecasts. It is possible for utility growth rates to be distorted by short-term trends in the industry, or by the industry falling into favor or disfavor by analysts. Such distortions could result in biased DCF estimates for utilities. Because the Non-Utility Group includes low risk companies from more than one industry, it helps to insulate against any possible distortion that may be present in results for a particular sector.

Q95. WHAT CRITERIA DO YOU APPLY TO DEVELOP THE NON-UTILITY GROUP?

A95. My comparable risk proxy group was composed of those United States companies followed by Value Line that:

1) pay common dividends;
2) have a Safety Rank of "1";
3) have a Financial Strength Rating of "A" or greater;
4) have a beta of 0.95 or less; and,
5) have investment grade credit ratings from Moody's and S&P.

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[60] *Federal Power Comm'n v. Hope Natural Gas Co.*, 320 U.S. 391 (1944).

Q96. HOW DO THE OVERALL RISKS OF YOUR NON-UTILITY GROUP COMPARE WITH THE GAS GROUP?

A96. Table 6 compares the Non-Utility Group with the Gas Group and NorthWestern across the measures of investment risk discussed earlier:

TABLE 6
COMPARISON OF RISK INDICATORS

	Credit Ratings		Value Line		
			Safety	Financial	
Proxy Group	S&P	Moody's	Rank	Strength	Beta
Non-Utility Group	A	A2	1	A+	0.79
Gas Group	A-	A3	2	A	0.86
NorthWestern	BBB	Baa2	3	B+	0.95

As shown above, the risk indicators for the Non-Utility Group consistently suggest less risk than for the Gas Group and NorthWestern.

The companies that make up the Non-Utility Group are representative of the pinnacle of corporate America. These firms, which include household names such as Coca-Cola, Johnson & Johnson, Procter & Gamble, and Walmart, have long corporate histories, well-established track records, and conservative risk profiles. Many of these companies pay dividends on a par with utilities, with the average dividend yield for the group at 2.1%. Moreover, because of their significance and name recognition, these companies receive intense scrutiny by the investment community, which increases confidence that published growth estimates are representative of the consensus expectations reflected in common stock prices.

Q97. WHAT ARE THE RESULTS OF YOUR DCF ANALYSIS FOR THE NON-UTILITY GROUP?

A97. I apply the DCF model to the Non-Utility Group using the same analysts' EPS growth projections described earlier for the Gas Group. The results of my DCF analysis for the Non-Utility Group are presented in Exhibit AMM-11. As summarized in Table 7, after

eliminating illogical values, application of the constant growth DCF model results in the following cost of equity estimates:

TABLE 7
DCF RESULTS – NON-UTILITY GROUP

	Non-Utility	
Growth Rate	**Average**	**Midpoint**
Value Line	10.7%	11.2%
IBES	10.4%	11.4%
Zacks	10.9%	11.6%

As discussed earlier, reference to the Non-Utility Group is consistent with established regulatory principles. Required returns for utilities should be in line with those of nonutility firms of comparable risk operating under the constraints of free competition. Because the actual cost of equity is unobservable, and DCF results inherently incorporate a degree of error, cost of equity estimates for the Non-Utility Group provide an important benchmark in evaluating a just and reasonable ROE for NorthWestern.

Q98. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A98. Yes, it does.

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Adrien M. McKenzie. My business address is 3907 Red River Street, Austin, Texas 78751.

Q. PLEASE STATE YOUR OCCUPATION.

A. I am a principal in FINCAP, Inc., a firm engaged primarily in financial, economic, and policy consulting in the field of public utility regulation.

Q. PLEASE DESCRIBE YOUR QUALIFICATIONS AND EXPERIENCE.

A. I received B.A. and M.B.A. degrees with a major in finance from The University of Texas at Austin and hold the Chartered Financial Analyst (CFA®) designation. Since joining FINCAP in 1984, I have participated in consulting assignments involving a broad range of economic and financial issues, including cost of capital, cost of service, rate design, economic damages, and business valuation. I have extensive experience in economic and financial analysis for regulated industries, and in preparing and supporting expert witness testimony before courts, regulatory agencies, and legislative committees throughout the U.S. and Canada. I have personally sponsored direct and rebuttal testimony in more than 200 proceedings filed with the Federal Energy Regulatory Commission ("FERC") and regulatory agencies in Alaska, Arkansas, Colorado, District of Columbia, Florida, Hawaii, Idaho, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Montana, Nebraska, New Mexico, Ohio, Oklahoma, Oregon, South Dakota, Texas, Virginia, Washington, West Virginia, and Wyoming. My testimony addressed the establishment of risk-comparable proxy groups, the application of alternative quantitative methods, and the consideration of regulatory standards and policy objectives in establishing a fair rate

of return on equity for regulated electric, gas, and water utility operations. In connection with these assignments, my responsibilities have included critically evaluating the positions of other parties and preparation of rebuttal testimony, representing clients in settlement negotiations and hearings, and assisting in the preparation of legal briefs.

FINCAP was formed in 1979 as an economic and financial consulting firm serving clients in both the regulated and competitive sectors. FINCAP conducts assignments ranging from broad qualitative analyses and policy consulting to technical analyses and research. The firm's experience is in the areas of public utilities, valuation of closely-held businesses, and economic evaluations (e.g., damage and cost/benefit analyses). Prior to joining FINCAP, I was employed by an oil and gas firm and was responsible for operations and accounting. I am a member of the CFA Institute. A resume containing the details of my qualifications and experience is attached below.

ADRIEN M. McKENZIE

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Summary of Qualifications

Adrien McKenzie has over 35 years of experience in economic and financial analysis for regulated industries, and in preparing and supporting expert witness testimony before regulatory agencies, courts, and legislative committees throughout the U.S. and Canada. Assignments have included a broad range of economic and financial issues, including cost of capital, cost of service, rate design, economic damages, and business valuation. Mr. McKenzie holds the Chartered Financial Analyst (CFA®) designation and earned an MBA in finance from the University of Texas at Austin.

Employment

President FINCAP, Inc. (June 1984 to June 1987) (April 1988 to present)	Economic consulting firm specializing in regulated industries and valuation of closely-held businesses. Assignments have involved electric, gas, telecommunication, and water/sewer utilities, with clients including utilities, consumer groups, municipalities, regulatory agencies, and cogenerators. Areas of participation have included rate of return, revenue requirements, rate design, tariff analysis, avoided cost, forecasting, and negotiations. Develop cost of capital analyses using alternative market models for electric, gas, and telephone utilities. Prepare pre-filed direct and rebuttal testimony, participate in settlement negotiations, respond to interrogatories, evaluate opposition testimony, and assist in the areas of cross-examination and the preparations of legal briefs. Other assignments have involved preparation of technical reports, valuations, estimation of damages, industry studies, and various economic analyses in support of litigation.
Manager, McKenzie Energy Company (Jan. 1981 to May. 1984)	Responsible for operations and accounting for firm engaged in the management of working interests in oil and gas properties.

Education

M.B.A., Finance, University of Texas at Austin (Sep. 1982 to May. 1984)	Program included coursework in corporate finance, accounting, financial modeling, and statistics. Received Dean's Award for Academic Excellence and Good Neighbor Scholarship. Professional Report: *The Impact of Construction Expenditures on Investor-Owned Electric Utilities*
B.B.A., Finance, University of Texas at Austin (Jan. 1981 to May 1982)	Electives included capital market theory, portfolio management, and international economics and finance. Elected to Beta Gamma Sigma business honor society. Dean's List 1981-1982.
Simon Fraser University, Vancouver, Canada and University of Hawaii at Manoa, Honolulu, Hawaii (Jan. 1979 to Dec 1980)	Coursework in accounting, finance, economics, and liberal arts.

Professional Associations

Received Chartered Financial Analyst (CFA®) designation in 1990.

Member – CFA Institute.

Bibliography

"A Profile of State Regulatory Commissions," A Special Report by the Electricity Consumers Resource Council (ELCON), Summer 1991.

"The Impact of Regulatory Climate on Utility Capital Costs: An Alternative Test," with Bruce H. Fairchild, *Public Utilities Fortnightly* (May 25, 1989).

Presentations

"ROE at FERC: Issues and Methods," *Expert Briefing on Parallels in ROE Issues between AER, ERA, and FERC*, Jones Day (Sydney, Melbourne, and Perth, Australia) (April 15, 2014).

Cost of Capital Working Group eforum, Edison Electric Institute (April 24, 2012).

"Cost-of-Service Studies and Rate Design," General Management of Electric Utilities (A Training Program for Electric Utility Managers from Developing Countries), Austin, Texas (October 1989 and November 1990 and 1991).

Representative Assignments

- Mr. McKenzie has prepared and sponsored prefiled testimony submitted in over 200 regulatory proceedings.
- In addition to filings before regulatory agencies in Alaska, Arkansas, Colorado, District of Columbia, Florida, Hawaii, Idaho, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Montana, Nebraska, New Mexico, Ohio, Oklahoma, Oregon, South Dakota, Texas, Virginia, Washington, West Virginia, and Wyoming, Mr. McKenzie has considerable expertise in preparing expert analyses and testimony before the Federal Energy Regulatory Commission.
- Evaluation of fair rate of return on equity for electric, gas, water, sewer, and telephone utilities, as well as natural gas pipelines.
- Analysis of capital structure issues for regulated utilities.
- Developing cost of service, cost allocation, and rate design studies.
- Design and development of explanatory models for nuclear plant capital costs in connection with prudency reviews.
- Analysis of avoided cost pricing for cogenerated power.
- Application of econometric models to analyze the impact of anti-competitive behavior, theft of trade secrets, and estimate lost profits.
- Valuation of closely-held businesses.

ROE ANALYSIS **Exhibit AMM-2**

SUMMARY OF RESULTS

Method	Average
DCF	
Value Line	10.3%
IBES	10.1%
Zacks	9.8%
br + sv	10.2%
CAPM	11.0% -- 11.9%
ECAPM	11.2% -- 12.2%
Utility Risk Premium	10.6%
Expected Earnings	10.3%

ROE Recommendation	
Cost of Equity	
Range	**10.2% -- 11.2%**
Recommendation	**10.7%**

REGULATORY MECHANISMS

GAS GROUP

			Type of Adjustment Clause (a)												(c)	(d)
					Conserv.						New Capital					
					Program		Decoupling				Delivery		Environ.		Future	Formula
	Company	State	Fuel/PGA		Expense		Full		Partial		Infrastructure		Compliance		(b) WNA	Test Year	Rates / MRP
1	**ATMOS ENERGY**																
	Atmos Energy Corp.	KS	✓		--	*	--		✓	*	✓	*	--		✓	--	--
	Atmos Energy Corp.	KY	✓		✓		--		✓	*	✓		--		✓	O	--
	Atmos Energy Corp.	LA	✓		--		--		✓	*	--		--		✓	O	✓
	Atmos Energy Inc.	MS	✓		--		--		✓	*	✓		--		✓	O	✓
	Atmos Energy Inc.	TN	✓		--		--		✓	*	--		--		✓	C	✓
	Atmos Energy Inc.	TX	✓	*	--		--		✓	*	✓		--		--	--	✓
2	**CHESAPEAKE UTILITES**																
	Chesapeake Utilities Corp.	DE	✓		--		--		--		✓	*	✓	*	--	P	--
	Florida Public Utilities Co.	FL	✓		✓		--		--		--	*	✓		--	C	✓
	Florida Public Utilities Co.	FL	✓		✓		--		--		✓	*	✓		--	C	✓
3	**NEW JERSEY RESOURCES**																
	New Jersey Natural Gas Co.	NJ	--	*	✓	*	✓	*	--		✓	*	✓	*	✓	P	--
4	**NISOURCE INC.**																
	Northern Indiana Public Service Co.	IN	✓		✓		--		--		✓	*	--		--	--	✓
	Columbia Gas of Kentucky Inc.	KY	✓		✓		--		✓	*	✓		--		✓	O	--
	Columbia Gas of Maryland Inc.	MD	✓		✓		--		✓	*	✓		--		✓	P	--
	Columbia Gas of Ohio Inc.	OH	--	*	✓		--	*	--		✓	*	--		--	P	✓
	Columbia Gas of Pennsylvania Inc.	PA	✓		--		--		✓	*	✓	*	--		✓	O	--
	Columbia Gas of Virginia Inc.	VA	✓		✓		--		✓	*	✓		--		✓	--	✓
5	**NORTHWEST NATURAL**																
	Northwest Natural Gas Co.	OR	✓		✓	*	--		✓	*	--		✓	*	✓	C	--
	Northwest Natural Gas Co.	WA	✓		✓		--		--		--		--		--	--	✓
6	**ONE GAS, INC.**																
	Kansas Gas Service Co.	KS	✓		--	*	--		✓	*	✓	*	--		✓	--	--
	Oklahoma Natural Gas Co.	OK	✓		✓	*	--		✓	*	--		--		✓	--	✓
	Texas Gas Service Co.	TX	✓	*	--		--		✓	*	✓		--		✓	--	✓
7	**SPIRE INC.**																
	Spire Alabama Inc.	AL	✓	*	--		--		✓	*	--		--		✓	C	✓
	Spire Gulf Inc.	AL	✓	*	--		--		✓	*	--		--		✓	C	✓
	Spire Missouri Inc.	MO	✓		--		--		✓	*	✓		--		✓	P	--

Sources:

(a) S&P Global Market Intelligence, *Adjustment clauses: A state by state overview*, Regulatory Focus Topical Special Report (Jul. 18, 2022).

(b) SEC Form 10-K Reports.

(c) Edison Electric Institute, *Alternative Regulation for Emerging Utility Challenges: 2015 Update* (Nov. 11, 2015).

(d) Formula rates and Multiyear Rate plans approved in the state listed for this operating company. *See*, U.S. Department of Energy, *State Performance-Based Regulation Using Multiyear Rate Plans for U.S. Electric Utilities*,GRID Modernization Laboratory Consortium (Jul. 2017); The Brattle Group, *Exploring the Use of Alternative Regulatory Mechanisms to Establish New Base Rates*, Joint Utilities of Maryland (Mar. 29, 2018).

Notes:

C - Fully-forecasted test years commonly used in the state listed for this operating company.

O - Fully-forecasted test years occasionally used in the state listed for this operating company.

P - Partially-forecasted test years commonly or occasionally used in the state listed for this operating company.

* For additional context around the specific recovery mechanisms available to the particular operating companies in each state, see the source document.

HISTORICAL

		Average		12/31/2023		9/30/2023		6/30/2023		3/31/2023	
	Company	**Long-term Debt**	**Common Equity**	**Long-term Debt**	**Common Equity**	**Long-term Debt**	**Common Equity**	**Long-term Debt**	**Common Equity**	**Long-term Debt**	**Common Equity**
1	Atmos Energy Corp.	38.7%	61.3%	39.8%	60.2%	37.6%	62.4%	38.2%	61.8%	39.1%	60.9%
2	Chesapeake Utilities	45.0%	55.0%	49.2%	50.8%	43.4%	56.6%	43.5%	56.5%	44.1%	55.9%
3	New Jersey Resources	58.9%	41.1%	58.9%	41.1%	59.2%	40.8%	59.2%	40.8%	58.3%	41.7%
4	NiSource Inc.	54.7%	39.8%	52.2%	45.5%	58.7%	35.2%	55.8%	38.3%	51.9%	40.3%
5	Northwest Natural	55.6%	44.4%	55.1%	44.9%	57.0%	43.0%	55.3%	44.7%	55.2%	44.8%
6	ONE Gas, Inc.	50.3%	49.7%	51.5%	48.5%	49.9%	50.1%	49.9%	50.1%	50.0%	50.0%
7	Spire Inc.	54.4%	42.2%	52.9%	43.6%	54.0%	42.5%	55.5%	41.1%	55.1%	41.6%
	Average	**51.1%**	**47.6%**	**51.4%**	**47.8%**	**51.4%**	**47.2%**	**51.1%**	**47.6%**	**50.5%**	**47.9%**
	Minimum	**38.7%**	**39.8%**	**39.8%**	**41.1%**	**37.6%**	**35.2%**	**38.2%**	**38.3%**	**39.1%**	**40.3%**
	Maximum	**58.9%**	**61.3%**	**58.9%**	**60.2%**	**59.2%**	**62.4%**	**59.2%**	**61.8%**	**58.3%**	**60.9%**

Source: Company Form 10-K and 10-Q Reports. The capital structures of NiSource and Spire include preferred stock not included here.

PROJECTED

	Company	Debt	Preferred	Common Equity
1	Atmos Energy Corp.	40.0%	0.0%	60.0%
2	Chesapeake Utilities	40.0%	0.0%	60.0%
3	New Jersey Resources	55.0%	0.0%	45.0%
4	NiSource Inc.	55.0%	7.5%	37.5%
5	Northwest Natural	50.0%	0.0%	50.0%
6	ONE Gas, Inc.	51.0%	0.0%	49.0%
7	Spire Inc.	51.0%	4.0%	45.0%
	Average	**48.9%**	**1.6%**	**49.5%**
	Minimum	**40.0%**		**37.5%**
	Maximum	**55.0%**		**60.0%**

Source: The Value Line Investment Survey (Feb. 23, 2024).

DIVIDEND YIELD

		(a)	(b)	
	Company	**Price**	**Dividends**	**Yield**
1	Atmos Energy Corp.	$ 115.48	$ 3.34	2.9%
2	Chesapeake Utilities	$ 103.76	$ 2.48	2.4%
3	New Jersey Resources	$ 42.18	$ 1.68	4.0%
4	NiSource Inc.	$ 26.79	$ 1.06	4.0%
5	Northwest Natural	$ 36.79	$ 1.95	5.3%
6	ONE Gas, Inc.	$ 62.00	$ 2.65	4.3%
7	Spire Inc.	$ 60.06	$ 3.06	5.1%
	Average			**4.0%**

(a) Average of closing prices for 30 trading days ended Apr. 5, 2024.

(b) The Value Line Investment Survey, *Summary & Index* (Apr. 5, 2024).

GROWTH RATES

		(a)	(b)	(c)	(d)
		Earnings Growth			**br+sv**
	Company	**V Line**	**IBES**	**Zacks**	**Growth**
1	Atmos Energy Corp.	7.0%	7.5%	7.0%	7.2%
2	Chesapeake Utilities	5.0%	7.6%	n/a	9.9%
3	New Jersey Resources	5.0%	6.0%	n/a	6.5%
4	NiSource Inc.	9.5%	7.3%	6.0%	6.8%
5	Northwest Natural	6.5%	2.8%	n/a	5.1%
6	ONE Gas, Inc.	4.0%	5.0%	5.0%	3.9%
7	Spire Inc.	4.5%	6.4%	5.0%	4.0%

(a) The Value Line Investment Survey (Feb. 23, 2024).

(b) www.finance.yahoo.com (retrieved Apr. 11, 2024).

(c) www.zacks.com (retrieved Apr. 11, 2024).

(d) See Exhibit AMM-6.

DCF COST OF EQUITY ESTIMATES

	Company	(a) V Line	(a) IBES	(a) Zacks	(a) br+sv Growth
1	Atmos Energy Corp.	9.9%	10.4%	9.9%	10.1%
2	Chesapeake Utilities	7.4%	10.0%	n/a	12.3%
3	New Jersey Resources	9.0%	10.0%	n/a	10.5%
4	NiSource Inc.	13.5%	11.3%	10.0%	10.7%
5	Northwest Natural	11.8%	8.1%	n/a	10.4%
6	ONE Gas, Inc.	8.3%	9.3%	9.3%	8.2%
7	Spire Inc.	9.6%	11.5%	10.1%	9.1%
	Average (b)	**10.3%**	**10.1%**	**9.8%**	**10.2%**

(a) Sum of dividend yield (p. 1) and respective growth rate (p. 2).
(b) Excludes highlighted figures.

GAS GROUP

		(a)	(a)	(a)	(b)	(c)	(d)	(e)		(f)	(g)		
		2028					**Adjustment**			**"sv" Factor**			
	Company	**EPS**	**DPS**	**BVPS**	**b**	**r**	**Factor**	**Adjusted r**	**br**	**s**	**v**	**sv**	**br + sv**
1	Atmos Energy Corp.	$8.35	$4.25	$83.50	49.1%	10.0%	1.0295	10.3%	5.1%	0.0550	0.3927	2.16%	**7.2%**
2	Chesapeake Utilities	$6.50	$3.20	$66.40	50.8%	9.8%	1.0536	10.3%	5.2%	0.0960	0.4892	4.69%	**9.9%**
3	New Jersey Resources	$3.50	$1.95	$27.00	44.3%	13.0%	1.0305	13.4%	5.9%	0.0110	0.5500	0.60%	**6.5%**
4	NiSource Inc.	$2.10	$1.20	$18.75	42.9%	11.2%	1.0238	11.5%	4.9%	0.0348	0.5313	1.85%	**6.8%**
5	Northwest Natural	$3.25	$1.98	$38.70	39.1%	8.4%	1.0326	8.7%	3.4%	0.0431	0.4046	1.74%	**5.1%**
6	ONE Gas, Inc.	$5.00	$2.85	$60.20	43.0%	8.3%	1.0273	8.5%	3.7%	0.0080	0.3311	0.26%	**3.9%**
7	Spire Inc.	$5.50	$3.60	$66.05	34.5%	8.3%	1.0426	8.7%	3.0%	0.0412	0.2451	1.01%	**4.0%**

GAS GROUP

		(a)	(a)	(h)	(a)	(a)	(h)	(i)	(a)	(a)		(j)	(a)	(a)	(i)
			2023			2028		Chg		2028				Common Shares	
	Company	Eq Ratio	Tot Cap	Com Eq	Eq Ratio	Tot Cap	Com Eq	Equity	High	Low	Avg.	M/B	2023	2028	Growth
1	Atmos Energy Corp.	62.1%	$17,509	$10,873	60.0%	$24,350	$14,610	6.1%	$150.00	$125.00	$137.50	1.647	148.49	175.00	3.34%
2	Chesapeake Utilities	57.0%	$1,600	$912	60.0%	$2,600	$1,560	11.3%	$150.00	$110.00	$130.00	1.958	18.50	23.50	4.90%
3	New Jersey Resources	41.8%	$4,759	$1,989	45.0%	$6,000	$2,700	6.3%	$70.00	$50.00	$60.00	2.222	97.57	100.00	0.49%
4	NiSource Inc.	35.0%	$19,000	$6,650	37.5%	$22,500	$8,438	4.9%	$45.00	$35.00	$40.00	2.133	415.00	450.00	1.63%
5	Northwest Natural	46.0%	$2,550	$1,173	50.0%	$3,250	$1,625	6.7%	$80.00	$50.00	$65.00	1.680	37.00	42.00	2.57%
6	ONE Gas, Inc.	58.0%	$4,500	$2,610	49.0%	$7,000	$3,430	5.6%	$105.00	$75.00	$90.00	1.495	55.50	57.00	0.53%
7	Spire Inc.	41.3%	$6,471	$2,673	45.0%	$9,100	$4,095	8.9%	$100.00	$75.00	$87.50	1.325	53.20	62.00	3.11%

(a) The Value Line Investment Survey (Feb. 23, 2024).
(b) "b" is the retention ratio, computed as (EPS-DPS)/EPS.
(c) "r" is the rate of return on book equity, computed as EPS/BVPS.
(d) Computed using the formula 2*(1+5-Yr. Change in Equity)/(2+5 Yr. Change in Equity).
(e) Product of year-end "r" for 2028 and Adjustment Factor.
(f) Product of change in common shares outstanding and M/B Ratio.
(g) Computed as 1 - B/M Ratio.
(h) Product of total capital and equity ratio.
(i) Five-year rate of change.
(j) Average of High and Low expected market prices divided by 2028 BVPS.

GAS GROUP

		(a)	(b)		(c)			(d)	(d)	(e)	
		Market Return (R_m)									
	Company	**Div Yield**	**Proj. Growth**	**$R_{(m)}$**	**Risk-Free Rate**	**Risk Premium**	**Beta**	**Unadjusted CAPM**	**Market Cap**	**Size Adjustment**	**Adjusted CAPM**
1	Atmos Energy Corp.	1.9%	10.1%	12.0%	4.5%	7.5%	0.85	10.9%	$17,200	0.46%	11.3%
2	Chesapeake Utilities	1.9%	10.1%	12.0%	4.5%	7.5%	0.80	10.5%	$1,900	1.21%	11.7%
3	New Jersey Resources	1.9%	10.1%	12.0%	4.5%	7.5%	0.95	11.6%	$4,100	0.95%	12.6%
4	NiSource Inc.	1.9%	10.1%	12.0%	4.5%	7.5%	0.90	11.3%	$10,600	0.61%	11.9%
5	Northwest Natural	1.9%	10.1%	12.0%	4.5%	7.5%	0.85	10.9%	$1,300	1.39%	12.3%
6	ONE Gas, Inc.	1.9%	10.1%	12.0%	4.5%	7.5%	0.85	10.9%	$3,500	0.95%	11.8%
7	Spire Inc.	1.9%	10.1%	12.0%	4.5%	7.5%	0.85	10.9%	$3,300	0.95%	11.8%
	Average							**11.0%**			**11.9%**

(a) Weighted average for dividend-paying stocks in the S&P 500 based on data from www.valueline.com (retrieved Feb. 15, 2024)..
(b) Average of weighted average earnings growth rates from IBES, Value Line, and Zacks for dividend-paying stocks in the S&P 500 based on data from Refinitiv, as provided by fidelity.com (retrieved Feb. 15, 2024), www.valueline.com (retrieved Feb. 15, 2024)., and www.zacks.com (retrieved Feb. 15, 2024).
(c) Average yield on 30-year Treasury bonds for the six month period ending Mar. 2024 based on data from https://fred.stlouisfed.org/.
(d) The Value Line Investment Survey, Summary & Index (Apr. 5, 2024).
(e) Kroll, 2023 CRSP Deciles Size Premium, Cost of Capital Navigator (2024).

GAS GROUP

		(a)	(b)		(c)		(d)		(e)	(d)				(e)	(f)	
		Market Return (R_m)					**Unadjusted RP**		**Beta Adjusted RP**							
	Company	**Div Yield**	**Proj. Growth**	**$R_{(m)}$**	**Risk-Free Rate**	**Risk Premium**	**Weight**	**RP^1**	**Beta**	**Weight**	**RP^2**	**Total RP**	**Unadjusted ECAPM**	**Market Cap**	**Size Adjustment**	**Adjusted ECAPM**
1	Atmos Energy Corp.	1.9%	10.1%	12.0%	4.5%	7.5%	25%	1.9%	0.85	75%	4.8%	6.7%	11.2%	$17,200	0.46%	11.6%
2	Chesapeake Utilities	1.9%	10.1%	12.0%	4.5%	7.5%	25%	1.9%	0.80	75%	4.5%	6.4%	10.9%	$1,900	1.21%	12.1%
3	New Jersey Resources	1.9%	10.1%	12.0%	4.5%	7.5%	25%	1.9%	0.95	75%	5.3%	7.2%	11.7%	$4,100	0.95%	12.7%
4	NiSource Inc.	1.9%	10.1%	12.0%	4.5%	7.5%	25%	1.9%	0.90	75%	5.1%	6.9%	11.4%	$10,600	0.61%	12.0%
5	Northwest Natural	1.9%	10.1%	12.0%	4.5%	7.5%	25%	1.9%	0.85	75%	4.8%	6.7%	11.2%	$1,300	1.39%	12.6%
6	ONE Gas, Inc.	1.9%	10.1%	12.0%	4.5%	7.5%	25%	1.9%	0.85	75%	4.8%	6.7%	11.2%	$3,500	0.95%	12.1%
7	Spire Inc.	1.9%	10.1%	12.0%	4.5%	7.5%	25%	1.9%	0.85	75%	4.8%	6.7%	11.2%	$3,300	0.95%	12.1%
	Average												**11.2%**			**12.2%**

(a) Weighted average for dividend-paying stocks in the S&P 500 based on data from www.valueline.com (retrieved Feb. 15, 2024)..

(b) Average of weighted average earnings growth rates from IBES, Value Line, and Zacks for dividend-paying stocks in the S&P 500 based on data from Refinitiv, as provided by fidelity.com (retrieved Feb. 15, 2024), www.valueline.com (retrieved Feb. 15, 2024)., and www.zacks.com (retrieved Feb. 15, 2024).

(c) Average yield on 30-year Treasury bonds for the six month period ending Mar. 2024 based on data from https://fred.stlouisfed.org/.

(d) Roger A. Morin, *New Regulatory Finance* , Pub. Util. Reports, Inc. (2006) at 190.

(e) The Value Line Investment Survey, Summary & Index (Apr. 5, 2024).

(f) Kroll, 2023 CRSP Deciles Size Premium, Cost of Capital Navigator (2024).

COST OF EQUITY ESTIMATE

Current Equity Risk Premium	
(a) Average Yield over Study Period	7.56%
(b) Average Single-A Utility Bond Yield	5.74%
Change in Bond Yield	-1.82%
(c) Risk Premium/Interest Rate Relationship	-0.4756
Adjustment to Average Risk Premium	0.86%
(a) Average Risk Premium over Study Period	3.80%
Adjusted Risk Premium	**4.67%**
Implied Cost of Equity	
(b) Baa Utility Bond Yield	5.98%
Adjusted Equity Risk Premium	4.67%
Risk Premium Cost of Equity	**10.65%**

(a) Exhibit AMM-9, page 4.
(b) Yields on 'A' and 'Baa' utility bonds for the six month period ending Mar. 2024 based on data from Moody's Investors Service at www.credittrends.com.
(c) Exhibit AMM-9, page 5.

AUTHORIZED RETURNS

		(a)	(b)	
Year	**Qtr.**	**Allowed ROE**	**Single-A Utility Bond Yield**	**Risk Premium**
1980	1	13.45%	13.49%	-0.04%
	2	14.38%	12.87%	1.51%
	3	13.87%	12.88%	0.99%
	4	14.35%	14.11%	0.24%
1981	1	14.69%	14.77%	-0.08%
	2	14.61%	15.82%	-1.21%
	3	14.86%	16.65%	-1.79%
	4	15.70%	16.57%	-0.87%
1982	1	15.55%	16.72%	-1.17%
	2	15.62%	16.26%	-0.64%
	3	15.72%	15.88%	-0.16%
	4	15.62%	14.56%	1.06%
1983	1	15.41%	14.15%	1.26%
	2	14.84%	13.58%	1.26%
	3	15.24%	13.52%	1.72%
	4	15.41%	13.38%	2.03%
1984	1	15.39%	13.56%	1.83%
	2	15.07%	14.72%	0.35%
	3	15.37%	14.47%	0.90%
	4	15.33%	13.38%	1.95%
1985	1	15.03%	13.31%	1.72%
	2	15.44%	12.95%	2.49%
	3	14.64%	12.11%	2.53%
	4	14.44%	11.49%	2.95%
1986	1	14.05%	10.18%	3.87%
	2	13.28%	9.41%	3.87%
	3	13.09%	9.39%	3.70%
	4	13.62%	9.31%	4.31%
1987	1	12.61%	8.96%	3.65%
	2	13.13%	9.77%	3.36%
	3	12.56%	10.61%	1.95%
	4	12.73%	11.05%	1.68%
1988	1	12.94%	10.32%	2.62%
	2	12.48%	10.71%	1.77%
	3	12.79%	10.94%	1.85%
	4	12.98%	9.98%	3.00%
1989	1	12.99%	10.13%	2.86%
	2	13.25%	9.94%	3.31%
	3	12.56%	9.53%	3.03%
	4	12.94%	9.50%	3.44%
1990	1	12.60%	9.72%	2.88%
	2	12.81%	9.91%	2.90%
	3	12.34%	9.93%	2.41%
	4	12.77%	9.89%	2.88%
1991	1	12.69%	9.58%	3.11%
	2	12.53%	9.50%	3.03%
	3	12.43%	9.33%	3.10%
	4	12.38%	9.02%	3.36%
1992	1	12.42%	8.91%	3.51%
	2	11.98%	8.86%	3.12%
	3	11.87%	8.47%	3.40%
	4	11.94%	8.53%	3.41%
1993	1	11.75%	8.07%	3.68%
	2	11.71%	7.81%	3.90%
	3	11.39%	7.28%	4.11%
	4	11.15%	7.22%	3.93%
1994	1	11.12%	7.55%	3.57%
	2	10.81%	8.29%	2.52%
	3	10.95%	8.51%	2.44%
	4	11.64%	8.87%	2.77%
1995	1	(c)	--	--
	2	11.00%	7.93%	3.07%
	3	11.07%	7.72%	3.35%
1996	4	11.56%	7.37%	4.19%
	1	11.45%	7.44%	4.01%
	2	10.88%	7.98%	2.90%
	3	11.25%	7.96%	3.29%
1997	4	11.32%	7.62%	3.70%
	1	11.31%	7.76%	3.55%
	2	11.70%	7.88%	3.82%
	3	12.00%	7.49%	4.51%
	4	11.01%	7.25%	3.76%
1998	1	(c)	--	--
	2	11.37%	7.12%	4.25%
	3	11.41%	6.99%	4.42%
	4	11.69%	6.97%	4.72%
1999	1	10.82%	7.11%	3.71%
	2	10.82%	7.48%	3.34%
	3	(c)	--	--
	4	10.33%	8.05%	2.28%

AUTHORIZED RETURNS

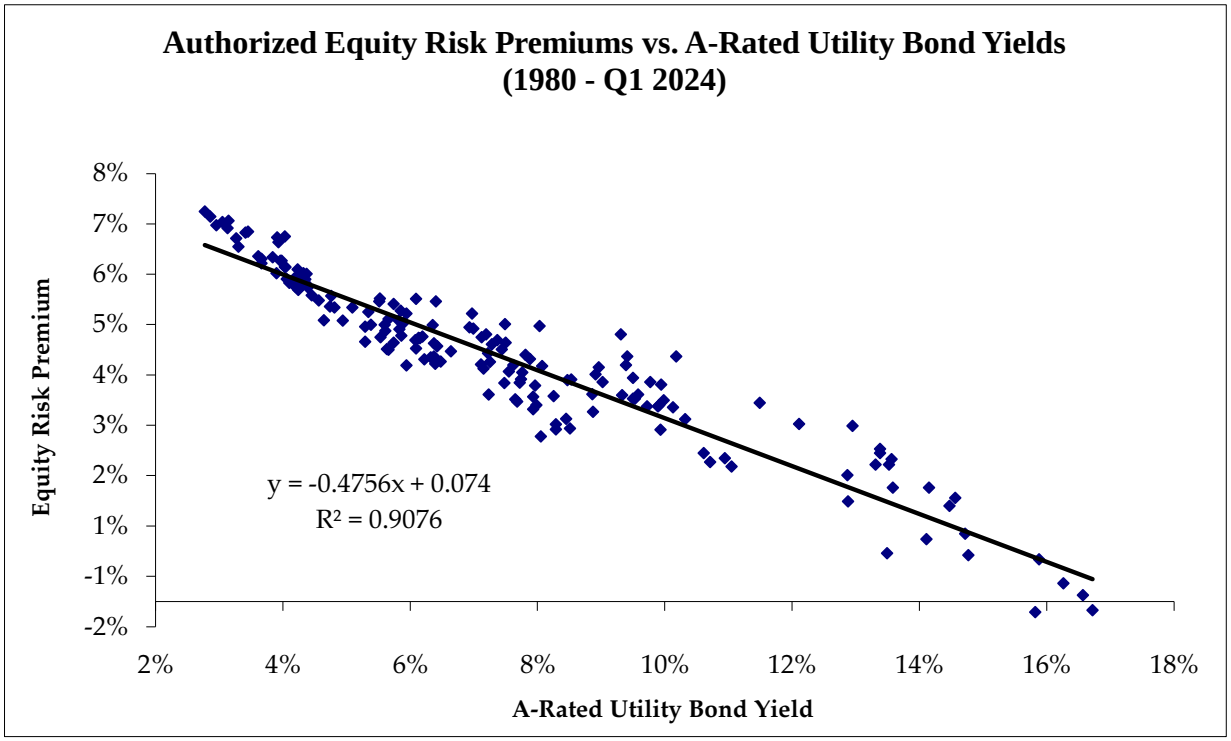
		(a)	(b)	
Year	**Qtr.**	**Allowed ROE**	**Single-A Utility Bond Yield**	**Risk Premium**
2000	1	10.71%	8.29%	2.42%
	2	11.08%	8.45%	2.63%
	3	11.33%	8.25%	3.08%
	4	12.50%	8.03%	4.47%
2001	1	11.16%	7.74%	3.42%
	2	10.75%	7.93%	2.82%
	3	(c)	--	--
	4	10.65%	7.68%	2.97%
2002	1	10.67%	7.65%	3.02%
	2	11.64%	7.50%	4.14%
	3	11.50%	7.19%	4.31%
	4	10.78%	7.15%	3.63%
2003	1	11.38%	6.93%	4.45%
	2	11.36%	6.40%	4.96%
	3	10.61%	6.64%	3.97%
	4	10.84%	6.35%	4.49%
2004	1	11.10%	6.09%	5.01%
	2	10.25%	6.48%	3.77%
	3	10.37%	6.13%	4.24%
	4	10.66%	5.94%	4.72%
2005	1	10.65%	5.74%	4.91%
	2	10.54%	5.52%	5.02%
	3	10.47%	5.51%	4.96%
	4	10.40%	5.82%	4.58%
2006	1	10.63%	5.85%	4.78%
	2	10.50%	6.37%	4.13%
	3	10.45%	6.19%	4.26%
	4	10.14%	5.86%	4.28%
2007	1	10.44%	5.90%	4.54%
	2	10.12%	6.09%	4.03%
	3	10.03%	6.22%	3.81%
	4	10.27%	6.08%	4.19%
2008	1	10.38%	6.15%	4.23%
	2	10.17%	6.32%	3.85%
	3	10.49%	6.42%	4.07%
	4	10.34%	7.23%	3.11%
2009	1	10.24%	6.37%	3.87%
	2	10.11%	6.39%	3.72%
	3	9.88%	5.74%	4.14%
	4	10.27%	5.66%	4.61%
2010	1	10.24%	5.83%	4.41%
	2	9.99%	5.61%	4.38%
	3	9.93%	5.09%	4.84%
	4	10.09%	5.34%	4.75%
2011	1	10.10%	5.60%	4.50%
	2	9.88%	5.38%	4.50%
	3	9.65%	4.81%	4.84%
	4	9.88%	4.37%	5.51%
2012	1	9.63%	4.39%	5.24%
	2	9.83%	4.23%	5.60%
	3	9.75%	3.98%	5.77%
	4	10.07%	3.93%	6.14%
2013	1	9.57%	4.18%	5.39%
	2	9.47%	4.23%	5.24%
	3	9.60%	4.74%	4.86%
	4	9.83%	4.76%	5.07%
2014	1	9.54%	4.56%	4.98%
	2	9.84%	4.32%	5.52%
	3	9.45%	4.20%	5.25%
	4	10.28%	4.03%	6.25%
2015	1	9.47%	3.66%	5.81%
	2	9.43%	4.10%	5.33%
	3	9.75%	4.35%	5.40%
	4	9.68%	4.35%	5.33%
2016	1	9.48%	4.18%	5.30%
	2	9.42%	3.90%	5.52%
	3	9.47%	3.61%	5.86%
	4	9.68%	4.04%	5.64%
2017	1	9.60%	4.18%	5.42%
	2	9.47%	4.06%	5.41%
	3	10.14%	3.91%	6.23%
	4	9.68%	3.84%	5.84%
2018	1	9.68%	4.03%	5.65%
	2	9.43%	4.24%	5.19%
	3	9.69%	4.28%	5.41%
	4	9.53%	4.45%	5.08%
2019	1	9.55%	4.25%	5.30%
	2	9.73%	3.96%	5.77%
	3	9.80%	3.45%	6.35%
	4	9.74%	3.41%	6.33%

AUTHORIZED RETURNS

		(a)	(b)	
Year	**Qtr.**	**Allowed ROE**	**Single-A Utility Bond Yield**	**Risk Premium**
2020	1	9.35%	3.30%	6.05%
	2	9.55%	3.13%	6.42%
	3	9.52%	2.77%	6.75%
	4	9.50%	2.86%	6.64%
2021	1	9.71%	3.15%	6.56%
	2	9.48%	3.26%	6.22%
	3	9.43%	2.95%	6.48%
	4	9.59%	3.05%	6.54%
2022	1	9.38%	3.66%	5.72%
	2	9.23%	4.64%	4.59%
	3	9.52%	4.94%	4.58%
	4	9.65%	5.63%	4.02%
2023	1	9.75%	5.29%	4.46%
	2	9.45%	5.29%	4.16%
	3	9.66%	5.66%	4.00%
	4	9.63%	5.94%	3.69%
2024	1	9.78%	5.53%	4.25%
Average		**11.36%**	**7.56%**	**3.80%**

(a) S&P Global Market Intelligence, *Major Rate Case Decisions* , (Apr. 19, 2024; Jan. 31, 2020; Jan. 14, 2016; Jan. 7, 2011; Apr. 5, 2004; Jan. 21, 1998; July 12, 1991; and Jan. 16, 1990).
(b) Moody's Investors Service.
(c) No decisions reported.

REGRESSION RESULTS



EXPECTED EARNINGS APPROACH **Exhibit AMM-10**

GAS GROUP

		(a)	(b)	(c)
	Company	**Expected Return on Common Equity**	**Adjustment Factor**	**Adjusted Return on Common Equity**
1	Atmos Energy Corp.	10.0%	1.0295	10.3%
2	Chesapeake Utilities	10.0%	1.0536	10.5%
3	New Jersey Resources	13.0%	1.0305	13.4%
4	NiSource Inc.	11.0%	1.0238	11.3%
5	Northwest Natural	8.5%	1.0326	8.8%
6	ONE Gas, Inc.	8.5%	1.0273	8.7%
7	Spire Inc.	8.5%	1.0426	8.9%
	Average	**9.9%**		**10.3%**

(a) The Value Line Investment Survey (Feb. 23, 2024).

(b) Adjustment to convert year-end return to an average rate of return from Exhibit AMM-6.

(c) (a) x (b).

DIVIDEND YIELD

	Company	Industry Group	(a) Price	(b) Dividends	Yield
1	Abbott Labs.	Med Supp Non-Invasive	$116.55	$ 2.20	1.9%
2	Air Products & Chem.	Chemical (Diversified)	$235.63	$ 7.00	3.0%
3	Amdocs Ltd.	IT Services	$91.43	$ 1.92	2.1%
4	Amgen	Biotechnology	$279.42	$ 9.00	3.2%
5	Archer Daniels Midl'd	Food Processing	$177.29	$ 0.96	0.5%
6	Becton, Dickinson	Med Supp Invasive	$239.60	$ 3.85	1.6%
7	Bristol-Myers Squibb	Drug	$51.48	$ 2.40	4.7%
8	Brown & Brown	Financial Svcs. (Div.)	$84.33	$ 0.52	0.6%
9	Brown-Forman 'B'	Beverage	$56.05	$ 0.87	1.6%
10	Church & Dwight	Household Products	$101.53	$ 1.14	1.1%
11	Cisco Systems	Telecom. Equipment	$49.17	$ 1.60	3.3%
12	Coca-Cola	Beverage	$60.17	$ 1.96	3.3%
13	Colgate-Palmolive	Household Products	$86.81	$ 2.00	2.3%
14	Comcast Corp.	Cable TV	$42.42	$ 1.24	2.9%
15	Costco Wholesale	Retail Store	$737.29	$ 4.38	0.6%
16	Danaher Corp.	Diversified Co.	$246.58	$ 2.40	1.0%
17	Gen'l Mills	Food Processing	$65.51	$ 2.42	3.7%
18	Gilead Sciences	Drug	$73.35	$ 3.08	4.2%
19	Hershey Co.	Food Processing	$193.11	$ 5.48	2.8%
20	Home Depot	Retail Building Supply	$374.30	$ 9.00	2.4%
21	Hormel Foods	Food Processing	$32.43	$ 1.16	3.6%
22	Intercontinental Exch.	Brokers & Exchanges	$137.19	$ 1.80	1.3%
23	Johnson & Johnson	Med Supp Non-Invasive	$158.84	$ 4.94	3.1%
24	Kimberly-Clark	Household Products	$122.90	$ 4.88	4.0%
25	Lilly (Eli)	Drug	$764.16	$ 5.20	0.7%
26	Lockheed Martin	Aerospace/Defense	$432.03	$ 12.75	3.0%
27	Marsh & McLennan	Financial Svcs. (Div.)	$203.42	$ 2.88	1.4%
28	McCormick & Co.	Food Processing	$68.06	$ 1.68	2.5%
29	McDonald's Corp.	Restaurant	$289.38	$ 6.83	2.4%
30	McKesson Corp.	Med Supp Non-Invasive	$521.54	$ 2.56	0.5%
31	Merck & Co.	Drug	$125.11	$ 3.08	2.5%
32	Microsoft Corp.	Computer Software	$412.57	$ 3.08	0.7%
33	Mondelez Int'l	Food Processing	$72.19	$ 1.70	2.4%
34	NewMarket Corp.	Chemical (Specialty)	$619.74	$ 10.00	1.6%
35	Northrop Grumman	Aerospace/Defense	$459.00	$ 8.00	1.7%
36	Oracle Corp.	Computer Software	$117.28	$ 1.60	1.4%
37	PepsiCo, Inc.	Beverage	$167.42	$ 5.20	3.1%
38	Pfizer, Inc.	Drug	$159.94	$ 3.76	2.4%
39	Procter & Gamble	Household Products	$195.18	$ 0.40	0.2%
40	Progressive Corp.	Insurance (Prop/Cas.)	$184.02	$ 2.14	1.2%
41	Republic Services	Environmental	$547.83	$ 3.00	0.5%
42	Sherwin-Williams	Retail Building Supply	$123.37	$ 4.32	3.5%
43	Smucker (J.M.)	Food Processing	$167.77	$ 5.20	3.1%
44	Texas Instruments	Semiconductor	$573.34	$ 1.56	0.3%
45	Thermo Fisher Sci.	Precision Instrument	$220.58	$ 4.00	1.8%
46	Travelers Cos.	Insurance (Prop/Cas.)	$499.41	$ 7.52	1.5%
47	Walmart Inc.	Retail Store	$59.45	$ 0.77	1.3%
48	Waste Management	Environmental	$206.73	$ 3.00	1.5%
	Average				**2.1%**

(a) Average of closing prices for 30 trading days ended Mar. 25, 2024.
(b) The Value Line Investment Survey, *Summary & Index* (Mar. 29, 2024).

GROWTH RATES

		(a)	(b)	(c)
		Earnings Growth		
	Company	**V Line**	**IBES**	**Zacks**
1	Abbott Labs.	4.00%	7.80%	9.00%
2	Air Products & Chem.	10.50%	6.69%	7.34%
3	Amdocs Ltd.	7.50%	8.60%	10.50%
4	Amgen	5.00%	5.12%	5.43%
5	Apple Inc.	6.50%	11.00%	12.67%
6	Becton, Dickinson	5.50%	8.65%	9.35%
7	Bristol-Myers Squibb	n/a	-2.80%	5.00%
8	Brown & Brown	6.50%	9.10%	9.10%
9	Brown-Forman 'B'	16.50%	7.90%	n/a
10	Church & Dwight	5.50%	9.10%	8.46%
11	Cisco Systems	4.50%	4.14%	7.00%
12	Coca-Cola	8.00%	6.21%	6.27%
13	Colgate-Palmolive	8.00%	8.38%	7.53%
14	Comcast Corp.	8.00%	9.53%	10.21%
15	Costco Wholesale	10.50%	9.29%	9.14%
16	Gallagher (Arthur J.)	22.00%	10.30%	10.35%
17	Gen'l Mills	5.50%	7.46%	6.43%
18	Gilead Sciences	8.50%	5.12%	11.16%
19	Hershey Co.	9.50%	5.84%	6.80%
20	Home Depot	6.50%	4.50%	9.84%
21	Hormel Foods	7.50%	7.40%	6.53%
22	Intercontinental Exch.	7.00%	8.92%	9.45%
23	Johnson & Johnson	4.50%	4.70%	5.59%
24	Kimberly-Clark	7.50%	5.05%	4.66%
25	Lilly (Eli)	27.50%	50.67%	36.64%
26	Lockheed Martin	9.00%	6.85%	4.18%
27	Marsh & McLennan	9.00%	9.60%	9.57%
28	McCormick & Co.	4.50%	10.61%	6.54%
29	McDonald's Corp.	10.00%	7.41%	7.48%
30	McKesson Corp.	8.00%	10.61%	11.87%
31	Merck & Co.	15.50%	67.56%	29.28%
32	Microsoft Corp.	10.50%	16.30%	16.16%
33	Mondelez Int'l	11.00%	8.43%	8.35%
34	NewMarket Corp.	5.50%	7.70%	n/a
35	Northrop Grumman	8.00%	29.39%	10.08%
36	Oracle Corp.	10.00%	11.06%	11.64%
37	PepsiCo, Inc.	7.50%	7.01%	7.84%
38	Procter & Gamble	5.00%	8.05%	7.60%
39	Progressive Corp.	14.50%	26.00%	22.34%
40	Republic Services	10.50%	8.89%	9.52%
41	Roper Tech.	8.00%	7.70%	10.50%
42	Smucker (J.M.)	5.50%	7.27%	6.53%
43	Texas Instruments	3.00%	10.00%	9.00%
44	Thermo Fisher Sci.	6.50%	6.74%	11.06%
45	Travelers Cos.	10.50%	15.60%	10.88%
46	UnitedHealth Group	12.00%	13.40%	13.21%
47	Walmart Inc.	6.50%	8.00%	6.50%
48	Waste Management	6.00%	10.00%	9.57%

(a) The Value Line Investment Survey (various editions as of Mar. 29, 2024).
(b) www.finance.yahoo.com (retrieved Mar. 27, 2024).
(c) www.zacks.com (retrieved Mar. 27, 2024).

DCF COST OF EQUITY ESTIMATES

		(a)	(b)	(c)
	Company	**V Line**	**IBES**	**Zacks**
1	Abbott Labs.	5.9%	9.7%	10.9%
2	Air Products & Chem.	13.5%	9.7%	10.3%
3	Amdocs Ltd.	9.6%	10.7%	12.6%
4	Amgen	8.2%	8.3%	8.7%
5	Archer Daniels Midl'd	7.0%	11.5%	13.2%
6	Becton, Dickinson	7.1%	10.3%	11.0%
7	Bristol-Myers Squibb	n/a	1.9%	9.7%
8	Brown & Brown	7.1%	9.7%	9.7%
9	Brown-Forman 'B'	18.1%	9.5%	n/a
10	Church & Dwight	6.6%	10.2%	9.6%
11	Cisco Systems	7.8%	7.4%	10.3%
12	Coca-Cola	11.3%	9.5%	9.5%
13	Colgate-Palmolive	10.3%	10.7%	9.8%
14	Comcast Corp.	10.9%	12.5%	13.1%
15	Costco Wholesale	11.1%	9.9%	9.7%
16	Danaher Corp.	23.0%	11.3%	11.3%
17	Gen'l Mills	9.2%	11.2%	10.1%
18	Gilead Sciences	12.7%	9.3%	15.4%
19	Hershey Co.	12.3%	8.7%	9.6%
20	Home Depot	8.9%	6.9%	12.2%
21	Hormel Foods	11.1%	11.0%	10.1%
22	Intercontinental Exch.	8.3%	10.2%	10.8%
23	Johnson & Johnson	7.6%	7.8%	8.7%
24	Kimberly-Clark	11.5%	9.0%	8.6%
25	Lilly (Eli)	28.2%	51.4%	37.3%
26	Lockheed Martin	12.0%	9.8%	7.1%
27	Marsh & McLennan	10.4%	11.0%	11.0%
28	McCormick & Co.	7.0%	13.1%	9.0%
29	McDonald's Corp.	12.4%	9.8%	9.8%
30	McKesson Corp.	8.5%	11.1%	12.4%
31	Merck & Co.	18.0%	70.0%	31.7%
32	Microsoft Corp.	11.2%	17.0%	16.9%
33	Mondelez Int'l	13.4%	10.8%	10.7%
34	NewMarket Corp.	7.1%	9.3%	n/a
35	Northrop Grumman	9.7%	31.1%	11.8%
36	Oracle Corp.	11.4%	12.4%	13.0%
37	PepsiCo, Inc.	10.6%	10.1%	10.9%
38	Pfizer, Inc.	7.4%	10.4%	10.0%
39	Procter & Gamble	14.7%	26.2%	22.5%
40	Progressive Corp.	11.7%	10.1%	10.7%
41	Republic Services	8.5%	8.2%	11.0%
42	Sherwin-Williams	9.0%	10.8%	10.0%
43	Smucker (J.M.)	6.1%	13.1%	12.1%
44	Texas Instruments	6.8%	7.0%	11.3%
45	Thermo Fisher Sci.	12.3%	17.4%	12.7%
46	Travelers Cos.	13.5%	14.9%	14.7%
47	Walmart Inc.	7.8%	9.3%	7.8%
48	Waste Management	7.5%	11.5%	11.0%
	Average (b)	**10.7%**	**10.4%**	**10.9%**

(a) Sum of dividend yield (p. 1) and respective growth rate (p. 2).
(b) Excludes highlighted figures.

Pre-filed Direct Testimony and Exhibits
Jeffrey B. Berzina

Before the South Dakota Public Utilities Commission
of the State of South Dakota

In the Matter of the Application of
NorthWestern Energy Public Service Corporation, d/b/a NorthWestern Energy

For Authority to Increase Natural Gas Utility Rates
in South Dakota

Docket No. NG24-_____

June 21, 2024

TABLE OF CONTENTS

EXHIBITS

Witness Information

Q. Please state your name and business address.

A. My name is Jeffrey B. Berzina. My business address is 3010 W. 69th Street, Sioux Falls, South Dakota, 57108.

Q. By whom are you employed and in what capacity?

A. I am the Controller of NorthWestern Energy Public Service Corporation d/b/a NorthWestern Energy ("NorthWestern" or "Company").

Q. Please summarize your educational and employment experiences.

A. I have been with NorthWestern since April 2020. My primary responsibilities include management of the accounting and financial reporting functions. This includes overseeing compliance with financial reporting requirements established by the Securities and Exchange Commission and Federal Energy Regulatory Commission ("FERC"), reviewing NorthWestern's financial statements, and implementing and overseeing accounting policies and procedures. Prior to joining NorthWestern, I held various roles within accounting, finance, and corporate development at Black Hills Corporation ("Black Hills"), a utility holding company with electric and natural gas utility operations. Prior to Black Hills, I was an auditor with Ketel, Thorstenson, LLP. I have a Bachelor of Science degree in Business Administration and am a Certified Public Accountant (inactive)

Q. Have you previously testified before the South Dakota Public Utilities Commission ("Commission")?

A. Yes, I provided testimony in Docket No. EL23-016, as well as in Docket No. EL12-061 when I was at Black Hills.

Purpose of Testimony

Q. What is the purpose of your testimony in this proceeding?

A. My testimony:

1. Discusses the Revenue Requirement and the Statements and Schedules included in the filing;
2. Presents a detailed explanation of various adjustments to the rate base and the income statement;
3. Discusses the proposed depreciation rates as developed in the 2022 Depreciation Study developed by Gannett Fleming Valuation and Rate Consultants, LLC ("Gannett Fleming"); and
4. Discusses NorthWestern's method of allocating shared administrative costs.

Overview of Revenue Requirement, Statements and Schedules

Q. What was your role in preparing the revenue requirement in this filing?

A. I supervised the preparation of the information based on the books and records of the Company as well as the pro forma information contained in this filing, including the Statements and supporting Schedules. NorthWestern used a revenue requirement model consistent with the model used in Docket No.

EL23-016, NorthWestern's last rate review in South Dakota. Statement M details the revenue requirement.

Q. What test year did NorthWestern use in this filing?

A. NorthWestern is using a 12-month test year based on historical data, ending December 31, 2023, as adjusted with known and measurable changes. The financial statements comply with FERC rules and regulations.

Q. Please indicate what Statements are included in this filing and who sponsors them.

A. The following is a list of Statements provided, along with the respective sponsor:

A. Balance Sheet (Jeffrey B. Berzina)

B. Income Statement (Jeffrey B. Berzina)

C. Statement of Retained Earnings (Jeffrey B. Berzina)

D. Utility Plant in Service (Jeffrey B. Berzina)

E. Accumulated Depreciation (Jeffrey B. Berzina)

F. Working Capital (Jeffrey B. Berzina)

G. Cost of Capital (Emilie T. Ng)

H. Operation and Maintenance Expense (Jeffrey B. Berzina)

I. Operating Revenues (Jeffrey B. Berzina)

J. Depreciation Expense (Jeffrey B. Berzina)

K. Income Taxes (Aaron J. Bjorkman)

L. Taxes other than Income (Jeffrey B. Berzina)

M. Overall Revenue Requirement (Jeffrey B. Berzina)

N. Allocated Cost of Service by Jurisdiction (Jeffrey J. Decker)

O. Allocated Cost of Service by SD Customer Class (Jeffrey J. Decker)

P. Gas Cost Adjustment Factors (Jeffrey J. Decker)

Q. Description of Utility Operations (Jeffrey B. Berzina)

R. Affiliate Transactions (Jeffrey B. Berzina)

Q. What Schedules are included in this filing?

A. Schedules with supporting information have been included for Statements D, E, F, G, H, I, J, K, L, M, N, O and P. These Schedules detail any adjustments made to the test year data.

Q. Please describe rate base.

A. NorthWestern sets rate base on a 13-month average of all asset accounts as of December 31, 2023. This is shown on Schedule D-3. Accumulated depreciation reduces this plant balance, as shown on Statement E. Rate base also includes materials, supplies, fuel stock, and prepayments. Statement F calculates the cash working capital reduction to rate base. Schedule F-3 details other reductions to rate base for cash received for customer deposits. Statement K details the accumulated deferred federal income taxes reduction to rate base.

Q. Has Construction Work in Progress ("CWIP") been included in rate base?

A. No, CWIP is not included in rate base. Rate base includes only plant investment that is used and useful prior to the time rates go into effect in this docket.

Q. Does NorthWestern plan to adjust test year rate base by including post-test year investments in this filing?

A. No.

Normalization Adjustments to Rate Base

Q. Please describe the proposed major adjustments for plant additions as well as other rate base adjustments.

A. The adjustments are as described below:

Adjustment #1 – Normalize investments during test year to reflect a full year

An adjustment was made to the test year rate base to reflect non-revenue producing major investments ($500,000 or greater) as if they were in service for the entire test year. All costs related to normalizing test year additions are actual costs and no forecasts or estimates are included. This adjustment increased rate base just over $1.1 million. NorthWestern made related adjustments to accumulated depreciation, depreciation expense, and deferred taxes for these assets. Exhibit JBB-1 details these adjustments, and Company Witness Bradley S. Wenande provides the details for these projects. There are no anticipated reductions in test year expenses as a result of less maintenance expense or operational efficiencies due to any of these projects.

Adjustment #2 – New depreciation rates

An adjustment was made to reflect the new depreciation rates as a result of the Gannett Fleming 2022 depreciation study. The amount of this adjustment increases depreciation and amortization expense by $703,301. Statement J details this adjustment and Statement E reflects it as well.

Adjustment #3 – Rate Case Expense

NorthWestern made an adjustment to rate base to reflect the amortization of the estimated expense to file this rate review. Schedule H-9 shows this calculation. The Company proposes to amortize projected rate review costs over a three-year period and include the average unamortized amount of $62,210 in rate base.

Q. How was working capital calculated and included in rate base?

A. Statement F details the working capital calculation. NorthWestern conducted a lead-lag analysis to examine the timing of the Company's receipt of service revenues from customers in relation to the Company's payment of expenses to vendors and employees. It includes a separate expense lead for vacation pay, a separate expense lead for uncollectible accounts, a separate expense lead for injuries and damages, and a separate expense lead for cost of fuel and purchased power, labor, other operating and maintenance ("O&M") expenses, property taxes, and payroll taxes. It calculates a separate rate base deduction for tax collections, which the Company receives in advance of turning the related payments over to the taxing authorities. Schedule M-1, Row 26 shows the adjustment for working capital, which shows a negative cash working capital.

Q. What does a negative cash working capital mean?

A. When cash working capital is negative, customers and vendors are providing working capital. Accordingly, the negative cash working capital is included as a decrease to rate base and reduces the annual revenue requirement.

Normalization Adjustments to the Operating Revenues and Expenses

Q. Please describe normalizing adjustments made to the test year operating revenues and expenses.

A. Witness Jeffrey J. Decker will discuss adjustments #1 - #6, and I will discuss adjustments #7 - #28. I describe these adjustments below, and can be found on Schedule M-1.

Adjustments #7, #8, #9 – Labor Expense, Payroll Taxes, and 401K Contribution

Consistent with prior ratemaking treatment, actual base year labor allocated or directly charged to South Dakota operations was increased 4% annually for 2024 and 4% for 2025, as per the contract covering bargaining unit employees. We adjusted non-union wages for 2024 based on the actual average increase of 4.74%. Payroll taxes have also been increased accordingly for both years as shown on Statement L, which includes a calculation to accommodate for the fact that FICA Social Security withholdings are capped whereas Medicare is not. Similar to the adjustment made in Docket No. EL23-016, we determined the Company-wide percentage of labor dollars subject to FICA in the test year is 95.01%. NorthWestern calculated this by taking Company-wide total wages

subject to FICA divided by Company-wide total wages subject to Medicare (as Medicare is uncapped). There are no proposed adjustments to Federal Unemployment Tax and State Unemployment Tax, as wages subject to these taxes are capped. The net increase for payroll taxes is $24,036. NorthWestern increased its 401K expense, which is comprised of a 4% Company match for those who contribute at least 4% and a non-elective Company contribution of at least 5% for all participants, by $31,749 as shown on Schedule H-5. NorthWestern calculated the Company match to be 3.72% and the non-elective match was 5.81%. There have been no positions eliminated post-test year.

Adjustment #10 – Family Protector Plan ("FPP") Amortization

The test year included an amortization of a gain related to the Company's FPP plan. Although the Company terminated the plan in 1999, there were participants who were grandfathered in given their age. NorthWestern recorded an actuarial gain in 2021 and began amortizing it over three years, from 2021-2023, as three years was the remaining life expectancy of the remaining participants. Given this amortization ended in 2023, NorthWestern made a normalizing adjustment of $90,916 to show $0 impact to the test year for this amortization that will not exist after 2023.

Adjustment #11 – Medical Costs

An adjustment is included in Schedule H-3 to reflect the increased medical costs we have experienced in 2024. NorthWestern based the adjustment on actual costs for the twelve months ended May 31, 2024. NorthWestern will update this

increase of $75,700 with the most current twelve-month-ended period as this rate review is completed.

Adjustments #12 and #13 – Advertising Expense

Consistent with prior ratemaking treatment, NorthWestern made an adjustment to reflect the removal, in its entirety, of promotional, institutional, and non-jurisdictional advertising expenses of $72,157. This is reflected on Schedule H-3 as a reduction to FERC Account 913. Additionally, NorthWestern made an adjustment of $31,426 to FERC Account 930.1, General Advertising, to remove our South Dakota State Fair Sponsorship, our sponsorship of sporting events such as SDSU and Stampede Hockey games, our sponsorship of Leadership South Dakota, a contribution to the DEX building on the State Fairgrounds, and other non-jurisdictional or economic development related items that are capped under our current Economic Development policy. Schedule H-3 on Rows 29-31 shows the removal of 930.1 General Advertising. Schedule H-3a provides all claimed advertising expenses that the Company has included in its test year for energy efficiency, informational, and safety advertising. Samples of these expenses are available upon request.

Adjustment #14 – Economic Development

NorthWestern is able to support its communities in fostering economic growth by providing financial support to local or area economic development organizations. The adjustment for economic development in Schedule H-3 reflects a 50/50 split between natural gas utility customers and shareholders, capped at $15,000

annually, as per Docket No. NG11-003. In addition to our financial support for these groups, NorthWestern also provides additional support through employee participation on local economic development boards, regional economic development organizations, and state-led initiatives. NorthWestern does not track individual employee hours spent on economic development activities, as it is our culture to support customers, communities, and the states we serve while meeting daily operations and customer care activities. It is also important to note that employee involvement in local and state economic development partnerships is not limited to normal working hours. NorthWestern employees dedicate many hours outside the normal workday in participating on economic development boards that provide benefits to customers and their communities as well. Within this rate review, NorthWestern is requesting an increase to the economic development cap for rate recovery as established in Docket No. NG11-003. The current economic development cap is set at $30,000 annually, which is split 50/50 between shareholders and our customers for a total of $15,000 to be recovered through rates. As demonstrated in our annual economic development filings, NorthWestern substantially exceeds the $30,000 annual cap each year. NorthWestern is proposing to increase the cap by $20,000 for a total annual budget of $50,000 that will continue to be split 50/50 between shareholders and customers. Schedule H-3 includes a normalizing entry of $13,776, which removes the economic development costs allocated to South Dakota natural gas customers that are above the capped amount dictated in Docket No. NG11-003, but with a $10,000 increase to the capped amount.

Adjustment #15 – Board-Related Costs

Consistent with prior treatment, NorthWestern made an adjustment to remove the cost associated with board of director deferred compensation plans, which totaled $21,990.

Adjustment #16 – Bad Debt Adjustment

We have made an adjustment to normalize bad debt expense using a five-year historical period. NorthWestern divided the average bad debt expense during the five-year period by average billed revenue to determine the bad debt expense percentage for NorthWestern. Once calculated, NorthWestern applied the percentage to the adjusted test year revenue amount to determine the test period bad debt expense. The resulting increase to bad debt expense is adjusted in Statement H and detailed on Schedule H-7.

Adjustment #17 – Company Aircraft

Consistent with prior ratemaking treatment in Docket No. EL23-016, NorthWestern made an adjustment to remove $2,276 of expenses related to spouses riding on NorthWestern's airplane, as well as all costs related to the trip to attend the National Lineman's Rodeo. Schedule H-8 shows this adjustment.

Adjustment #18 – Rate Case Expense

Consistent with prior ratemaking treatment, NorthWestern made an adjustment for the expenses related to filing this rate review. Schedule H-9 details this

adjustment. NorthWestern intends to update this number when expenses become final.

Adjustments #19 and #20 – Incentive Removal

NorthWestern offers its employees opportunities to earn incentive compensation in addition to their base salaries and wages. The Company offers these opportunities under three separate plans: the Long-Term Incentives Plan, the Employee Incentive Compensation Plan, and the Retirement Savings Plan Incentive Match. Consistent with prior ratemaking treatment, NorthWestern made an adjustment to remove all costs related to the Long-Term Incentive Plan, and a portion of the Short-Term Incentive Plan, and corresponding Retirement Savings Plan Incentive Match costs that were awarded based on achieving financial targets. The only incentive expense remaining in the test year is the portion related to safety, customer satisfaction, and reliability. Additionally, as shown on Schedule H-10, NorthWestern made a $5,897 adjustment to remove the 401K match on the incentive.

Adjustment #21 – Property Insurance and Claims

This adjustment reflects the increase in property insurance over the test year, which is a known increase given new policies have gone into effect. The South Dakota natural gas portion of this increase is $10,741 and impacts FERC Account 924. This is shown on Schedule H-11.

An adjustment has also been made for FERC Account 925, which includes a

combination of insurance premiums, which are allocated to each jurisdiction based on the 3-factor allocation method described later this testimony, as well as costs for building self-insured reserves for Work Comp, General Liability, and Auto, which are calculated separately for each state by our actuary. Schedule H-11 provides the 5-year history of these costs to demonstrate how costs have been increasing, as well as an adjustment to the test year levels, which includes the known costs for the first six months of 2024. The Company is proposing to increase the test year amount by using the most recent twelve month total for FERC Account 925, which is the period ending June 30, 2024. This increases the insurance expense by $57,831 over the test year level.

Adjustment #22 – Postage

This adjustment reflects the increase in postage rates that has occurred and will occur in 2024. A normalizing adjustment has been included to reflect the January 2024 and July 2024 increase over the test year postage rates.

Adjustment #23 – Non-sufficient Fund Check Returns

This adjustment represents the change in the non-sufficient funds charge from $15 to $30 and decreases the revenue requirement by $2,100 as shown in Statement H-13. Witness Jeffrey J. Decker discusses the detail of this adjustment in the General Terms and Conditions section of his testimony.

Adjustments #24 and #25 – Depreciation Expense

As part of this rate filing, NorthWestern has completed Statement J, which reflects depreciation rates for its natural gas and common utility assets, as determined by a depreciation study completed by Gannett Fleming. The implementation of the new rates for natural gas utility assets results in an increase to test year depreciation expense of $703,301. Additionally, NorthWestern made an adjustment to depreciation expense for the impact of normalizing the investments made during the test year to record a full year of depreciation expense. This adjustment increased depreciation expense by approximately $18,703.

Adjustment #26 – Gross Receipts Tax

Consistent with prior ratemaking treatment, this adjustment reflects the change in gross receipts tax related to the increase in revenue. Schedule L-1 details this adjustment.

Adjustment #27 – Interest Synchronization

Consistent with prior ratemaking treatment, this adjustment reflects the change in federal income taxes by using the interest synchronization method of computing the interest deduction for income tax purposes. Under this method, interest in the income tax calculation was set equal to the implied interest in the proposed cost of capital included in this filing. See Schedule H-12 for details.

Adjustment #28 – Carrying Charges

During the test year, the Company recorded interest income from customers calculated on under-collected tracker balances. NorthWestern made an adjustment to remove that income from the test year, as it is not guaranteed or known for any periods beyond the test year. Schedule H-6 details this adjustment and it is included on Schedule M-1.

Q. Did you include adjustments for ad valorem tax or purchased natural gas in this filing?

A. No. Recovery for ad valorem and natural gas costs occurs through separate trackers.

Q. Does this filing include any lobbying costs, charitable donations, mergers and acquisitions expenses, demand side management, severance expense, judgments, settlements, fines, penalties, or non-utility costs?

A. No, it does not.

Q. Does this filing include any acquisition adjustments for Freeman or AMPI which were disallowed in Docket No. NG11-003?

A. No, it does not.

2022 Depreciation Study

Q. Is NorthWestern proposing new depreciation rates as part of this filing?

A. Yes. NorthWestern engaged John J. Spanos, President of Gannett Fleming Valuation and Rate Consultants, LLC, to present the Depreciation Study with this filing. Gannett Fleming has extensive experience conducting depreciation studies. The testimony of Mr. Spanos discusses the process and conclusions for the natural gas utility assets, and he provides the study as Exhibit JJS-1 to his testimony. NorthWestern plans to adopt these new rates upon receiving a rate order in this docket. NorthWestern adopted the electric and common rates as approved in Docket No EL23-016.

Jurisdictional Allocations of Shared Costs

Q. Please briefly describe the methods used to allocate costs to the South Dakota Natural Gas Utility Operations.

A. NorthWestern has three state regulatory jurisdictions consisting of Montana, South Dakota, and Nebraska. In addition, NorthWestern has electric generation consisting of a 30% ownership interest in Colstrip Unit #4 ("CU4") in Montana.

NorthWestern allocates administrative costs between jurisdictions and its ownership interest in CU4 using a three-factor formula, consisting of gross plant, margin, and labor. NorthWestern updates the three-factor formula annually through an internal administrative allocation study. The 2022 jurisdictional allocation methodology is attached as Exhibit JBB-2.

In addition, NorthWestern uses a three-factor formula to allocate shared costs between South Dakota electric and natural gas operations and Nebraska natural

gas operations consisting of plant, customers, and O&M labor expense for each of the electric and natural gas segments of its business. NorthWestern also updates this formula annually through an internal administrative allocations study. The 2022 electric and natural gas allocation methodology is attached as Exhibit JBB-3. The Commission approved these allocation methods in NorthWestern's most recent natural gas filing, Docket No. NG11-003, and the most recent electric filing, Docket No. EL23-016.

In addition to the allocations described above, NorthWestern allocates common plant and common depreciation between electric and natural gas using rate base percentage. The 2023 allocation percentage to South Dakota natural gas was 10%. This is shown on Schedule E-3.

Q. Does this complete your pre-filed direct testimony?

A. Yes, it does.

NorthWestern Energy Public Service Corporation dba NorthWestern Energy
Normalizing Entries for Monthly Book Balances of SD Gas Plant Accounts
During Test Year and Thirteen Month Average
December 31, 2023 Test Year

Line No.	Account No.	Description	12/31/2022	1/31/2023	2/28/2023	3/31/2023	4/30/2023	5/31/2023	6/30/2023	7/31/2023	8/31/2023	9/30/2023	10/31/2023	11/30/2023	12/31/2023	13 Month Average
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)
1		**DISTRIBUTION**														
2																
3	378.0	21 GTS SD GOODWIN FT TO CG	758,265	758,265		-		-		-		-		-	-	116,656
4	376.1	BRK 22ND AVE DOT MOVE	575,244	575,244	575,244	575,244	575,244	575,244	575,244	575,244	575,244	575,244	575,244	575,244	-	530,994
5	376.1	HUR DAKOTA AVE GAS RELOCATE	500,550	500,550	500,550	500,550	500,550	500,550	500,550	500,550	500,550	500,550	500,550	500,550	-	462,047
6																
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33		**TOTAL Known & Measurable Adjustments**	**$ 1,834,059**	**$ 1,834,059**	**$ 1,075,794**	**$ 1,075,794**	**$ 1,075,794**	**$ 1,075,794**	**$ 1,075,794**	**$ 1,075,794**	**$ 1,075,794**	**$ 1,075,794**	**$ 1,075,794**	**$ 1,075,794**	**$ -**	**$ 1,109,697**

Line No.	Account No.	Description	Rate	12/31/2022	1/31/2023	2/28/2023	3/31/2023	4/30/2023	5/31/2023	6/30/2023	7/31/2023	8/31/2023	9/30/2023	10/31/2023	11/30/2023	12/31/2023	Add to Expense
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)
1		DISTRIBUTION															
2																	
3	378.0	21 GTS SD GOODWIN FT TO CG	1.86%	$ 1,175	$ 1,175												$ 2,351
4	376.1	BRK 22ND AVE DOT MOVE	1.52%	$ 729	$ 729	$ 729	$ 729	$ 729	$ 729	$ 729	$ 729	$ 729	$ 729	$ 729	$ 729		$ 8,744
5	376.1	HUR DAKOTA AVE GAS RELOCATE	1.52%	$ 634	$ 634	$ 634	$ 634	$ 634	$ 634	$ 634	$ 634	$ 634	$ 634	$ 634	$ 634		$ 7,608
6																	
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32		TOTAL Known & Measurable Adjustments		$ 2,538	$ 2,538	$ 1,363	$ 1,363	$ 1,363	$ 1,363	$ 1,363	$ 1,363	$ 1,363	$ 1,363	$ 1,363	$ 1,363	$ -	$ 18,703

NorthWestern Energy
2023 UTILITY ADMINISTRATION STUDY **Exhibit JBB-2**
August 2022

Plant Allocation (000's Omitted)

	In-Service	CWIP	Common Plant	Gross Plant	Percent
MTU	5,424,532	383,786	0	5,808,318	76.70%
NPS	1,405,975	31,740	0	1,437,715	18.99%
CU4	319,087	7,246		326,333	4.31%
Total	**7,149,594**	**422,772**	**0**	**7,572,366**	**100.00%**

Source: SAP Trial Balance Account 160000-165999 MT12-100, SD12-100

Margin

MTU	721,738	77.86%
NPS	145,843	15.73%
CU4	59,330	6.40%
Total	**926,911**	**100.0%**

Source: Historical Income by Segment (Profit Centers) MT01-100, SD01-100

Operating Labor Allocation (000's Omitted)

MTU	79,927	83.45%
NPS	15,779	16.47%
CU4	73	0.08%
Total	**95,779**	**100.00%**

Source: SAP Trial Balance Account 503000-503999

Allocation of Factors

Gross Plant:

	MTU	76.70%
	NPS	18.99%
	CU4	4.31%

Margin:

	MTU	77.86%
	NPS	15.73%
	CU4	6.40%

Direct Labor:

	MTU	83.45%
	NPS	16.47%
	CU4	0.08%

	Plant	Margin	Labor	Total	%
Total MTU	**76.70%**	**77.86%**	**83.45%**	**238.01%**	**79%**
Total NPS	**18.99%**	**15.73%**	**16.47%**	**51.19%**	**17%**
Total CU4	**4.31%**	**6.40%**	**0.08%**	**10.79%**	**4%**

MEMORANDUM

TO: File

FROM: William Robinson

DATE: October 5, 2022

RE: **2023 NPS ADMINISTRATIVE AND GENERAL ALLOCATION STUDY**

The August 2022 period allocation study was approved October 5, 2022. The results are:

General Office Electric & Gas Allocation Study (August 2022)

Factors used were:

1. Rate-Based Plant Balances (August 2022)
2. Customers (August 2022)
3. Operations Labor (12ME August 2022)

The results are:

Electric -	**58%**
SD Gas -	**24%**
NE Gas -	**18%**
SD Electric -	**69%**
SD Gas -	**31%**
SD Gas -	**61%**
NE Gas -	**39%**

Division Allocation Study (August 2022)

Factors used were:

1. Customers (by Area August 2022)
2. Distribution O&M (12ME August 2022)
3. Distribution Plant (by Area August 2022)

The results are:

	Electric	Gas
North Division……	**66%**	**34%**
Brookings District……	**0%**	**100%**
South Division……	**74%**	**26%**
Nebraska District……	**0%**	**100%**

Pre-filed Direct Testimony
Aaron J. Bjorkman

Before the South Dakota Public Utilities Commission
of the State of South Dakota

In the Matter of the Application of
NorthWestern Energy Public Service Corporation, d/b/a NorthWestern Energy

For Authority to Increase Gas Utility Rates
In South Dakota

Docket No. NG24-_____

June 21, 2024

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Witness Information

Q. Please provide your name, employer, and title.

A. My name is Aaron J. Bjorkman, and I am the Director – Corporate Taxes for NorthWestern Energy Public Service Corporation d/b/a NorthWestern Energy ("NorthWestern" or "Company"). I am responsible for all tax-related compliance, research, and planning activities for NorthWestern.

Q. Please provide a description of your relevant employment experience and other professional qualifications.

A. I have over 22 years of experience in the field of corporate taxation, 16 years of which I spent working in the public utility sector with NorthWestern. Prior to my employment at NorthWestern, I worked as a Certified Public Accountant for Deloitte and for RSM, spending the majority of my time on corporate taxation. I have a Bachelor of Science degree in Accounting and a Master's in Professional Accountancy from the University of South Dakota.

Q. Have you previously testified before the South Dakota Public Utilities Commission ("Commission" or "SD PUC")?

A. Yes, I provided testimony in electric Docket No. EL23-016.

Purpose of Testimony

Q. What is the purpose of your testimony in this proceeding?

A. I provide testimony in support of income tax-related items included in this filing. All income tax items in both the income statements and rate base statements were prepared under my supervision and control. I am sponsoring Statement K - Income Taxes.

Income Taxes

Q. Have income taxes in this filing been calculated in a manner consistent with the methodology approved by the Commission in prior rate proceedings?

A. Yes. The income taxes included in this filing have been calculated utilizing the partial flow-through method that the Commission has approved in prior dockets. Partial flow-through was utilized as part of recent dockets, including EL14-106, GE17-003, and EL23-016. Plant-related tax adjustments, except for those subject to mandatory normalization under Section 168 of the Internal Revenue Code ("IRC"), are generally flowed through to customers as a reduction to the income tax expense included in the revenue requirement.

Q. Have the impacts of the Tax Cuts and Jobs Act ("TCJA") been reflected in this filing?

A. Yes. The TJCA methodologies related to Excess/Deficient Deferred Income Taxes ("EDIT") as established in Docket No. GE17-003 are continued as part of this rate review.

Rate Base Deferred Taxes

Q. What are deferred income taxes?

A. Deferred taxes are differences between the book and tax treatment for certain transactions. Accelerated tax depreciation generally exceeds book depreciation during the early years of an asset's service life, creating an accumulated deferred income tax liability.

Q. Why are certain deferred income taxes a reduction to rate base?

A. Since deferred income taxes are typically liabilities for taxes due in future periods, they represent a source of funds. Accordingly, the average accumulated deferred income tax liability balance is deducted from rate base to recognize such funds are available for NorthWestern to use between the time they are collected in rates from customers and the time they are eventually remitted to the government.

Cost of Removal and Salvage Change

Q. Are the adjustment concepts made with respect to the tax accounting related to cost of removal ("COR") and salvage in Docket No. EL23-016 applied to this natural gas filing?

A. Yes, NorthWestern has made the following adjustments as part of the normalizing plant adjustments in order to comply with Internal Revenue Service normalization rules:

1. NorthWestern will no longer combine accrued COR with book depreciation. As a result, the following will be impacted:
    a. There will no longer be an excess amount of book depreciation resulting in an amount of protected plant EDIT reversing under the Average Rate Assumption Method ("ARAM") in excess of the amount permitted under the normalization rules.
    b. Accrued COR (i.e., an originating book/tax difference) will prospectively receive flow-through treatment, and a more appropriate matching of the tax effects of accrued COR and incurred COR will occur.
2. NorthWestern will no longer net estimated salvage within accrued COR.
3. NorthWestern will no longer combine salvage value received into net COR incurred and will instead prospectively normalize salvage value received (i.e., a reversing book/tax difference).
4. NorthWestern proposes to recover the regulatory asset that has resulted from recording net COR under the flow-through method but recording the accrual of net COR under the normalization method evenly over 10 years beginning with the effective date of the rates.

Q. What are the consequences if NorthWestern does not comply with the deferred tax normalization requirements, including the rules related to TCJA excess deferred taxes, as discussed above?

A. If NorthWestern does not comply with the deferred tax normalization requirements, it will prospectively lose the right to deduct accelerated depreciation. Instead, tax depreciation will equal regulatory depreciation expense for public utility property subject to regulation by the Commission that is in service at the time of the violation or placed in service after the violation occurs.

Q. Does this complete your pre-filed direct testimony?

A. Yes, it does.

BEFORE THE SOUTH DAKOTA PUBLIC UTILITIES COMMISSION

DIRECT TESTIMONY
OF
JOHN J. SPANOS

ON BEHALF OF
NORTHWESTERN
ENERGY PUBLIC SERVICE
CORPORATION

June 21, 2024

I. INTRODUCTION

Q. Please state your name and business address.

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

Q. In what capacity are you employed?

A. I am President of the firm Gannett Fleming Valuation and Rate Consultants, LLC (Gannett Fleming) and have been associated with the firm since June 1986.

Q. On whose behalf are you testifying in this case?

A. I am testifying on behalf of NorthWestern Energy.

Q. Please describe your educational background and professional experience.

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. I have over 37 years of depreciation experience which includes giving expert testimony in more than 460 cases before 46 regulatory commissions, including this Commission. These cases have included depreciation studies in the electric, gas, water, wastewater, and pipeline industries. In addition to cases where I have submitted testimony, I have also supervised over 800 other depreciation or valuation assignments. Please refer to Appendix A for my qualifications statement, which includes further information with respect to my work history, case experience, and leadership in the Society of Depreciation Professionals.

Q. What is the purpose of your testimony in this case?

A. I sponsor the Depreciation Study performed for NorthWestern Energy attached as Exhibit JJS-1 (Depreciation Study).

Q. Are you sponsoring any other exhibits other than JJS-1?

A. No, I am not.

II. DEPRECIATION STUDY

Q. Please describe the Depreciation Study that you sponsor.

A. The Depreciation Study sets forth the calculated annual depreciation accrual rates by account as of December 31, 2022. The proposed rates appropriately reflect the rates at which NorthWestern's assets should be depreciated over their useful lives and are based on the most commonly used methods and procedures for determining depreciation rates.

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, inadequacy, obsolescence, changes in the art, changes in demand and the requirements of public authorities.

Q. Did you prepare the Depreciation Study filed by NorthWestern in this proceeding?

A. Yes. I prepared the Depreciation Study submitted by NorthWestern with its filing in this proceeding. The Depreciation Study is entitled: 2022 Depreciation Study - Calculated Annual Depreciation Accruals Related to Electric, Gas and Common Plant as of December 31, 2022. The assets in the study include electric, gas and common property in both Nebraska and South Dakota, however, only the South Dakota gas assets are a component of this filing. This report sets forth the results of my

Depreciation Study for NorthWestern and has been included as Exhibit JJS-1.

Q. In preparing the Depreciation Study, did you follow generally accepted practices in the field of depreciation valuation?

A. Yes.

Q. Are the methods and procedures of this Depreciation Study consistent with past practices?

A. The methods and procedures of this study are the same as those utilized in past studies of this Company as well as others before this Commission. Depreciation rates are determined based on the average service life procedure and the remaining life method.

Q. Please describe the contents of the Depreciation Study.

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 table on pages VI-4 through VI-7 of the Depreciation Study presents the estimated survivor curve, the net salvage percent, the original cost as of December 31, 2022, the book depreciation reserve and the calculated annual depreciation accrual and rate for each account or subaccount. The section beginning on page VII-2 presents the results of the retirement rate analyses prepared as the historical bases for the service

life estimates. The section beginning on page VIII-2 presents the results of the net salvage analysis. The section beginning on page IX-2 presents the depreciation calculations related to surviving original cost as of December 31, 2022.

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. 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 reasonable manner.

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 NorthWestern's plant; analyzing these data to obtain historical trends of survivor characteristics; obtaining supplementary information from management and operating personnel concerning practices and plans as they relate to plant operations; and interpreting the above data and the estimates used by other electric and 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. Generally speaking, I analyzed the Company's accounting entries that record plant transactions during the 1990 through 2022 period for electric, gas and common plant by account. The transactions included additions, retirements, transfers, sales, and the related balances.

Q. What method did you use to analyze these service life data?

A. I used the retirement rate method for most plant accounts. This is the most appropriate method when retirement data covering a long period of time is available because this method determines the average rates of retirement actually experienced by the Company during the period of time covered by the Depreciation Study.

Q. Please describe how you used the retirement rate method to analyze NorthWestern's service life data.

A. I applied the retirement rate analysis to each different group of property in the study. For each property group, I used the retirement rate data 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 survivor curves that contain the range of

survivor characteristics usually experienced by utilities and other industrial companies. The Iowa-type 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-type curves and truncated Iowa-type 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 55-R3 indicates an average service life of fifty-five years; a right-moded, or R, type curve (the mode occurs after average life for right-moded curves); and a moderate height, 3, for the mode (possible modes for R type curves range from 0.5 to 5).

Q. Did you physically observe NorthWestern's plant and equipment during your depreciation study?

A. Yes. I made field reviews of NorthWestern's property as part of this study in November 2022 to observe representative portions of plant. 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 as well as information from other discussions with management was incorporated in the interpretation and extrapolation of the statistical analyses.

Q. Please describe how you estimated net salvage percentages.

A. I estimated the net salvage percentages by incorporating the historical data for the period 1990 through 2022 and considered estimates for other electric and gas companies. The net salvage percentages are based on a combination of statistical analyses and informed judgment. The statistical analyses consider the cost of removal and gross salvage ratios to the associated retirements during the 33-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, I calculated the annual depreciation accrual rates for each group, using the straight-line remaining life method, and using remaining lives weighted consistent with the average service life procedure.

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 use an example to illustrate how the annual depreciation accrual rate for a particular group of property is presented in your Depreciation Study.

A. I will use Gas Account 380.10, Services - Plastic, as an example because it is one of the largest depreciable mass accounts and represents approximately twenty-three percent of total gas depreciable plant.

The retirement rate method was used to analyze the survivor characteristics of this property group. Aged plant accounting data was compiled from 1990 through 2022 and analyzed in periods that best represent the overall service life of this property. The life table for the 1990-2022 experience band is presented on pages VII-136 and VII-137 of the report. The life table displays the retirement and surviving ratios of the aged plant data exposed to retirement by age interval. For example, page VII-136 shows $13,772 retired at age 0.5 with $52,317,910 exposed to retirement. Consequently, the retirement ratio is 0.0003 and the surviving ratio is 0.9997. This life table, or original survivor, is plotted along with the estimated smooth survivor curve, the 55-R3 on page VII-135.

The net salvage percent is presented on pages VIII-80 and VIII-81. 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 2002 through 2022. The 21-year period experienced $2,166,709 ($4,570-$2,171,280) in net salvage for $1,506,176 plant retired. The result is negative net salvage of 144 percent ($2,166,709/$1,506,176). The most recent five-year period, 2018-2022, has shown indications of more negative (negative 266 percent), therefore, it was determined that based on industry ranges, the current estimate for the Company and future expectations, negative 100 percent was the most appropriate estimate.

My calculation of the annual depreciation related to the original cost as of December 31, 2022, of gas plant is presented on page IX-83. The calculation is based on the 55-R3 survivor curve, 100 percent 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 the table on page VI-6.

III. CONCLUSION

Q. Was the Depreciation Study filed by NorthWestern Energy in this proceeding prepared by you or under your direction and control?

A. Yes.

Q. Can you summarize the results of your Depreciation Study?

A. Yes. The depreciation rates as of December 31, 2022, appropriately reflect the rates at which the values of NorthWestern's assets have been consumed over their useful lives to date. These rates are based on the most commonly used methods and procedures for determining depreciation rates. The life and net salvage parameters are based on widely used techniques and the depreciation rates are based on the average service life procedure and remaining life method. Therefore, the depreciation rates set forth on pages VI-4 through VI-7 of Exhibit JJS-1 represent the calculated rates as of December 31, 2022.

Q. Does this conclude your pre-filed direct testimony?

A. Yes.

Appendix A

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-	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
348.3	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-	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 Energ	Depreciation
431.	2023	PSC MD	Case No. 9695	The Potomac Edison Company	Depreciation
432.	2023	OR PUC	Case No. UM2277	Avista Corporation	Depreciation
433.	2023	FERC	Docket No. ER23-xxx-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. SPP-0007	Evergy Metro, Inc. and Evergy Missouri West, Inc.	Depreciation
456.	2024	NJ BPU	Docket No. WR24010057	Aqua New Jersey, Inc.	Depreciation
457.	2024	ILL CC	Docket No. 24-0044	Aqua Illinois, Inc.	Depreciation
458.	2024	PA PUC	Docket No. R-2024-3046519	NiSource – Columbia Gas of Pennsylvania, Inc.	Depreciation
459.	2024	KY PSC	Case No. 2024-00092	NiSource – Columbia Gas of Kentucky, Inc.	Depreciation
460.	2024	VA SCC	Case No. PUR-2024-00030	NiSource – Columbia Gas of Virginia, Inc.	Depreciation
461.	2024	IA Util Bd	Docket No. RPU-2023-0002	Alliant - Interstate Power and Light Company	Depreciation
462.	2024	PA PUC	Docket No. R-2024-3047068	FirstEnergy Pennsylvania – Metropolitan Edison;	Depreciation
463.	2024	PA PUC	Docket No. R-2024-3046523	Duquesne Light Company	Depreciation
464.	2024	NC	Docket No. E-22, Sub 694	Dominion Energy North Carolina	Depreciation
465.	2024	IN URC	IURC Cause No. 46038	Duke Energy Indiana	Depreciation
466.	2024	NJ BPU	Docket Nos. ER23120924 and	Public Service Electric and Gas Company	Depreciation
467.	2024	PA PUC	Docket No. R-2024-3047822	Aqua Pennsylvania, Inc	Depreciation
468.	2024	PA PUC	Docket No. R-2024-3047824	Aqua Pennsylvania Wastewater, Inc	Depreciation

NorthWestern® Energy

Delivering a Bright Future

2022 DEPRECIATION STUDY

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

Prepared by:

GANNETT FLEMING

Excellence Delivered As Promised

NORTHWESTERN ENERGY

Sioux Falls, South Dakota

2022 DEPRECIATION STUDY

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

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC

Camp Hill, Pennsylvania

Gannett Fleming
Valuation and Rate Consultants, LLC

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Camp Hill, PA 17011
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June 12, 2023

NorthWestern Energy
3010 West 69th Street
Sioux Falls, SD 57108

Attention: Jeff Berzina, Controller

Ladies and Gentlemen:

Pursuant to your request, we have conducted a depreciation study related to the electric, gas and common plant of NorthWestern Energy ("NWE") as of December 31, 2022. The attached report presents a description of the methods used in the estimation of depreciation, the summary of annual depreciation accrual rates, the statistical support for the life and net salvage estimates and the detailed tabulations of annual depreciation.

Respectfully submitted,

GANNETT FLEMING VALUATION
AND RATE CONSULTANTS, LLC

John J Spanos

JOHN J. SPANOS
President

JJS:mle

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NORTHWESTERN ENERGY

DEPRECIATION STUDY

EXECUTIVE SUMMARY

Pursuant to NorthWestern Energy's ("NWE" or "Company") request, Gannett Fleming Valuation and Rate Consultants, LLC ("Gannett Fleming") conducted a depreciation study related to NWE's electric, gas and common plant as of December 31, 2022. The purpose of this study was to determine the annual depreciation accrual rates and amounts for book and ratemaking purposes.

The depreciation rates determined as a result of this study 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 net salvage for each depreciable group of assets.

NWE's accounting policy has not changed since the last technical update was prepared as of December 31, 2013. There have been significant changes to plant in service and the average service life and net salvage parameters have been updated. The proposed depreciation rates produce an overall increase for electric, gas and common plant as of December 31, 2022.

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

The study results set forth an annual depreciation expense of $49.7 million when applied to depreciable plant balances as of December 31, 2022. The results are summarized at the functional level as follows:

FUNCTION	ORIGINAL COST AS OF DECEMBER 31, 2022	ACCRUAL RATE	ACCRUAL AMOUNT
ELECTRIC PLANT			
STEAM PRODUCTION PLANT	$ 270,028,056.54	3.13	$ 8,445,073
OTHER PRODUCTION PLANT	279,207,094.19	3.57	9,976,598
TRANSMISSION PLANT	213,886,238.77	2.85	6,090,589
DISTRIBUTION PLANT	293,788,842.10	3.89	11,432,626
GENERAL PLANT	24,888,044.80	5.70	1,419,590
TOTAL ELECTRIC PLANT	**$1,081,798,276.40**	**3.45**	**$37,364,476**
GAS PLANT			
PRODUCTION PLANT	$ 3,999.86	-	-
DISTRIBUTION PLANT	232,823,881.13	2.71	$6,313,634
GENERAL PLANT	13,927,050.66	3.45	479,813
TOTAL GAS PLANT	**$246,754,931.65**	**2.75**	**$6,793,447**
COMMON PLANT			
INTANGIBLE PLANT	$13,138,903.50	10.86	$1,427,305
GENERAL PLANT	57,934,638.18	7.08	4,099,678
TOTAL COMMON PLANT	**$71,073,541.68**	**7.78**	**$5,526,983**
TOTAL DEPRECIABLE ELECTRIC, GAS AND COMMON PLANT	**$1,399,626,749.73**		**$49,684,906**

PART I. INTRODUCTION

NORTHWESTERN ENERGY

DEPRECIATION STUDY

PART I. INTRODUCTION

SCOPE

This report sets forth the results of the depreciation study for NorthWestern Energy ("NWE"), to determine the annual depreciation accrual rates and amounts for book purposes applicable to the original cost of electric, gas and common plant as of December 31, 2022. The rates and amounts determined as a result of this study are based on the straight line remaining life method of depreciation. This report also describes the concepts, methods and judgments which underlie the recommended annual depreciation accrual rates related to electric, gas and common plant in service as of December 31, 2022.

The service life and net salvage estimates resulting from the study were based on informed judgment which incorporated analyses of historical plant retirement data as recorded through 2022, a review of Company practice and outlook as they relate to plant operation and retirement, and consideration of current practice in the electric and gas industry, including knowledge of service lives and net salvage estimates used for other electric and 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 the methods used in the service life analyses. Part III, Service Life Considerations, presents the factors and judgment employed in the service life study. Part IV, Net Salvage Considerations, presents the judgment used 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 a summary 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 utility service. Normally, the period of time over which the fixed capital cost is allocated to the cost of service is equal to the period of time over which an item renders service, that is, the item's service life. The most prevalent method of allocation is to distribute an equal amount of cost to each year of service life. This method is known as the straight line method of depreciation.

For most accounts, the annual depreciation was calculated by the straight line method using the average service life procedure and the remaining life basis. For certain

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

The straight line method, average service life procedure is a commonly used depreciation calculation procedure that has been widely accepted in jurisdictions throughout North America. Gannett Fleming recommends its continued use in this study. Amortization accounting is used for certain General Plant accounts because of the disproportionate plant accounting effort required when compared to the minimal original cost of the large number of items in these accounts. An explanation of the calculation of annual and accrued amortization is presented beginning on page V-4 of the report.

Service Life and Net Salvage Estimates

The service life and net salvage estimates used in the depreciation and amortization calculations were based on informed judgment which incorporated a review of management's plans, policies and outlook, a general knowledge of the electric and gas utility industry, and comparisons of the service life and net salvage estimates from our studies of other electric and gas utilities. The use of survivor curves to reflect the expected dispersion of retirement provides a consistent method of estimating depreciation for utility 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 estimates of future experience 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.

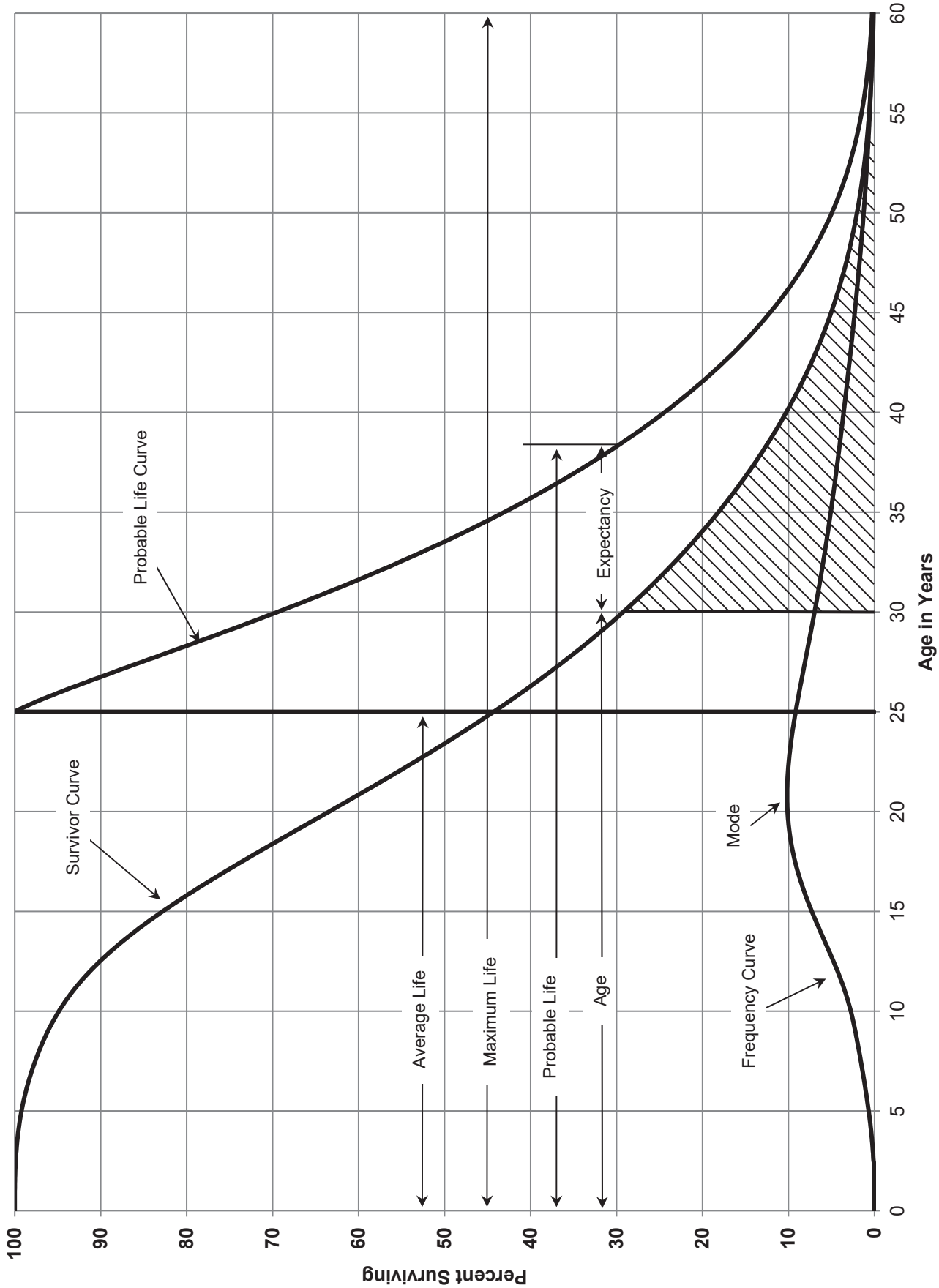

FIGURE 1. TYPICAL SURVIVOR CURVE AND DERIVED CURVES

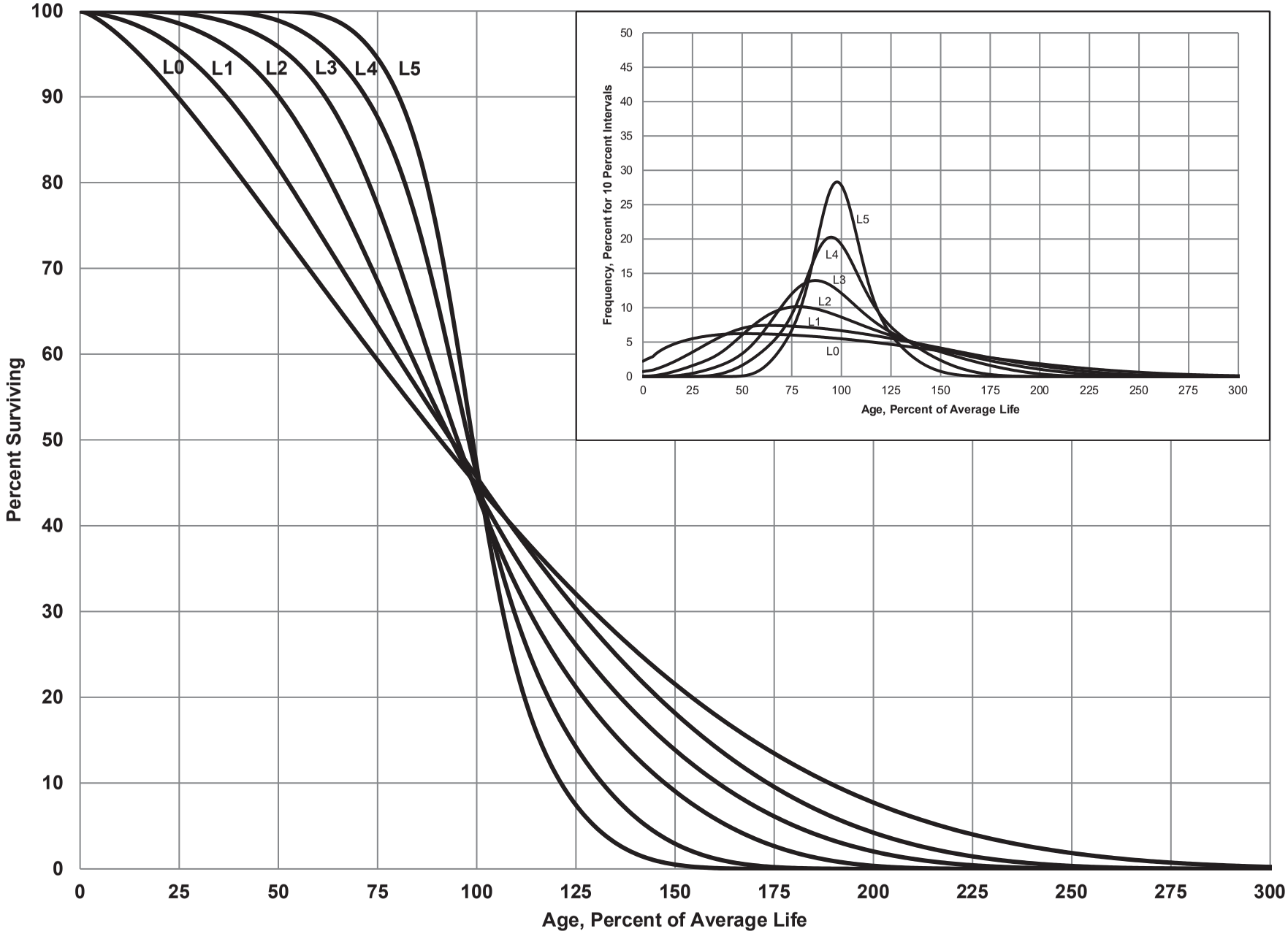

FIGURE 2. LEFT MODAL OR "L" IOWA TYPE SURVIVOR CURVES

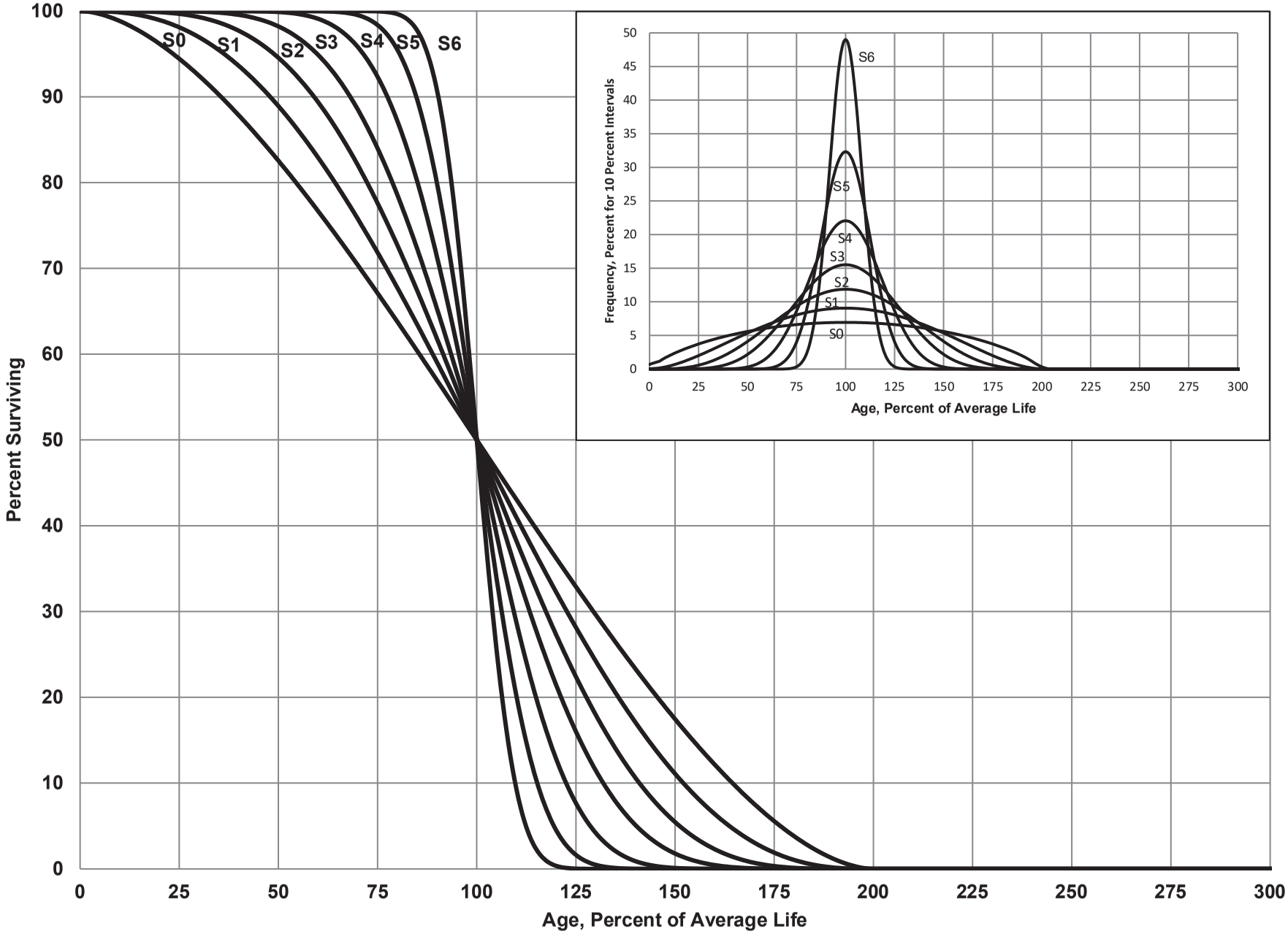

FIGURE 3. SYMMETRICAL OR "S" IOWA TYPE SURVIVOR CURVES

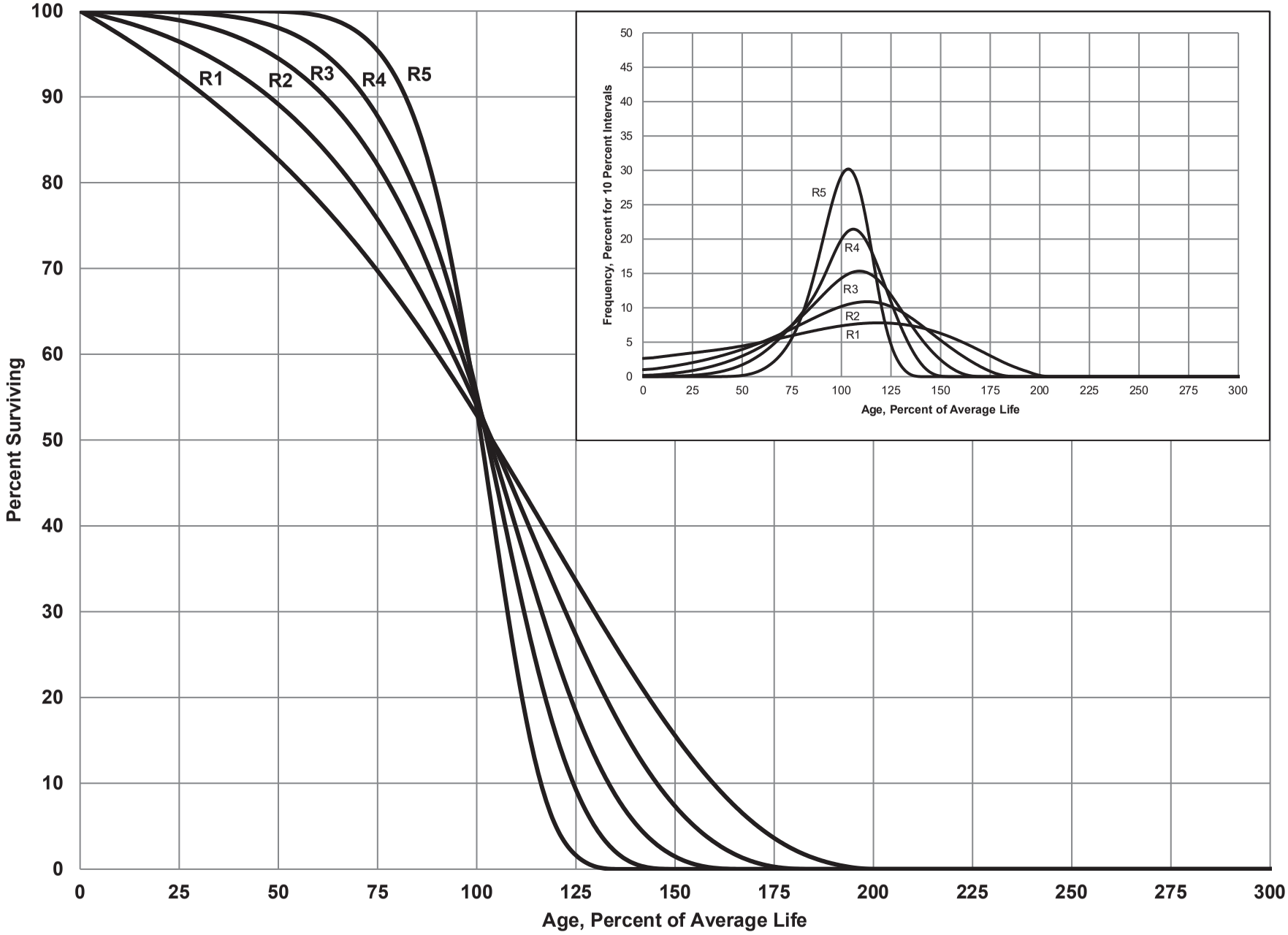

FIGURE 4. RIGHT MODAL OR "R" IOWA TYPE SURVIVOR CURVES

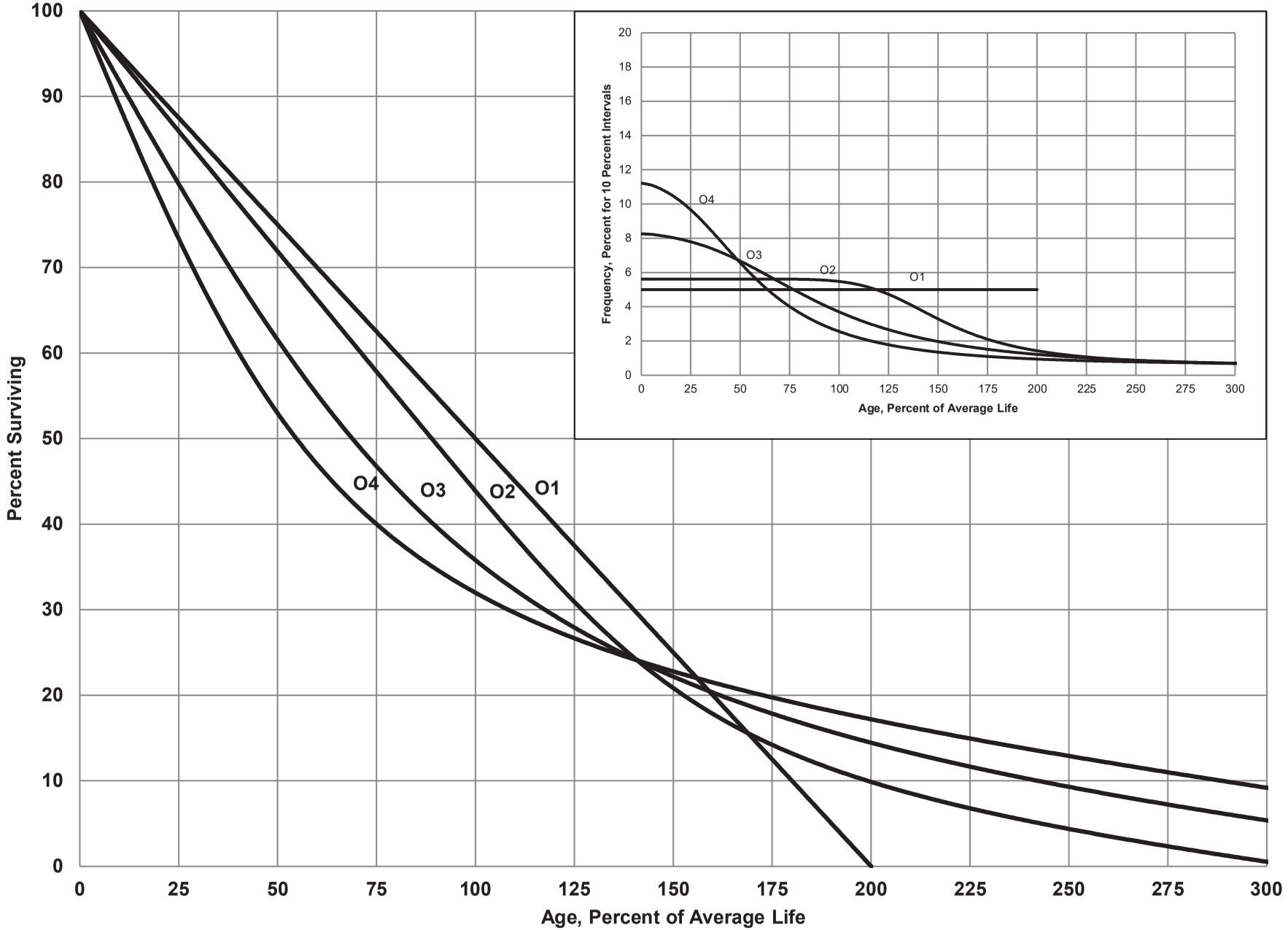

FIGURE 5. ORIGIN MODAL OR "O" IOWA TYPE SURVIVOR CURVES

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.

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

The total retirements occurring in each age interval in a band are determined by summing the amounts for each transaction year-installation year combination for that age interval. For example, the total of $143,000 retired for age interval 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 2013 retirements of 2008 installations and ending with the 2022 retirements of the 2017 installations. Thus, the total amount of 143 for age interval 4½-5½ equals the sum of:

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

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

Experience Band 2013-2022 Placement Band 2008-2022

Year Placed	Retirements, Thousands of Dollars During Year										Total During Age Interval	Age Interval
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2008	10	11	12	13	14	16	23	24	25	26	26	13½-14½
2009	11	12	13	15	16	18	20	21	22	19	44	12½-13½
2010	11	12	13	14	16	17	19	21	22	18	64	11½-12½
2011	8	9	10	11	11	13	14	15	16	17	83	10½-11½
2012	9	10	11	12	13	14	16	17	19	20	93	9½-10½
2013	4	9	10	11	12	13	14	15	16	20	105	8½-9½
2014		5	11	12	13	14	15	16	18	20	113	7½-8½
2015			6	12	13	15	16	17	19	19	124	6½-7½
2016				6	13	15	16	17	19	19	131	5½-6½
2017					7	14	16	17	19	20	143	4½-5½
2018						8	18	20	22	23	146	3½-4½
2019							9	20	22	25	150	2½-3½
2020								11	23	25	151	1½-2½
2021									11	24	153	½-1½
2022										13	80	0-½
Total	53	68	86	106	128	157	196	231	273	308	1,606	

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

Experience Band 2013-2022 Placement Band 2008-2022

Year Placed	Acquisitions, Transfers and Sales, Thousands of Dollars During Year										Total During Age Interval	Age Interval
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2008	-	-	-	-	-	-	60[a]	-	-	-	-	13½-14½
2009	-	-	-	-	-	-	-	-	-	-	-	12½-13½
2010	-	-	-	-	-	-	-	-	-	-	-	11½-12½
2011	-	-	-	-	-	-	-	(5)[b]	-	-	60	10½-11½
2012	-	-	-	-	-	-	-	6[a]	-	-	-	9½-10½
2013	-	-	-	-	-	-	-	-	-	-	(5)	8½-9½
2014		-	-	-	-	-	-	-	-	-	6	7½-8½
2015			-	-	-	-	-	-	-	-	-	6½-7½
2016				-	-	-	-	(12)[b]	-	-	-	5½-6½
2017					-	-	-	-	22[a]	-	-	4½-5½
2018						-	-	(19)[b]	-	-	10	3½-4½
2019							-	-	-	-	-	2½-3½
2020								-	-	(102)[c]	(121)	1½-2½
2021									-	-	-	½-1½
2022											-	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 2013 through 2022 is recorded by year in the portion of the table headed "Annual Survivors at the Beginning of the Year." The last amount entered in each column is the amount of new plant added to the group during the year. The amounts entered in Schedule 3 for each successive year following the beginning balance or addition are obtained by adding or subtracting the net entries shown on Schedules 1 and 2. For the purpose of determining the plant exposed to retirement, transfers-in are considered as being exposed to retirement in this group at the beginning of the year in which they occurred, and the sales and transfers-out are considered to be removed from the plant exposed to retirement at the beginning of the following year. Thus, the amounts of plant shown at the beginning of each year are the amounts of plant from each placement year considered to be exposed to retirement at the beginning of each successive transaction year. For example, the exposures for the installation year 2018 are calculated in the following manner:

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

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

Experience Band 2013-2022 Placement Band 2008-2022

Year Placed	Exposures, Thousands of Dollars Annual Survivors at the Beginning of the Year 2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total at Beginning of Age Interval	Age Interval
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2008	255	245	234	222	209	195	239	216	192	167	167	13½-14½
2009	279	268	256	243	228	212	194	174	153	131	323	12½-13½
2010	307	296	284	271	257	241	224	205	184	162	531	11½-12½
2011	338	330	321	311	300	289	276	262	242	226	823	10½-11½
2012	376	367	357	346	334	321	307	297	280	261	1,097	9½-10½
2013	420[a]	416	407	397	386	374	361	347	332	316	1,503	8½-9½
2014		460[a]	455	444	432	419	405	390	374	356	1,952	7½-8½
2015			510[a]	504	492	479	464	448	431	412	2,463	6½-7½
2016				580[a]	574	561	546	530	501	482	3,057	5½-6½
2017					660[a]	653	639	623	628	609	3,789	4½-5½
2018						750[a]	742	724	685	663	4,332	3½-4½
2019							850[a]	841	821	799	4,955	2½-3½
2020								960[a]	949	926	5,719	1½-2½
2021									1,080[a]	1,069	6,579	½-1½
2022										1,220[a]	7,490	0-½
Total	1,975	2,382	2,824	3,318	3,872	4,494	5,247	6,017	6,852	7,799	44,780	

[a]Additions during the year

For the entire experience band 2013-2022, the total exposures at the beginning of an age interval are obtained by summing diagonally in a manner similar to the summing of the retirements during an age interval (Schedule 1). For example, the figure of 3,789, shown as the total exposures at the beginning of age interval 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 2013-2022 Placement Band 2008-2022

(Exposure and Retirement Amounts are in Thousands of Dollars)

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

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

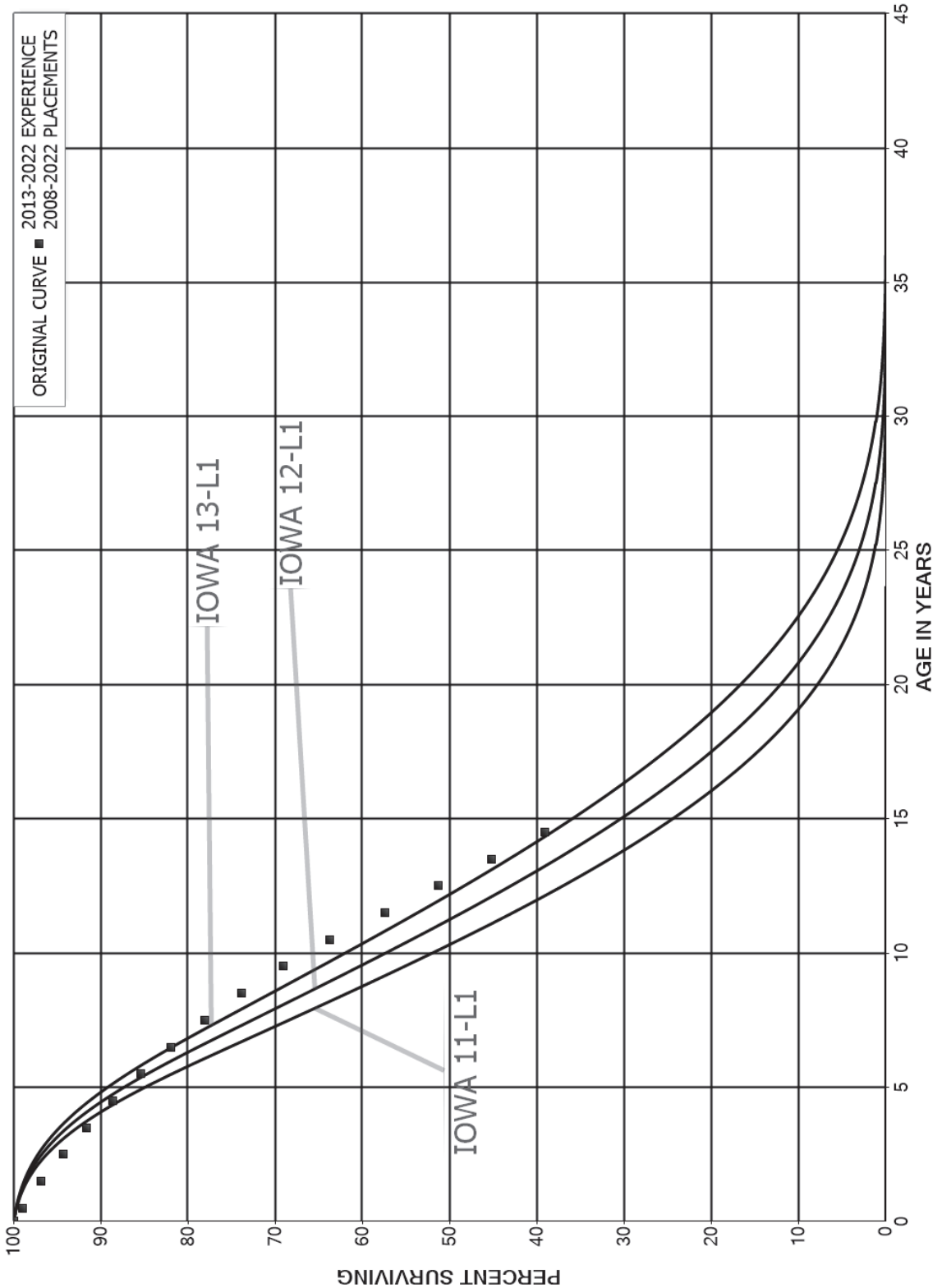


FIGURE 7. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN S0 IOWA TYPE CURVE
ORIGINAL AND SMOOTH SURVIVOR CURVES

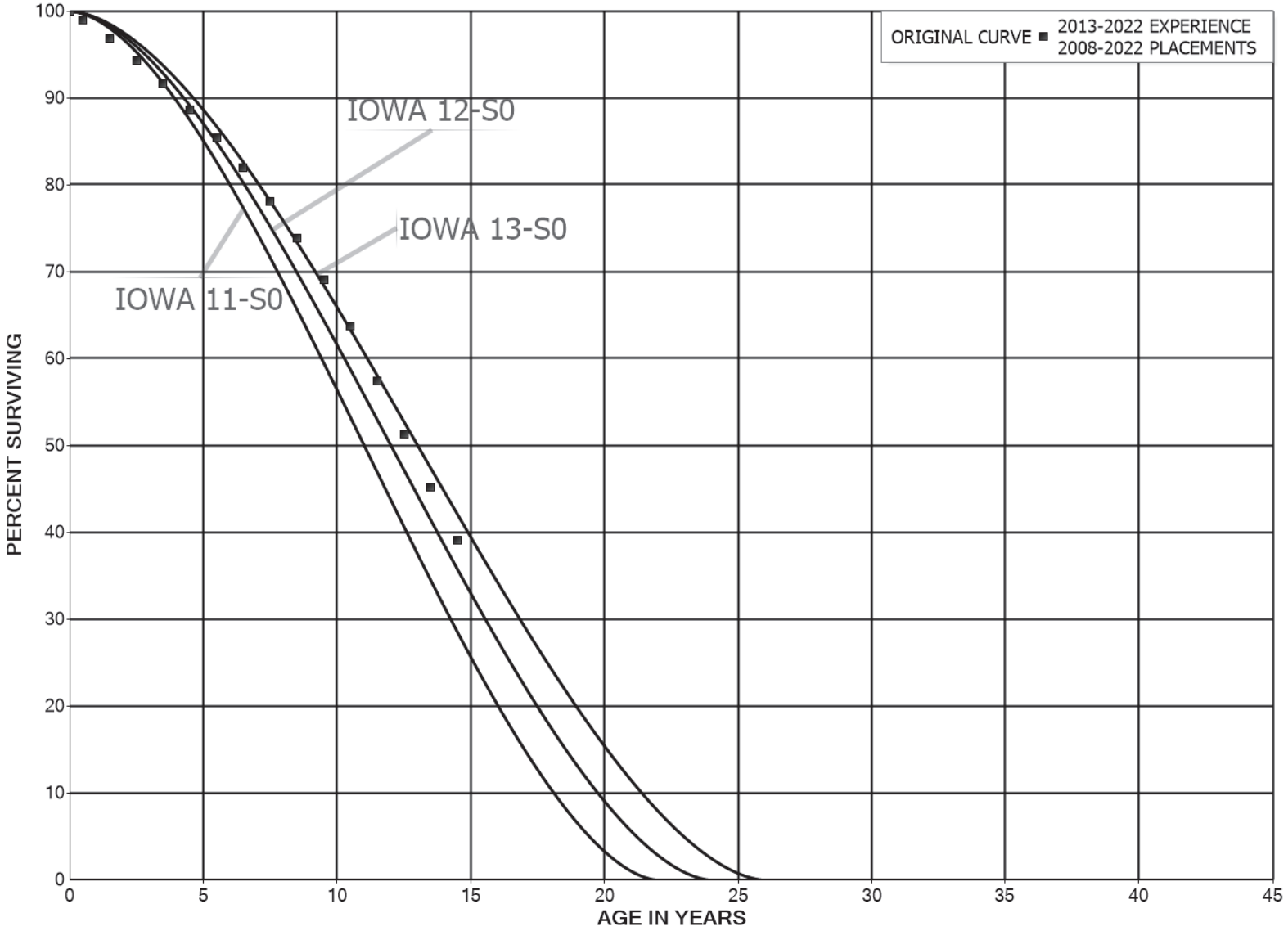


FIGURE 8. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN R1 IOWA TYPE CURVE
ORIGINAL AND SMOOTH SURVIVOR CURVES

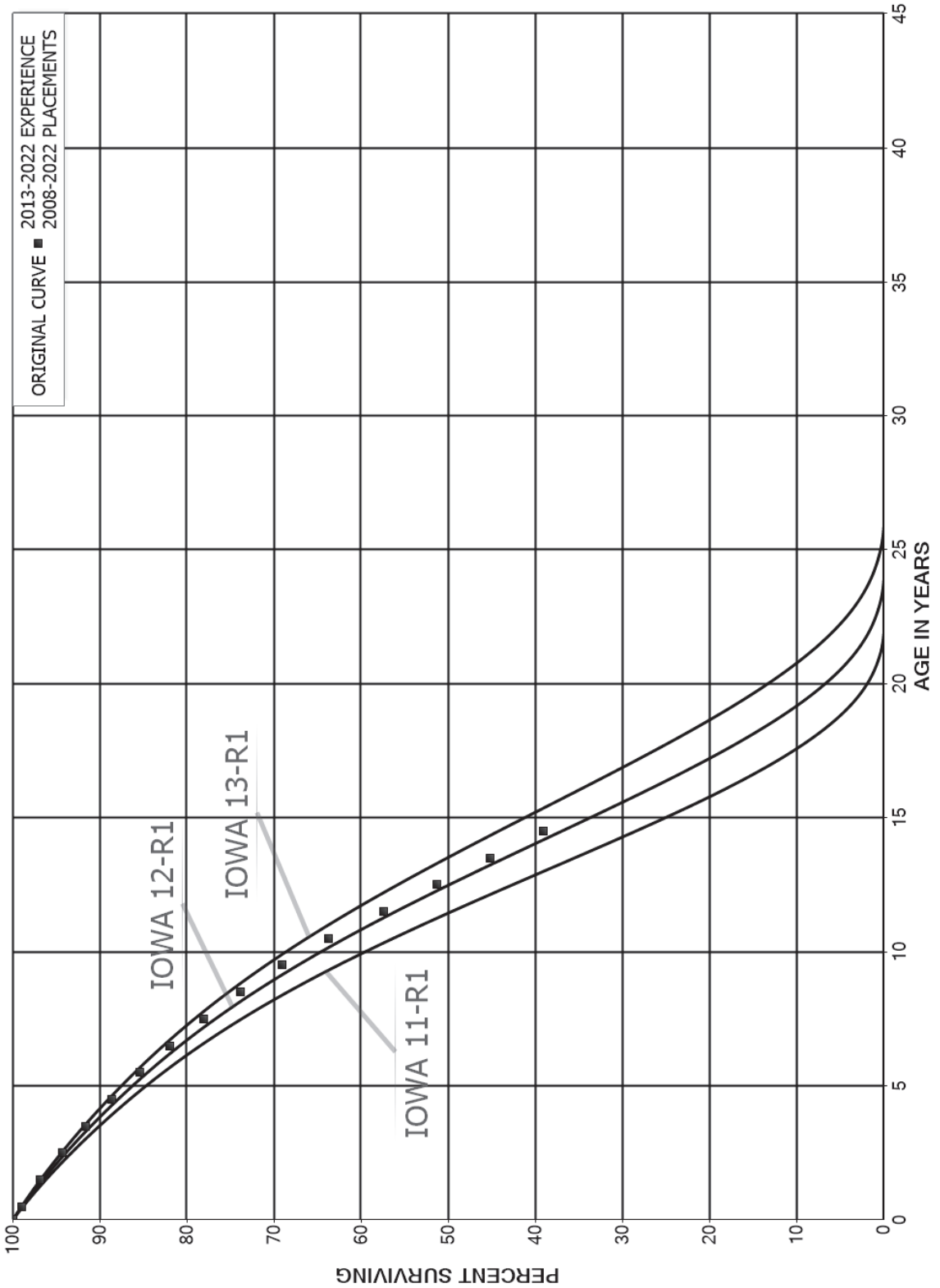
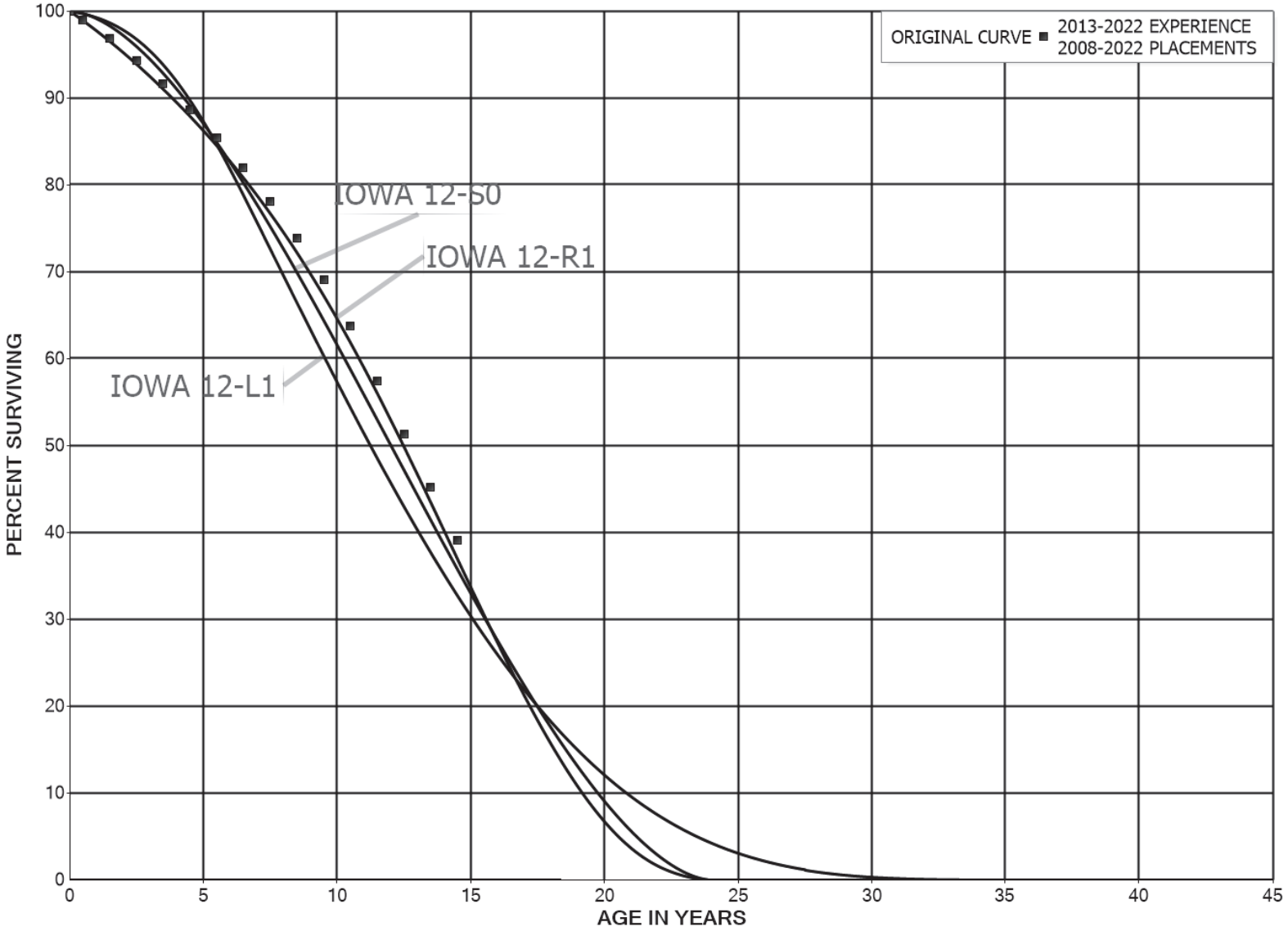


FIGURE 9. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN L1, S0 AND R1 IOWA TYPE CURVE
ORIGINAL AND SMOOTH SURVIVOR CURVES



PART III. SERVICE LIFE CONSIDERATIONS

PART III. SERVICE LIFE CONSIDERATIONS

FIELD TRIPS

In order to be familiar with the operation of the Company and observe representative portions of the plant, a field trip 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 initial field trip.

November 30, 2022

Aberdeen Generating Station
Huron Generating Station
Bob Glanzer Generating Station
Huron Office

SERVICE LIFE ANALYSIS

The service life estimates were based on informed judgment which considered a number of factors. The primary factors were the statistical analyses of data; current Company policies and outlook as determined during conversations with management; and the survivor curve estimates from previous studies of this company and other electric and 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 reasonable indications of the survivor patterns experienced. These accounts represent 82 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.

ELECTRIC PLANT

Steam Production Plant
- 311.00 Structures and Improvements
- 312.00 Boiler Plant Equipment
- 314.00 Turbogenerator Units
- 315.00 Accessory Electric Equipment

Other Production Plant
- 341.00 Structures and Improvements
- 342.00 Fuel Holders, Producers and Accessories
- 343.00 Prime Movers
- 345.00 Accessory Electric Equipment
- 346.00 Miscellaneous Power Plant Equipment

Transmission Plant
- 352.00 Structures and Improvements
- 353.00 Station Equipment
- 355.00 Poles and Fixtures
- 356.00 Overhead Conductors and Devices

Distribution Plant
- 362.00 Station Equipment
- 364.00 Poles, Towers and Fixtures
- 365.00 Overhead Conductors and Devices
- 366.00 Underground Conduit
- 367.00 Underground Conductors and Devices
- 368.00 Line Transformers
- 369.10 Overhead Services
- 369.20 Underground Services
- 370.00 Meters
- 371.00 Installations on Customers' Premises
- 373.00 Street Lighting and Signal Systems

General Plant
- 390.10 Structures and Improvements
- 392.20 Transportation Equipment – Trailers
- 392.30 Transportation Equipment – Automobiles
- 392.40 Transportation Equipment – Heavy Trucks
- 392.50 Transportation Equipment – Light Trucks
- 396.00 Power Operated Equipment
- 397.20 Communication Equipment

GAS PLANT

Production Plant
311.00 Liquefied Petroleum Gas Equipment

Distribution Plant
376.11 Mains – Steel
376.30 Mains – Plastic
378.00 Measuring and Regulating Station Equipment
379.00 Measuring and Regulating Station Equipment – City Gate
380.00 Services – Steel
380.10 Services – Plastic
381.00 Meters and Regulators

General Plant
390.10 Structures and Improvements
397.20 Communication Equipment – Nebraska

COMMON PLANT

General Plant
392.00 Transportation Equipment – Automobiles
392.10 Transportation Equipment – Heavy Trucks
392.20 Transportation Equipment – Light Trucks
392.60 Transportation Equipment – Aircraft
396.00 Power Operated Equipment

Electric Plant Account 362.00 Station Equipment, is used to illustrate the manner in which the study was conducted for the groups in the preceding list. Aged plant accounting data for the transmission plant originally owned by NorthWestern Energy have been compiled for the years 1990 through 2022. These data have been coded in the course of the Company's normal record keeping according to account or property group, type of transaction, year in which the transaction took place, and year in which the electric plant was placed in service. The retirements, other plant transactions, and plant additions were analyzed by the retirement rate method.

The survivor curve estimate is based on the statistical indications for the period 1990 through 2022. The Iowa 48-R2.5 is a good fit of the stub original survivor of station equipment. The 48-year service life is within the typical service life range of 40 to 55 years

for station equipment. The 48-year life reflects the Company's plans to continue to upgrade equipment when necessary with expectations that some assets will be in service for a long time. The previous estimate for this account was a 45-S1 survivor curve.

The survivor curve estimate for Electric Account 364, Poles, Towers and Fixtures, is based on the statistical indications for the period 1990-2022. The Iowa 40-R3 is a reasonable fit of the original survivor curve. The 40-year service life is at the lower end of the typical service life range of 40 to 60 years for distribution poles. The 40-year life reflects the Company's plans to replace poles consistently in the future as has been retired over the last thirty-three years. The previous estimate was a 37-R4 survivor curve.

The survivor curve estimate for Electric Account 368, Line Transformers, is the 45-R2.5 and is based on the statistical indication for the period 1990-2022. The previous estimate for this account is 50-L1.5. Assets in this account primarily include transformers, both pole mounted and pad mounted. Retirements are often due to failure, but also occur due to upgrades required to meet the load. The 45-R2.5 represents a reasonable fit of the historical data through age 70, as shown on page VII-82; is consistent with management outlook for a continuation of the historical experience; and is at the upper end of the typical range of service lives experienced for line transformers.

Analysis for Account 380.00, Services, is used to provide an example for gas assets. The survivor curve estimate is the 42-R2 and is based on the statistical indications for the period 1990-2022. The previous estimate for this account is the 40-S3. Assets in this account represent various steel services. Most retirements are due to changes with the associated mains, or leaks. The 42-R2 survivor curve sets forth a good

fit of the historical data through age 72, as shown on page VII-131, is consistent with management plans and within the typical 40-55 year range experienced for gas services.

The statistical analyses for the foregoing plant accounts are presented in Part VII of the report. The survivor curve estimates for the remaining accounts were based on judgment incorporating the statistical analyses and previous studies for this and other electric and 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 electric and gas companies.

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

Life Span Estimates

The life span method is appropriate for some electric production facilities in which all assets at the facility are expected to be retired concurrently upon the final retirement of the facility. The life span estimates for these facilities were based on current Company policies and outlook as determined during field review, discussions with management and the range of estimates from other electric utility companies.

Inasmuch as production plant consists of large generating units, the life span technique was employed in conjunction with the use of interim survivor curves which reflect interim retirements that occur prior to the ultimate retirement of the major unit. An interim survivor curve was estimated for each plant account, since the rate of interim retirements differs from account to account. The interim survivor curves estimated were

based on the retirement rate method of life analysis which incorporated experienced retirements for the period 1990 through 2022 for steam production plant, and 2015 through 2022 for wind production plant.

The life span estimates for power generating stations were the result of considering experienced life spans of similar units, the age of survivor units, general operating characteristics of the units, major refurbishing, and discussions with management personnel concerning the probable long-term outlook for the units, and the estimate of the operating partner, if applicable.

The life span estimate for the steam plant, base-load units are 59 to 70 years, which is on the upper end of the typical 50- to 65-year range of life spans expected for such units. In recent years, though, steam facilities have been consistently retired with life spans of 45-50 years. These life spans represent the expected depreciable life of each facility under their current configuration. Future capital expenditures can extend a facility's depreciable life, however, such changes to the depreciable life may not be prudent until the capital expenditures are actually put into plant in service. The life span for wind assets is 25 years, which is within the industry range for similarly designed facilities. The life span for the combustion turbine at Bob Glanzer is 35 years which is withing the industry range of 30-40 years for units recently placed in service.

A summary of the major year in service, probable retirement date and life span for each unit follows:

Depreciable Group	Major Year Service	Probable Retirement Year	Life Span
Steam Production Plant			
Big Stone	1976,1982	2046	70, 64
Neal 4	1981	2040	59
Coyote	1981	2041	60
Other Production Plant			
Beethoven Wind	2015	2040	25
Bob Glanzer	2022	2057	35

PART IV. NET SALVAGE CONSIDERATIONS

PART IV. NET SALVAGE CONSIDERATIONS

NET SALVAGE ANALYSIS

The estimates of net salvage by account were based in part on historical data compiled through 2022. 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 gross 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 1990 through 2022 contributed significantly toward the net salvage estimates for many plant accounts or subaccounts, representing 83 percent of the depreciable plant, listed below.

ELECTRIC PLANT

Steam Production Plant

311.00	Structures and Improvements
312.00	Boiler Plant Equipment
314.00	Turbogenerator Units
315.00	Accessory Electric Equipment
316.00	Miscellaneous Power Plant Equipment

Other Production Plant

341.00	Structures and Improvements
342.00	Fuel Holders, Producers and Accessories
343.00	Prime Movers
344.00	Generators
345.00	Accessory Electric Equipment
346.00	Miscellaneous Power Plant Equipment

Transmission Plant

352.00	Structures and Improvements
353.00	Station Equipment
355.00	Poles and Fixtures
356.00	Overhead Conductors and Devices

Distribution Plant

362.00	Station Equipment
364.00	Poles, Towers and Fixtures
365.00	Overhead Conductors and Devices
366.00	Underground Conduit
367.00	Underground Conductors and Devices
368.00	Line Transformers
369.10	Overhead Services
369.20	Underground Services
370.00	Meters
371.00	Installations on Customers' Premises
373.00	Street Lighting and Signal Systems

General Plant

390.10	Structures and Improvements
392.20	Transportation Equipment – Trailers
392.30	Transportation Equipment – Automobiles
392.40	Transportation Equipment – Heavy Trucks
392.50	Transportation Equipment – Light Trucks
396.00	Power Operated Equipment

GAS PLANT

Distribution Plant

376.11	Mains - Steel
376.30	Mains - Plastic
378.00	Measuring and Regulating Station Equipment
379.00	Measuring and Regulating Station Equipment - City Gate
380.00	Services – Steel
380.10	Services - Plastic
381.00	Meters and Regulators

General Plant

390.10	Structures and Improvements
392.30	Transportation Equipment – Automobiles
392.40	Transportation Equipment – Heavy Trucks
392.50	Transportation Equipment – Light Trucks
396.00	Power Operated Equipment

COMMON PLANT

General Plant

390.10	Structures and Improvements
392.00	Transportation Equipment – Automobiles
392.10	Transportation Equipment – Heavy Trucks
392.20	Transportation Equipment – Light Trucks
392.60	Transportation Equipment – Aircraft
396.00	Power Operated Equipment

Electric Plant Account 367.00, Underground Conductors and Devices, is used to illustrate the manner in which the study was conducted for the groups in the preceding list. Net salvage data for the period 1990 through 2022 were analyzed for this account. The data include cost of removal, gross salvage and net salvage amounts and each amount is expressed as a percent of the original cost of regular retirements. Three-year moving averages for the 1990-1992 through 2020-2022 periods were computed to smooth the annual amounts.

Cost of removal fluctuated during the 33-year period. The primary cause of cost of removal was the effort needed to retire the underground conductor. Cost of removal

for the overall periods has averaged 20 percent and the most recent five years averaged 22 percent. The cost of removal has been relatively consistent since 2012.

Gross salvage was recorded at a reasonable level through the 1990s, however it has been low in the last 20 years. The most recent five-year average of 0 percent gross salvage is typical for what would be expected for underground conductors. The net salvage percent based on the overall period 1990 through 2022 is 18 percent negative net salvage and based on the most recent five-year period is negative 22 percent. The range of estimates made by other electric companies for underground conductors and devices is negative 10 to negative 30 percent. The net salvage estimate for underground conductors is negative 20 percent, is within the range of other estimates and reflects expectations of the future for negative net salvage.

For Electric Account 364.00, Poles, Towers and Fixtures, cost of removal fluctuated throughout the period with high levels from 2013 through 2017 then trended to a lower level since 2018. The primary cause of the high level of cost of removal was the required effort needed to take out the poles and towers. Cost of removal for the most recent five years averaged 65 percent.

Gross salvage was generally high through the 1990s, then has been minimal for the last twenty years. The most recent five-year average of 0 percent gross salvage reflects recent trends and the reduced market for poles.

The net salvage percent based on the overall period 1990 through 2022 is 84 percent negative net salvage and based on the most recent five-year period is 65 percent. The range of estimates made by other electric companies for Poles, Towers and Fixtures is negative 20 to negative 120 percent. The net salvage estimate for distribution poles is

negative 80 percent, is within the range of other estimates but does not reflect the recent trend toward lower negative net salvage due to the expectation that costs will once again increase for pole removal.

The overall net salvage percent for steam production, wind production and the Bob Glanzer facility include costs for final retirement. The calculation of the weighted net salvage percent includes costs by unit for final retirement as well as interim retirements prior to final retirement. The overall net salvage for each production facility combines the interim net salvage amount with the final dismantlement amount factored to the total plant cost. The calculation for each facility is set forth on pages VIII-2 and VIII-3 of this study.

The net salvage estimates for the remaining plant accounts were estimated using the above-described process of historical indications, judgment and reviewing the typical range of estimates used by other electric and gas companies. The results of the net salvage for each plant account are presented in account sequence in the section titled “Net Salvage Statistics”, beginning on page VIII-4.

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, which was used in this study, the rate of annual depreciation is based on the average life or average remaining life of the group, and this rate is applied to the surviving balances of the group's cost. A characteristic of this procedure is that the cost of plant retired prior to average life is not fully recouped at the time of retirement, whereas the cost of plant retired subsequent to average life is more than fully recouped. Over the entire life cycle, the portion of cost not recouped prior to average life is balanced by the cost recouped subsequent to average life.

Single Unit of Property

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

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

The accrued depreciation is:

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

Remaining Life Annual Accruals

For the purpose of calculating remaining life accruals as of December 31, 2022, the depreciation reserve for each plant account is allocated among vintages in proportion to the calculated accrued depreciation for the account. Explanations of remaining life accruals and calculated accrued depreciation follow. The detailed calculations as of December 31, 2022, 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 depreciation 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 utility plant in service. The accounts and their amortization periods are as follows:

ACCOUNT	TITLE	AMORTIZATION PERIOD, YEARS
Electric Plant		
391.00	Office Furniture and Equipment	20
394.00	Tools, Shop and Garage Equipment	15
397.00	Communication Equipment – 10-Year	10
Gas Plant		
391.00	Office Furniture and Equipment	20
391.50	Office Furniture and Equipment – Computers – 5-Year	5
394.00	Tools, Shop and Garage Equipment	15
397.45	Communication Equipment – 10-Year	10

ACCOUNT	TITLE	AMORTIZATION PERIOD, YEARS
Common Plant		
391.00	Office Furniture and Equipment	20
391.10	Office Furniture and Equipment – Computers – 10 Year	10
391.50	Office Furniture and Equipment – Computers – 5 Year	5
393.00	Stores Equipment	20
394.00	Tools, Shop and Garage Equipment	15
397.00	Communication Equipment – 10-Year	10
398.00	Miscellaneous Equipment	20

For the purpose of calculating annual amortization amounts as of December 31, 2022, 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 electric, gas and common plant in service as of December 31, 2022. For most plant accounts, the application of such rates to future balances that reflect additions subsequent to December 31, 2022 is reasonable for a period of up to five years.

DESCRIPTION OF DETAILED TABULATIONS

Table 1 is a summary of the results of the study as applied to the original cost of electric, gas and common plant respectively, as of December 31, 2022. The summary schedules are presented on pages VI-4 through VI-7 of this report.

The service life estimates were based on judgment that incorporated statistical analysis of retirement data, discussions with management and consideration of estimates made for other electric and 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 is followed by a tabular presentation of the original life table(s) plotted on the chart. The survivor curves estimated for the depreciable groups are shown as dark smooth curves on the charts. Each smooth survivor curve is denoted by a numeral followed by the curve type designation. The numeral used is the average life derived from the entire curve from 100 percent to zero percent surviving. The titles of the chart indicate the group, the symbol used to plot the points of the original life table, and the experience and placement bands of the life tables which where plotted. The experience band indicates the range of years for which retirements were used to develop the stub survivor curve. The placements indicate, for the related experience band, the range of years of installations which appear in the experience.

The analyses of net 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 December 31, 2022 are presented in account sequence starting on page IX-3 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.

NORTHWESTERN ENERGY

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, NET SALVAGE PERCENT, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO ELECTRIC, GAS AND COMMON PLANT AS OF DECEMBER 31, 2022

	ACCOUNT	PROBABLE RETIREMENT DATE	SURVIVOR CURVE		NET SALVAGE PERCENT	ORIGINAL COST AS OF DECEMBER 31, 2022	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)	(3)		(4)	(5)	(6)	(7)	(8)	(9)=(8)/(5)	(10)=(7)/(8)
	ELECTRIC PLANT										
	STEAM PRODUCTION PLANT										
311.00	STRUCTURES AND IMPROVEMENTS										
	BIG STONE	12-2046	90-S1	*	(4)	9,877,979.39	9,264,568	1,008,531	43,496	0.44	23.2
	NEAL 4	12-2040	90-S1	*	(4)	7,362,870.70	3,787,042	3,870,344	220,513	2.99	17.6
	COYOTE	12-2041	90-S1	*	(5)	10,031,491.09	8,690,671	1,842,394	101,203	1.01	18.2
	TOTAL STRUCTURES AND IMPROVEMENTS					27,272,341.18	21,742,281	6,721,269	365,212	1.34	18.4
312.00	BOILER PLANT EQUIPMENT										
	BIG STONE	12-2046	45-R1	*	(4)	125,850,218.40	20,819,535	110,064,692	5,302,797	4.21	20.8
	NEAL 4	12-2040	45-R1	*	(4)	42,754,692.24	24,670,908	19,793,972	1,231,221	2.88	16.1
	COYOTE	12-2041	45-R1	*	(5)	31,300,264.10	22,550,151	10,315,126	641,472	2.05	16.1
	TOTAL BOILER PLANT EQUIPMENT					199,905,174.74	68,040,595	140,173,790	7,175,490	3.59	19.5
314.00	TURBOGENERATOR UNITS										
	BIG STONE	12-2046	65-S0	*	(4)	14,126,122.22	10,079,358	4,611,809	211,684	1.50	21.8
	NEAL 4	12-2040	65-S0	*	(4)	5,948,842.29	3,961,262	2,225,534	132,635	2.23	16.8
	COYOTE	12-2041	65-S0	*	(5)	6,536,982.73	4,824,729	2,039,103	116,854	1.79	17.5
	TOTAL TURBOGENERATOR UNITS					26,611,947.24	18,865,348	8,876,446	461,173	1.73	19.3
315.00	ACCESSORY ELECTRIC EQUIPMENT										
	BIG STONE	12-2046	65-R3	*	(4)	4,042,544.55	2,503,418	1,700,828	81,746	2.02	20.8
	NEAL 4	12-2040	65-R3	*	(4)	6,071,036.92	3,201,872	3,112,006	179,423	2.96	17.3
	COYOTE	12-2041	65-R3	*	(5)	3,024,637.57	2,545,265	630,604	35,089	1.16	18.0
	TOTAL ACCESSORY ELECTRIC EQUIPMENT					13,138,219.04	8,250,555	5,443,438	296,258	2.25	18.4
316.00	MISCELLANEOUS POWER PLANT EQUIPMENT										
	BIG STONE	12-2046	40-L0.5	*	(4)	1,507,506.62	217,452	1,350,355	77,596	5.15	17.4
	NEAL 4	12-2040	40-L0.5	*	(4)	894,232.56	225,716	704,286	44,892	5.02	15.7
	COYOTE	12-2041	40-L0.5	*	(5)	698,635.16	343,829	389,738	24,452	3.50	15.9
	TOTAL MISCELLANEOUS POWER PLANT EQUIPMENT					3,100,374.34	786,997	2,444,379	146,940	4.74	16.6
	TOTAL STEAM PLANT					**270,028,056.54**	**117,685,776**	**163,659,322**	**8,445,073**	**3.13**	**19.4**
	OTHER PRODUCTION PLANT										
341.00	STRUCTURES AND IMPROVEMENTS		45-R2.5		(10)	12,243,344.57	1,834,635	11,633,044	344,452	2.81	33.8
342.00	FUEL HOLDERS, PRODUCERS AND ACCESSORIES		50-R2.5		(10)	3,408,227.16	884,719	2,864,330	77,824	2.28	36.8
342.10	FUEL HOLDERS, PRODUCERS AND ACCESSORIES - PIPELINES		45-S1.5		(5)	1,408,975.51	256,434	1,222,990	35,103	2.49	34.8
342.20	FUEL HOLDERS, PRODUCERS AND ACCESSORIES - COMPRESSORS		50-R2.5		(5)	487,130.49	125,184	386,303	9,586	1.97	40.3
343.00	PRIME MOVERS		50-R2		(20)	42,989,355.79	13,628,429	37,958,798	970,914	2.26	39.1
344.00	GENERATORS		35-R2.5		(5)	7,936,369.48	1,454,075	6,879,113	260,031	3.28	26.5
345.00	ACCESSORY ELECTRIC EQUIPMENT		35-R2.5		(5)	3,267,175.56	640,123	2,790,411	112,742	3.45	24.8
346.00	MISCELLANEOUS POWER PLANT EQUIPMENT		35-S1		0	7,240,608.18	652,952	6,587,656	204,055	2.82	32.3
	TOTAL OTHER PRODUCTION					78,981,186.74	19,476,552	70,322,645	2,014,707	2.55	34.9
	BOB GLANZER										
343.00	PRIME MOVERS	06-2057	50-R2	*	(4)	85,629,724.55	1,426,609	87,628,305	2,744,388	3.20	31.9
	TOTAL BOB GLANZER					85,629,724.55	1,426,609	87,628,305	2,744,388	3.20	31.9

NORTHWESTERN ENERGY

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, NET SALVAGE PERCENT, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO ELECTRIC, GAS AND COMMON PLANT AS OF DECEMBER 31, 2022

	ACCOUNT	PROBABLE RETIREMENT DATE	SURVIVOR CURVE		NET SALVAGE PERCENT	ORIGINAL COST AS OF DECEMBER 31, 2022	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)	(3)		(4)	(5)	(6)	(7)	(8)	(9)=(8)/(5)	(10)=(7)/(8)
	WIND PRODUCTION										
341.10	STRUCTURES AND IMPROVEMENTS	08-2040	45-R3	*	(1)	14,557,823.03	4,393,943	10,309,458	598,343	4.11	17.2
344.10	GENERATORS	08-2040	30-S1	*	(1)	79,926,258.87	24,146,576	56,578,946	3,712,529	4.64	15.2
345.10	ACCESSORY ELECTRIC EQUIPMENT	08-2040	30-R2.5	*	(1)	4,648,825.15	1,303,009	3,392,304	212,135	4.56	16.0
346.10	MISCELLANEOUS POWER PLANT EQUIPMENT	08-2040	35-S1	*	(1)	15,463,275.85	4,522,221	11,095,687	694,496	4.49	16.0
						114,596,182.90	34,365,750	81,376,395	5,217,503	4.55	15.6
	TOTAL OTHER PRODUCTION PLANT					**279,207,094.19**	**55,268,911**	**239,327,345**	**9,976,598**	**3.57**	**24.0**
	TRANSMISSION PLANT										
352.00	STRUCTURES AND IMPROVEMENTS		65-R3		(10)	12,393,490.30	2,245,878	11,386,961	206,370	1.67	55.2
353.00	STATION EQUIPMENT		48-R2		(20)	101,755,312.95	23,161,996	98,944,379	2,813,760	2.77	35.2
355.00	POLES AND FIXTURES		60-R2.5		(120)	61,186,933.57	39,348,000	95,263,254	2,100,142	3.43	45.4
356.00	OVERHEAD CONDUCTORS AND DEVICES		56-R1		(40)	33,204,076.05	12,406,422	34,079,285	845,544	2.55	40.3
357.00	UNDERGROUND CONDUIT		55-R3		0	640,801.68	189,739	451,063	11,254	1.76	40.1
358.00	UNDERGROUND CONDUCTORS AND DEVICES		40-R4		(5)	4,705,624.22	1,525,276	3,415,630	113,519	2.41	30.1
	TOTAL TRANSMISSION					**213,886,238.77**	**78,877,311**	**243,540,572**	**6,090,589**	**2.85**	**40.0**
	DISTRIBUTION PLANT										
361.00	STRUCTURES AND IMPROVEMENTS		60-R4		(5)	1,484,027.32	316,730	1,241,499	24,446	1.65	50.8
362.00	STATION EQUIPMENT		48-R2.5		(15)	47,142,419.29	12,796,695	41,417,088	1,278,542	2.71	32.4
364.00	POLES, TOWERS AND FIXTURES		40-R3		(80)	58,931,418.65	32,083,351	73,993,203	2,651,269	4.50	27.9
365.00	OVERHEAD CONDUCTORS AND DEVICES		30-R0.5		(25)	21,791,407.03	2,836,943	24,402,316	1,333,007	6.12	18.3
366.00	UNDERGROUND CONDUIT		50-R3		(10)	11,060,486.31	3,705,082	8,461,452	247,436	2.24	34.2
367.00	UNDERGROUND CONDUCTORS AND DEVICES		35-R2		(20)	63,436,946.49	17,884,146	58,240,190	2,370,569	3.74	24.6
368.00	LINE TRANSFORMERS		45-R2.5		(5)	43,311,582.32	11,090,419	34,386,743	1,151,413	2.66	29.9
369.10	OVERHEAD SERVICES		42-R2		(50)	16,306,675.15	11,409,971	13,050,041	552,304	3.39	23.6
369.20	UNDERGROUND SERVICES		42-R2		(50)	6,111,778.62	169,373	8,998,295	236,369	3.87	38.1
370.00	METERS		14-L1		(10)	513,860.02	81,006	484,240	55,426	10.79	8.7
370.30	METERS - AMI		15-S2.5		(10)	13,491,068.37	2,795,500	12,044,675	1,028,181	7.62	11.7
371.00	INSTALLATIONS ON CUSTOMERS' PREMISES		10-L0.5		(10)	91,822.02	5,137	95,867	12,053	13.13	8.0
371.50	LED YARD LIGHTS		20-L2.5		(10)	654,265.64	0	719,692	36,907	5.64	19.5
373.00	STREET LIGHTING AND SIGNAL SYSTEMS		40-R4		(60)	9,383,596.27	5,721,748	9,292,006	448,346	4.78	20.7
373.50	LED STREET LIGHTS		20-L2.5		(60)	77,488.60	0	123,982	6,358	8.21	19.5
	TOTAL DISTRIBUTION PLANT					**293,788,842.10**	**100,896,102**	**286,951,289**	**11,432,626**	**3.89**	**25.1**
	GENERAL PLANT										
390.10	STRUCTURES AND IMPROVEMENTS		55-S0.5		(5)	1,843,953.52	1,009,024	927,128	19,366	1.05	47.9
391.00	OFFICE FURNITURE AND EQUIPMENT		20-SQ		0	7,069.51	4,184	2,886	292	4.13	9.9
392.20	TRANSPORTATION EQUIPMENT - TRAILERS		20-L2		10	917,618.84	525,857	300,000	20,659	2.25	14.5
392.30	TRANSPORTATION EQUIPMENT - AUTOMOBILES		8-L2.5		5	85,414.00	65,955	15,189	4,809	5.63	3.2
392.40	TRANSPORTATION EQUIPMENT - HEAVY TRUCKS		16-L2.5		10	13,480,639.07	3,626,769	8,505,806	870,938	6.46	9.8
392.50	TRANSPORTATION EQUIPMENT - LIGHT TRUCKS		14-L2.5		10	2,583,322.61	2,012,634	312,356	25,677	0.99	12.2
394.00	TOOLS, SHOP AND GARAGE EQUIPMENT		15-SQ		0	2,016,055.44	979,327	1,036,728	134,711	6.68	7.7
396.00	POWER OPERATED EQUIPMENT		25-S0.5		5	849,036.30	287,157	519,427	28,787	3.39	18.0
397.00	COMMUNICATION EQUIPMENT - 10-YEAR		10-SQ		0	3,084,611.62	1,812,352	1,272,260	311,970	10.11	4.1
397.20	COMMUNICATION EQUIPMENT		13-L3		0	20,323.89	9,245	11,079	2,381	11.72	4.7
	TOTAL GENERAL PLANT					**24,888,044.80**	**10,332,503**	**12,902,859**	**1,419,590**	**5.70**	**9.1**
	TOTAL ELECTRIC PLANT					**1,081,798,276.40**	**363,060,603**	**946,381,387**	**37,364,476**	**3.45**	**25.3**

NORTHWESTERN ENERGY

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, NET SALVAGE PERCENT, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO ELECTRIC, GAS AND COMMON PLANT AS OF DECEMBER 31, 2022

	ACCOUNT	PROBABLE RETIREMENT DATE	SURVIVOR CURVE	NET SALVAGE PERCENT	ORIGINAL COST AS OF DECEMBER 31, 2022	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE		COMPOSITE REMAINING LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)=(8)/(5)		(10)=(7)/(8)
	GAS PLANT										
	PRODUCTION PLANT										
311.00	LIQUEFIED PETROLEUM GAS EQUIPMENT		25-L2.5	10	3,999.86	25,736	(22,136)	0	-	**	-
	TOTAL PRODUCTION PLANT				**3,999.86**	**25,736**	**(22,136)**	**0**	-		-
	DISTRIBUTION PLANT										
367.00	MAINS		65-R3	(20)	8,870,070.16	609,207	10,034,877	168,398	1.90		59.6
375.00	STRUCTURES AND IMPROVEMENTS		50-R3	(5)	478,470.99	251,009	251,385	6,352	1.33		39.6
376.11	MAINS - STEEL		65-R2.5	(40)	58,874,487.70	36,407,221	46,017,061	894,045	1.52		51.5
376.30	MAINS - PLASTIC		65-R3	(50)	51,822,275.07	19,660,299	58,073,113	1,135,644	2.19		51.1
378.00	MEASURING AND REGULATING STATION EQUIPMENT		52-R2	(30)	9,460,739.40	4,491,948	7,807,013	176,059	1.86		44.3
379.00	MEASURING AND REGULATING STATION EQUIPMENT - CITY GATE		45-S1	(30)	5,653,461.20	2,211,733	5,137,766	140,593	2.49		36.5
380.00	SERVICES - STEEL		42-R2	(120)	4,331,476.78	4,916,331	4,612,918	262,400	6.06		17.6
380.10	SERVICES - PLASTIC		55-R3	(100)	57,964,818.19	18,245,550	97,684,086	2,379,682	4.11		41.0
381.00	METERS AND REGULATORS		55-R3	(20)	26,151,915.25	12,847,853	18,534,445	505,514	1.93		36.7
381.10	METERS - AMI		15-S2.5	0	9,216,166.39	1,785,425	7,430,741	644,947	7.00		11.5
	TOTAL DISTRIBUTION PLANT				**232,823,881.13**	**101,426,578**	**255,583,405**	**6,313,634**	**2.71**		**40.5**
	GENERAL PLANT										
390.10	STRUCTURES AND IMPROVEMENTS		40-R1	(10)	3,835,795.66	1,383,838	2,835,537	84,129	2.19		33.7
391.00	OFFICE FURNITURE AND EQUIPMENT		20-SQ	0	84,485.97	6,712	77,774	4,845	5.73		16.1
391.50	OFFICE FURNITURE AND EQUIPMENT - COMPUTERS - 5-YEAR		5-SQ	0	37,716.33	24,965	12,751	9,202	24.40		1.4
392.30	TRANSPORTATION EQUIPMENT - AUTOMOBILES		8-L2.5	5	94,029.58	51,021	38,307	10,576	11.25		3.6
392.40	TRANSPORTATION EQUIPMENT - HEAVY TRUCKS		16-L2.5	10	489,105.43	327,635	112,559	9,573	1.96		11.8
392.50	TRANSPORTATION EQUIPMENT - LIGHT TRUCKS		14-L2.5	10	3,751,173.96	2,998,408	377,649	31,755	0.85		11.9
394.00	TOOLS, SHOP AND GARAGE EQUIPMENT		15-SQ	0	1,520,686.74	701,656	819,030	101,069	6.65		8.1
396.00	POWER OPERATED EQUIPMENT		25-S0.5	5	2,707,879.82	901,242	1,671,244	97,587	3.60		17.1
397.20	COMMUNICATION EQUIPMENT - NEBRASKA		21-R3	0	43,589.44	43,589	0	0	-	**	-
397.45	COMMUNICATION EQUIPMENT - 10-YEAR		10-SQ	0	1,362,587.73	508,302	854,285	131,077	9.62		6.5
	TOTAL GENERAL PLANT				**13,927,050.66**	**6,947,370**	**6,799,136**	**479,813**	**3.45**		**14.2**
	TOTAL GAS PLANT				**246,754,931.65**	**108,399,684**	**262,360,405**	**6,793,447**	**2.75**		**38.6**
	COMMON PLANT										
	INTANGIBLE PLANT										
303.10	INTANGIBLE PLANT - 10-YEAR		10-SQ	0	9,769,080.79	3,680,162	6,088,919	846,191	8.66		7.2
303.50	INTANGIBLE PLANT - 5-YEAR		5-SQ	0	3,369,822.71	1,426,622	1,943,201	581,114	17.24		3.3
	INTANGIBLE PLANT				**13,138,903.50**	**5,106,784**	**8,032,120**	**1,427,305**	**10.86**		**5.6**

NORTHWESTERN ENERGY

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, NET SALVAGE PERCENT, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO ELECTRIC, GAS AND COMMON PLANT AS OF DECEMBER 31, 2022

	ACCOUNT	PROBABLE RETIREMENT DATE	SURVIVOR CURVE	NET SALVAGE PERCENT	ORIGINAL COST AS OF DECEMBER 31, 2022	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)=(8)/(5)	(10)=(7)/(8)
	GENERAL PLANT									
390.10	STRUCTURES AND IMPROVEMENTS		40-S1.5	(20)	37,970,139.87	7,629,011	37,935,157	1,510,449	3.98	25.1
391.00	OFFICE FURNITURE AND EQUIPMENT		20-SQ	0	533,396.32	236,392	297,004	20,802	3.90	14.3
391.10	OFFICE FURNITURE AND EQUIPMENT - COMPUTERS - 10-YEAR		10-SQ	0	3,233,793.61	2,193,110	1,040,684	440,309	13.62	2.4
391.50	OFFICE FURNITURE AND EQUIPMENT - COMPUTERS - 5-YEAR		5-SQ	0	5,306,654.44	2,139,419	3,167,236	1,505,463	28.37	2.1
392.00	TRANSPORTATION EQUIPMENT - AUTOMOBILES		8-L2.5	5	469,999.42	246,499	200,000	55,468	11.80	3.6
392.10	TRANSPORTATION EQUIPMENT - HEAVY TRUCKS		16-L2.5	10	765,896.54	469,044	220,263	31,788	4.15	6.9
392.20	TRANSPORTATION EQUIPMENT - LIGHT TRUCKS		14-L2.5	10	1,039,518.84	535,567	400,000	52,583	5.06	7.6
392.60	TRANSPORTATION EQUIPMENT - AIRCRAFT		8-L3	50	1,511,788.53	144,923	610,971	159,940	10.58	3.8
393.00	STORES EQUIPMENT		20-SQ	0	35,559.18	7,112	28,448	1,835	5.16	15.5
394.00	TOOLS, SHOP AND GARAGE EQUIPMENT		15-SQ	0	203,291.81	69,961	133,331	14,705	7.23	9.1
396.00	POWER OPERATED EQUIPMENT		25-S0.5	5	2,299,056.23	988,625	1,195,478	66,109	2.88	18.1
397.10	COMMUNICATION EQUIPMENT - MICROWAVE AND FIBER OPTIC		18-S3	0	4,138,988.24	2,730,776	1,408,213	206,238	4.98	6.8
397.30	COMMUNICATION EQUIPMENT - 10-YEAR		10-SQ	0	400,740.15	352,156	48,584	32,106	8.01	1.5
398.00	MISCELLANEOUS EQUIPMENT		20-SQ	0	25,815.00	7,135	18,680	1,883	7.29	9.9
	TOTAL GENERAL PLANT				**57,934,638.18**	**17,749,729**	**46,704,049**	**4,099,678**	**7.08**	**11.4**
	TOTAL COMMON PLANT				**71,073,541.68**	**22,856,513**	**54,736,169**	**5,526,983**	**7.78**	**9.9**
	TOTAL DEPRECIABLE ELECTRIC, GAS AND COMMON PLANT				**1,399,626,749.73**	**494,316,799**	**1,263,477,961**	**49,684,906**		
	NONDEPRECIABLE PLANT AND ACCOUNTS NOT STUDIED									
303.50	INTANGIBLE PLANT 5-YEAR - ELECTRIC				8,303.91	2,387				
304.00	LAND AND LAND RIGHTS				30,169.96					
310.00	LAND AND LAND RIGHTS				366,510.94					
340.00	LAND AND LAND RIGHTS				82,483.24					
350.00	LAND AND LAND RIGHTS				1,734,600.15					
360.00	LAND AND LAND RIGHTS				639,546.85					
374.00	LAND AND LAND RIGHTS				1,264,425.07					
389.00	LAND AND LAND RIGHTS				2,196,670.02					
	TOTAL NONDEPRECIABLE PLANT AND ACCOUNTS NOT STUDIED				**6,322,710.14**	**2,387**				
	TOTAL DEPRECIABLE ELECTRIC, GAS AND COMMON PLANT				**1,405,949,459.87**	**494,319,186**				

* LIFE SPAN METHOD IS USED. CURVE SHOWN IS INTERIM SURVIVOR CURVE.

** ACCRUAL RATES FOR NEW ADDITIONS PLACED INTO SERVICE AFTER DECEMBER 31, 2022 ARE AS FOLLOWS.

	ACCOUNT	RATE
GAS PLANT		
	311.00	3.68
	397.10	4.88
	397.20	4.88

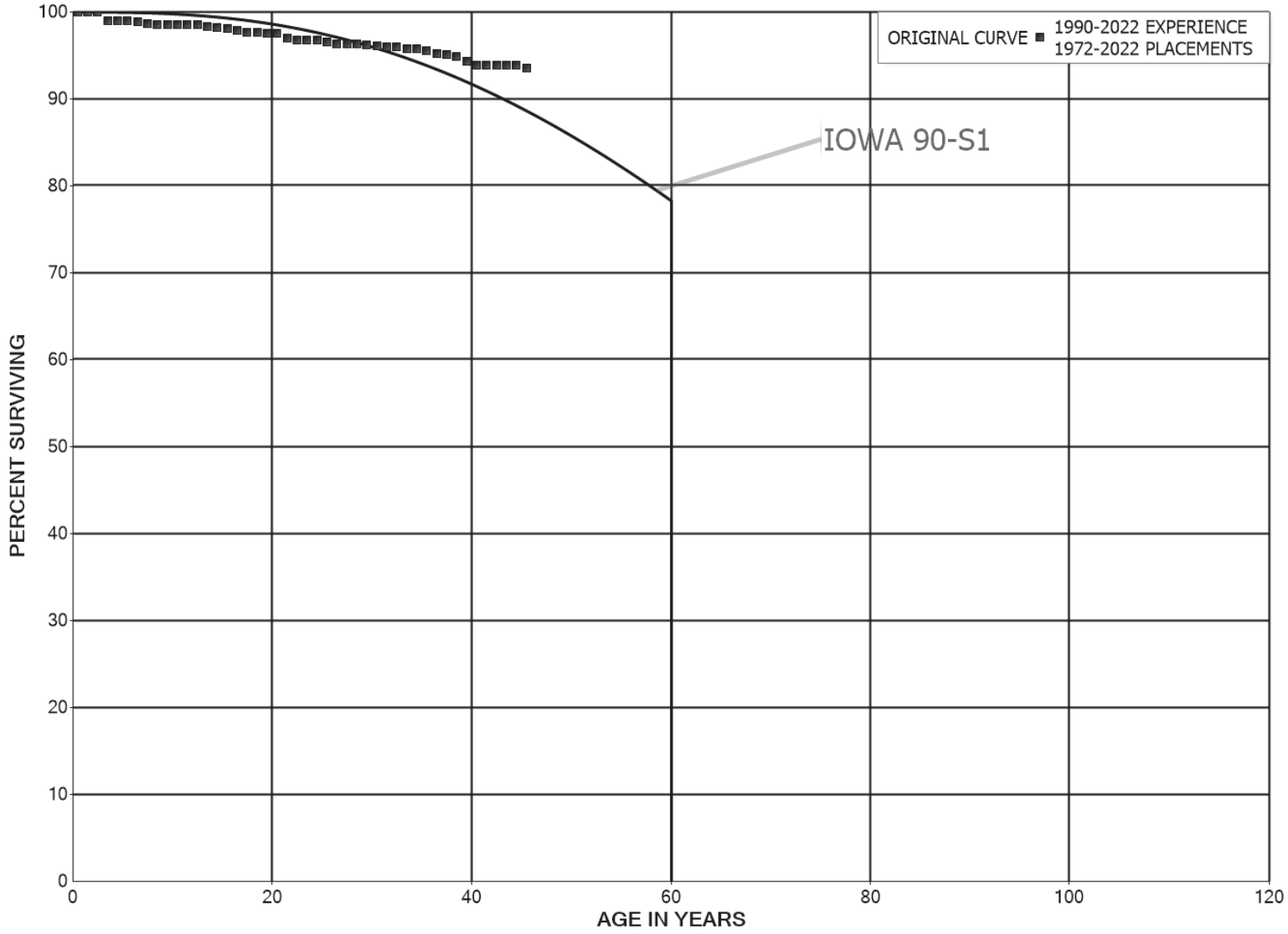
NOTE: ACCRUAL RATES FOR NEW ASSETS UNITIZED AFTER DECEMBER 31, 2022 ARE AS FOLLOWS.

	ACCOUNT	RATE
BOB GLANZER GENERATING STATION		
	341.00	3.25
	342.00	3.20
	344.00	3.47
	345.00	3.47
	346.00	3.60

PART VII. SERVICE LIFE STATISTICS

ELECTRIC PLANT

NORTHWESTERN ENERGY
ELECTRIC PLANT
ACCOUNT 311.00 STRUCTURES AND IMPROVEMENTS
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 311.00 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1972-2022 EXPERIENCE BAND 1990-2022

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	8,163,144		0.0000	1.0000	100.00
0.5	8,103,197		0.0000	1.0000	100.00
1.5	7,944,220		0.0000	1.0000	100.00
2.5	7,484,931	76,061	0.0102	0.9898	100.00
3.5	7,182,516	5,537	0.0008	0.9992	98.98
4.5	7,054,638	16	0.0000	1.0000	98.91
5.5	7,094,980	3,203	0.0005	0.9995	98.91
6.5	6,770,429	20,278	0.0030	0.9970	98.86
7.5	9,571,768	3,763	0.0004	0.9996	98.57
8.5	21,272,584	711	0.0000	1.0000	98.53
9.5	18,030,862		0.0000	1.0000	98.52
10.5	17,943,485		0.0000	1.0000	98.52
11.5	17,864,222	5,105	0.0003	0.9997	98.52
12.5	17,866,910	46,388	0.0026	0.9974	98.50
13.5	22,662,837	17,454	0.0008	0.9992	98.24
14.5	22,440,249	17,045	0.0008	0.9992	98.16
15.5	22,362,215	70,507	0.0032	0.9968	98.09
16.5	22,094,284	30,244	0.0014	0.9986	97.78
17.5	21,956,518	16,788	0.0008	0.9992	97.65
18.5	21,931,351	5,581	0.0003	0.9997	97.57
19.5	21,920,422	3,195	0.0001	0.9999	97.55
20.5	21,888,317	117,733	0.0054	0.9946	97.53
21.5	21,763,991	51,767	0.0024	0.9976	97.01
22.5	21,414,155	599	0.0000	1.0000	96.78
23.5	21,385,976	723	0.0000	1.0000	96.78
24.5	21,293,545	60,020	0.0028	0.9972	96.77
25.5	20,701,182	48,238	0.0023	0.9977	96.50
26.5	20,624,523	190	0.0000	1.0000	96.27
27.5	20,558,677	5,694	0.0003	0.9997	96.27
28.5	20,521,921	18,063	0.0009	0.9991	96.25
29.5	20,063,751	21,098	0.0011	0.9989	96.16
30.5	20,014,301	24,902	0.0012	0.9988	96.06
31.5	19,889,273	10,460	0.0005	0.9995	95.94
32.5	19,857,786	25,003	0.0013	0.9987	95.89
33.5	19,801,132	17,688	0.0009	0.9991	95.77
34.5	19,779,973	28,214	0.0014	0.9986	95.68
35.5	19,698,098	86,058	0.0044	0.9956	95.55
36.5	19,595,944	10,513	0.0005	0.9995	95.13
37.5	19,578,552	43,233	0.0022	0.9978	95.08
38.5	19,496,608	124,671	0.0064	0.9936	94.87

NORTHWESTERN ENERGY
ELECTRIC PLANT

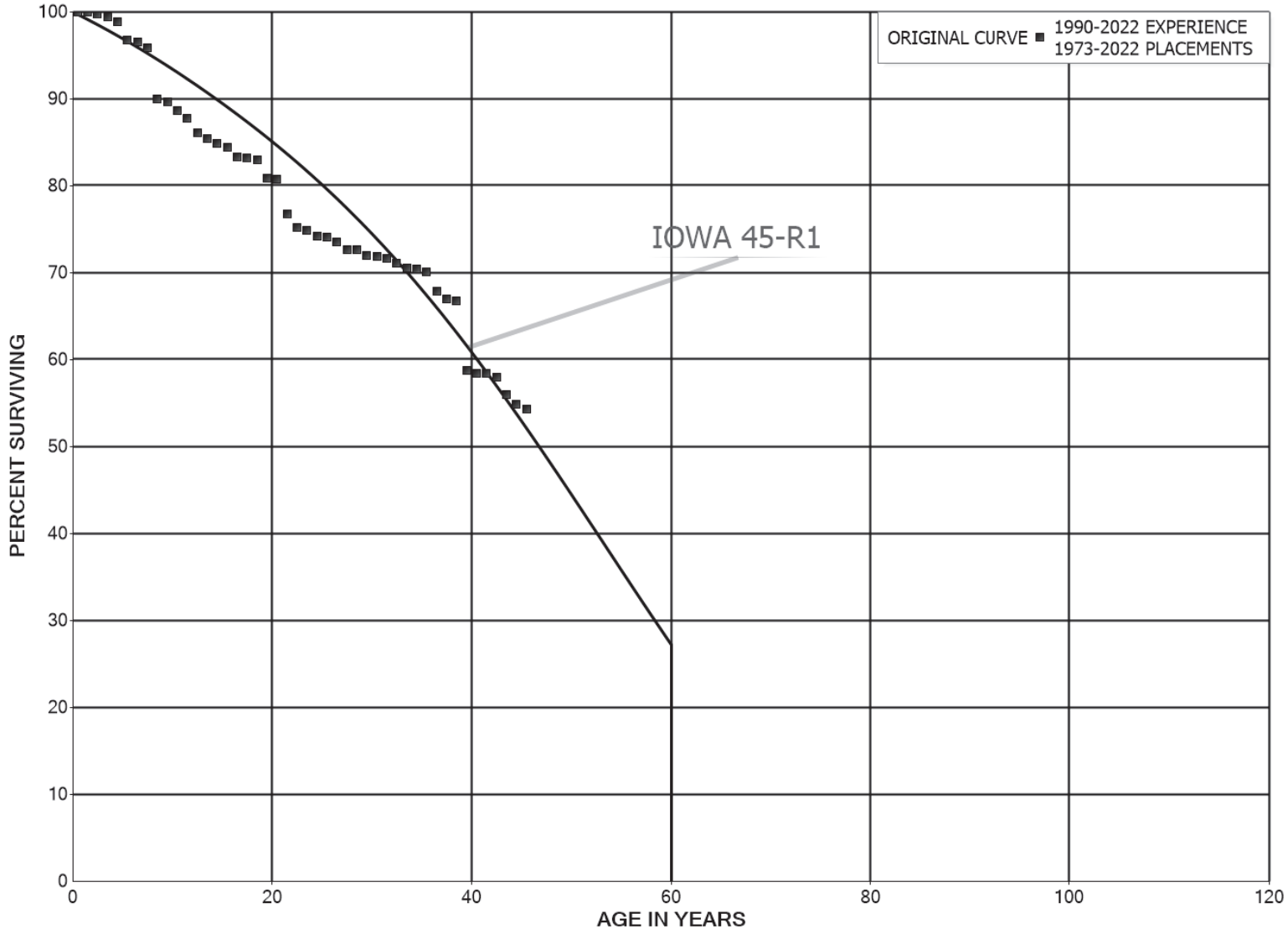
ACCOUNT 311.00 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1972-2022 EXPERIENCE BAND 1990-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	19,357,838	90,521	0.0047	0.9953	94.26
40.5	16,162,501	5,006	0.0003	0.9997	93.82
41.5	4,776,815		0.0000	1.0000	93.79
42.5	4,762,895		0.0000	1.0000	93.79
43.5	4,762,895		0.0000	1.0000	93.79
44.5	4,756,802	14,806	0.0031	0.9969	93.79
45.5	4,719,863		0.0000	1.0000	93.50
46.5					93.50

NORTHWESTERN ENERGY
ELECTRIC PLANT
ACCOUNT 312.00 BOILER PLANT EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 312.00 BOILER PLANT EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1973-2022 EXPERIENCE BAND 1990-2022

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	169,984,833		0.0000	1.0000	100.00
0.5	168,324,809	2,466	0.0000	1.0000	100.00
1.5	166,689,645	423,364	0.0025	0.9975	100.00
2.5	166,003,516	526,691	0.0032	0.9968	99.74
3.5	161,668,409	932,424	0.0058	0.9942	99.43
4.5	157,188,330	3,382,344	0.0215	0.9785	98.85
5.5	153,684,615	373,809	0.0024	0.9976	96.73
6.5	148,952,047	1,001,230	0.0067	0.9933	96.49
7.5	50,863,288	3,134,028	0.0616	0.9384	95.84
8.5	86,223,129	269,885	0.0031	0.9969	89.94
9.5	62,928,260	711,171	0.0113	0.9887	89.66
10.5	59,322,877	634,845	0.0107	0.9893	88.64
11.5	59,197,236	1,073,677	0.0181	0.9819	87.69
12.5	57,185,540	439,487	0.0077	0.9923	86.10
13.5	75,249,125	522,137	0.0069	0.9931	85.44
14.5	78,880,279	458,408	0.0058	0.9942	84.85
15.5	78,356,153	997,663	0.0127	0.9873	84.36
16.5	76,404,607	121,741	0.0016	0.9984	83.28
17.5	74,902,267	220,044	0.0029	0.9971	83.15
18.5	74,447,013	1,838,914	0.0247	0.9753	82.91
19.5	69,810,384	72,340	0.0010	0.9990	80.86
20.5	69,477,588	3,526,889	0.0508	0.9492	80.77
21.5	65,944,230	1,267,549	0.0192	0.9808	76.67
22.5	64,127,805	299,847	0.0047	0.9953	75.20
23.5	63,200,749	551,956	0.0087	0.9913	74.85
24.5	62,604,920	143,403	0.0023	0.9977	74.19
25.5	62,224,074	419,146	0.0067	0.9933	74.02
26.5	61,804,742	730,564	0.0118	0.9882	73.53
27.5	60,964,563	53,069	0.0009	0.9991	72.66
28.5	60,872,897	542,413	0.0089	0.9911	72.59
29.5	57,996,102	78,312	0.0014	0.9986	71.95
30.5	57,754,422	214,726	0.0037	0.9963	71.85
31.5	54,361,706	378,523	0.0070	0.9930	71.58
32.5	53,952,337	458,414	0.0085	0.9915	71.08
33.5	53,481,540	66,325	0.0012	0.9988	70.48
34.5	53,396,297	283,603	0.0053	0.9947	70.39
35.5	53,099,005	1,682,131	0.0317	0.9683	70.02
36.5	51,414,313	619,116	0.0120	0.9880	67.80
37.5	50,760,964	175,101	0.0034	0.9966	66.98
38.5	50,292,092	6,012,913	0.1196	0.8804	66.75

NORTHWESTERN ENERGY
ELECTRIC PLANT

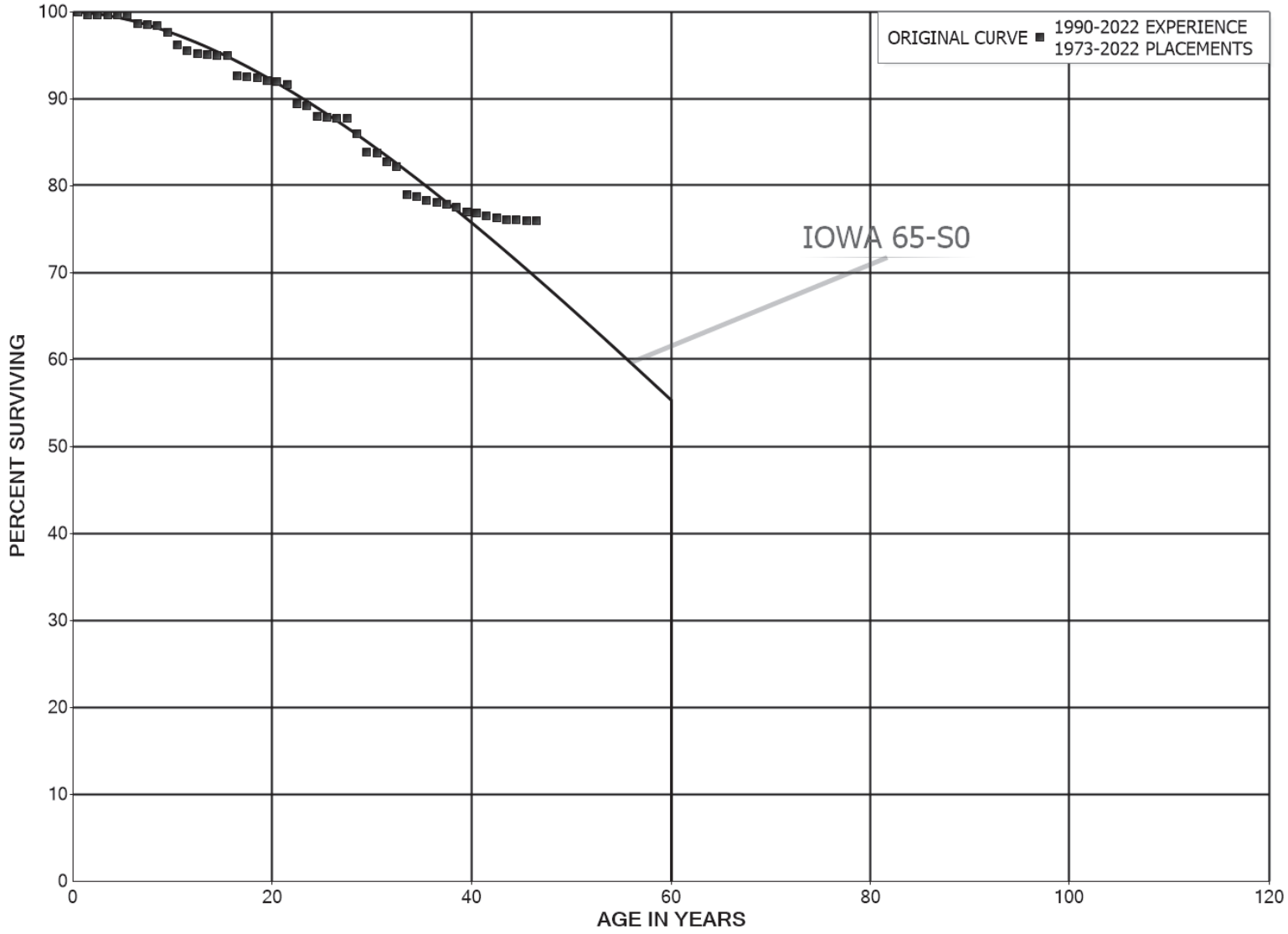
ACCOUNT 312.00 BOILER PLANT EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1973-2022 EXPERIENCE BAND 1990-2022

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	44,206,297	250,114	0.0057	0.9943	58.77
40.5	43,844,287	9,911	0.0002	0.9998	58.44
41.5	10,214,362	83,131	0.0081	0.9919	58.43
42.5	10,074,507	350,570	0.0348	0.9652	57.95
43.5	9,723,937	192,953	0.0198	0.9802	55.93
44.5	9,530,984	91,160	0.0096	0.9904	54.82
45.5	9,209,065	262,700	0.0285	0.9715	54.30
46.5					52.75

NORTHWESTERN ENERGY
ELECTRIC PLANT
ACCOUNT 314.00 TURBOGENERATOR UNITS
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 314.00 TURBOGENERATOR UNITS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1973-2022 EXPERIENCE BAND 1990-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	16,181,908		0.0000	1.0000	100.00
0.5	15,896,646	57,392	0.0036	0.9964	100.00
1.5	15,438,481	5,743	0.0004	0.9996	99.64
2.5	15,559,787	3,089	0.0002	0.9998	99.60
3.5	15,145,331	865	0.0001	0.9999	99.58
4.5	14,996,765	1,042	0.0001	0.9999	99.58
5.5	15,813,354	153,163	0.0097	0.9903	99.57
6.5	15,573,593	19,616	0.0013	0.9987	98.61
7.5	16,664,591	21,265	0.0013	0.9987	98.48
8.5	23,640,203	183,438	0.0078	0.9922	98.36
9.5	20,743,879	300,578	0.0145	0.9855	97.59
10.5	20,392,879	151,750	0.0074	0.9926	96.18
11.5	20,244,670	72,510	0.0036	0.9964	95.46
12.5	20,117,652	22,296	0.0011	0.9989	95.12
13.5	22,859,531	2,686	0.0001	0.9999	95.01
14.5	20,350,554	15,915	0.0008	0.9992	95.00
15.5	20,313,028	494,318	0.0243	0.9757	94.93
16.5	19,789,003	22,203	0.0011	0.9989	92.62
17.5	17,798,066	16,853	0.0009	0.9991	92.52
18.5	17,774,757	66,167	0.0037	0.9963	92.43
19.5	17,063,656	24,419	0.0014	0.9986	92.08
20.5	17,017,778	61,615	0.0036	0.9964	91.95
21.5	16,956,162	418,906	0.0247	0.9753	91.62
22.5	15,848,845	35,482	0.0022	0.9978	89.36
23.5	15,813,363	212,079	0.0134	0.9866	89.16
24.5	15,596,951	16,666	0.0011	0.9989	87.96
25.5	14,112,580	15,206	0.0011	0.9989	87.87
26.5	14,095,529	5,967	0.0004	0.9996	87.77
27.5	14,117,068	285,741	0.0202	0.9798	87.73
28.5	13,776,391	347,318	0.0252	0.9748	85.96
29.5	13,420,785	8,746	0.0007	0.9993	83.79
30.5	13,353,623	155,671	0.0117	0.9883	83.74
31.5	13,195,098	99,880	0.0076	0.9924	82.76
32.5	13,095,218	516,204	0.0394	0.9606	82.13
33.5	12,570,848	19,425	0.0015	0.9985	78.90
34.5	11,970,610	79,690	0.0067	0.9933	78.77
35.5	11,890,920	25,550	0.0021	0.9979	78.25
36.5	11,861,866	42,698	0.0036	0.9964	78.08
37.5	11,819,168	50,666	0.0043	0.9957	77.80
38.5	10,852,984	77,573	0.0071	0.9929	77.47

NORTHWESTERN ENERGY
ELECTRIC PLANT

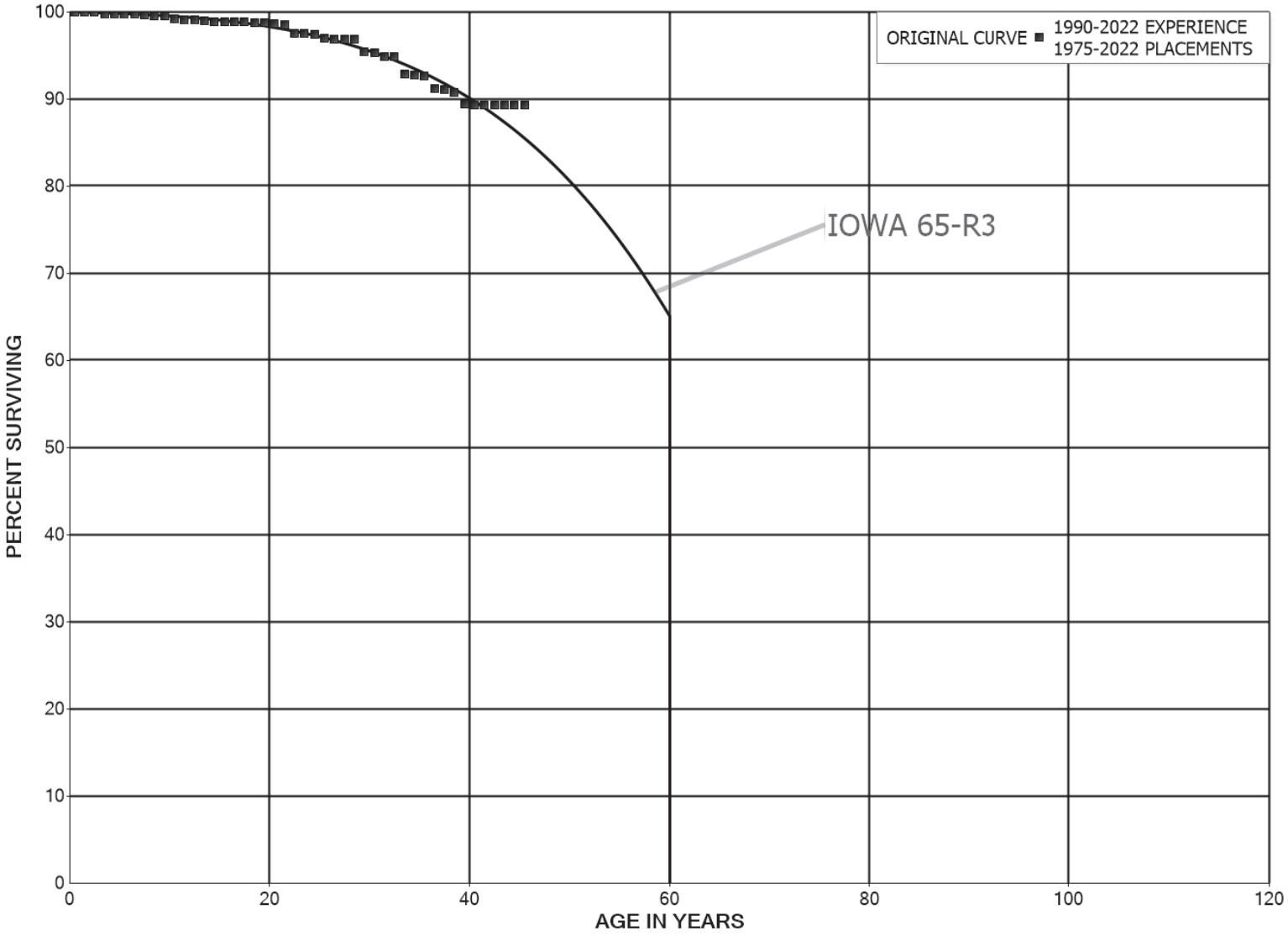
ACCOUNT 314.00 TURBOGENERATOR UNITS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1973-2022 EXPERIENCE BAND 1990-2022

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	10,694,851	4,256	0.0004	0.9996	76.91
40.5	9,025,781	38,126	0.0042	0.9958	76.88
41.5	3,251,160	11,121	0.0034	0.9966	76.56
42.5	3,240,039	10,327	0.0032	0.9968	76.30
43.5	3,054,749		0.0000	1.0000	76.05
44.5	3,053,853	4,447	0.0015	0.9985	76.05
45.5	3,031,178		0.0000	1.0000	75.94
46.5					75.94

NORTHWESTERN ENERGY
ELECTRIC PLANT
ACCOUNT 315.00 ACCESSORY ELECTRIC EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 315.00 ACCESSORY ELECTRIC EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1975-2022 EXPERIENCE BAND 1990-2022

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	5,890,937		0.0000	1.0000	100.00
0.5	5,815,993		0.0000	1.0000	100.00
1.5	5,739,551		0.0000	1.0000	100.00
2.5	5,729,067	15,500	0.0027	0.9973	100.00
3.5	5,473,829		0.0000	1.0000	99.73
4.5	5,454,179		0.0000	1.0000	99.73
5.5	5,454,364	1,638	0.0003	0.9997	99.73
6.5	5,450,714	4,085	0.0007	0.9993	99.70
7.5	5,489,818	9,342	0.0017	0.9983	99.62
8.5	10,383,738		0.0000	1.0000	99.46
9.5	7,575,244	22,439	0.0030	0.9970	99.46
10.5	7,085,689	4,893	0.0007	0.9993	99.16
11.5	7,043,347	2,496	0.0004	0.9996	99.09
12.5	6,848,195	8,809	0.0013	0.9987	99.06
13.5	9,827,914	7,066	0.0007	0.9993	98.93
14.5	9,378,369	662	0.0001	0.9999	98.86
15.5	9,370,471	3,208	0.0003	0.9997	98.85
16.5	9,021,402	1,501	0.0002	0.9998	98.82
17.5	8,511,353	4,988	0.0006	0.9994	98.80
18.5	8,504,702	340	0.0000	1.0000	98.74
19.5	8,504,362	8,965	0.0011	0.9989	98.74
20.5	8,490,569	10,019	0.0012	0.9988	98.64
21.5	8,464,928	88,513	0.0105	0.9895	98.52
22.5	8,136,467	1,264	0.0002	0.9998	97.49
23.5	8,135,203	5,283	0.0006	0.9994	97.47
24.5	8,124,070	43,081	0.0053	0.9947	97.41
25.5	8,076,139	4,595	0.0006	0.9994	96.89
26.5	8,071,544	1,530	0.0002	0.9998	96.84
27.5	8,064,826		0.0000	1.0000	96.82
28.5	8,063,164	119,543	0.0148	0.9852	96.82
29.5	7,943,621	5,769	0.0007	0.9993	95.38
30.5	7,937,852	38,201	0.0048	0.9952	95.32
31.5	7,877,973	1,207	0.0002	0.9998	94.86
32.5	7,876,766	167,797	0.0213	0.9787	94.84
33.5	7,708,970	6,440	0.0008	0.9992	92.82
34.5	7,695,861	6,760	0.0009	0.9991	92.74
35.5	7,687,037	119,353	0.0155	0.9845	92.66
36.5	7,563,279	16,831	0.0022	0.9978	91.22
37.5	7,546,448	26,962	0.0036	0.9964	91.02
38.5	7,500,558	105,904	0.0141	0.9859	90.70

NORTHWESTERN ENERGY
ELECTRIC PLANT

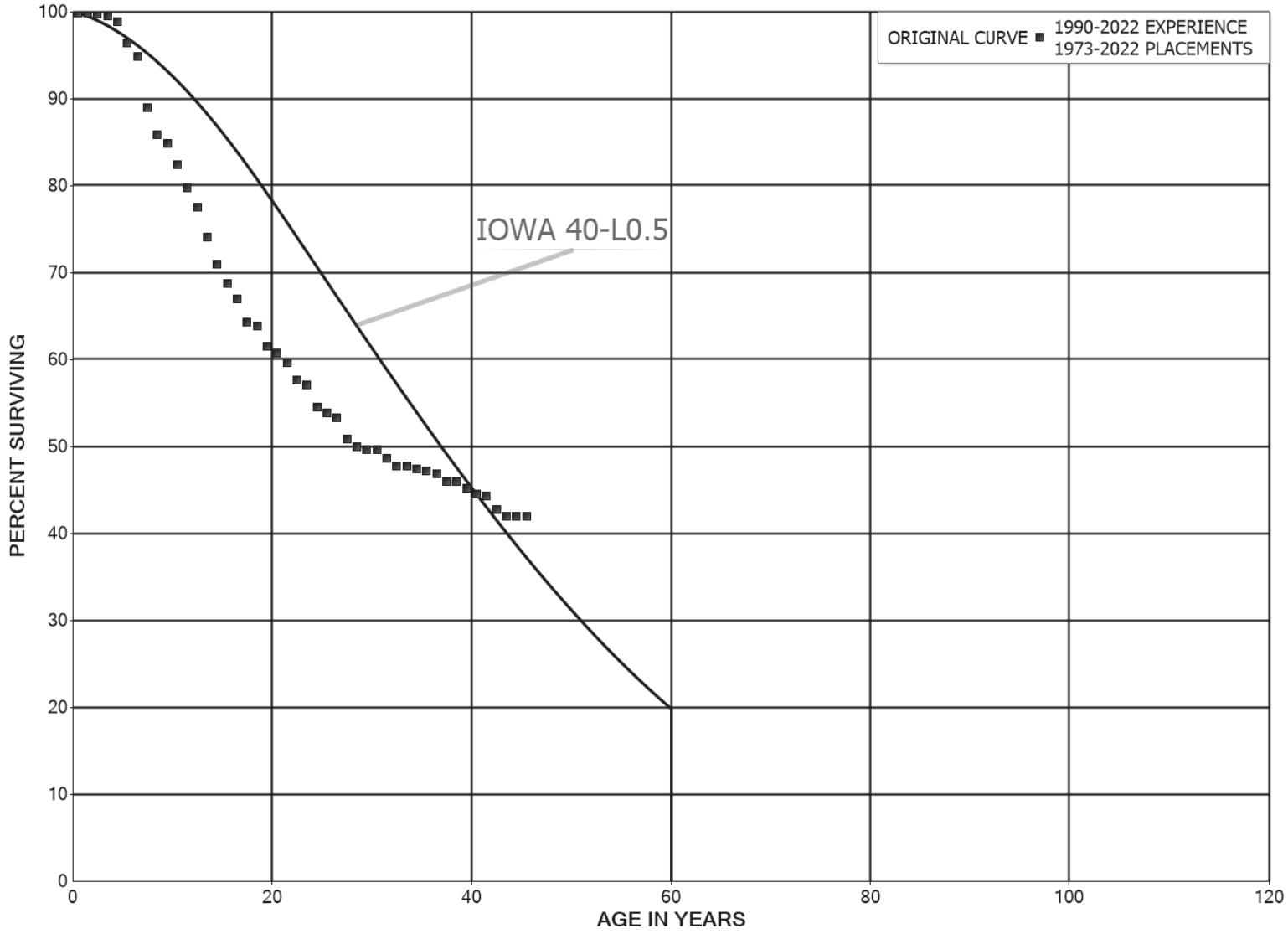
ACCOUNT 315.00 ACCESSORY ELECTRIC EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1975-2022 EXPERIENCE BAND 1990-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	7,394,654	9,877	0.0013	0.9987	89.42
40.5	7,324,193		0.0000	1.0000	89.30
41.5	2,771,471		0.0000	1.0000	89.30
42.5	2,765,374		0.0000	1.0000	89.30
43.5	2,762,598		0.0000	1.0000	89.30
44.5	2,755,143		0.0000	1.0000	89.30
45.5	2,754,182		0.0000	1.0000	89.30
46.5					89.30

NORTHWESTERN ENERGY
ELECTRIC PLANT
ACCOUNT 316.00 MISCELLANEOUS POWER PLANT EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 316.00 MISCELLANEOUS POWER PLANT EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1973-2022 EXPERIENCE BAND 1990-2022

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	2,634,549	3,707	0.0014	0.9986	100.00
0.5	2,501,988	939	0.0004	0.9996	99.86
1.5	2,421,884	1,019	0.0004	0.9996	99.82
2.5	2,248,056	7,089	0.0032	0.9968	99.78
3.5	2,233,834	14,087	0.0063	0.9937	99.47
4.5	2,103,923	51,417	0.0244	0.9756	98.84
5.5	2,040,511	33,257	0.0163	0.9837	96.42
6.5	1,933,657	119,857	0.0620	0.9380	94.85
7.5	1,749,782	61,247	0.0350	0.9650	88.97
8.5	1,984,960	23,682	0.0119	0.9881	85.86
9.5	1,801,123	51,607	0.0287	0.9713	84.83
10.5	1,753,100	57,735	0.0329	0.9671	82.40
11.5	1,618,570	44,405	0.0274	0.9726	79.69
12.5	1,523,435	68,266	0.0448	0.9552	77.50
13.5	1,939,439	80,388	0.0414	0.9586	74.03
14.5	1,993,559	62,244	0.0312	0.9688	70.96
15.5	1,903,384	49,807	0.0262	0.9738	68.75
16.5	1,842,017	73,680	0.0400	0.9600	66.95
17.5	1,741,175	12,085	0.0069	0.9931	64.27
18.5	1,710,512	63,082	0.0369	0.9631	63.82
19.5	1,642,742	20,654	0.0126	0.9874	61.47
20.5	1,604,550	29,137	0.0182	0.9818	60.70
21.5	1,575,414	52,450	0.0333	0.9667	59.59
22.5	1,474,766	15,298	0.0104	0.9896	57.61
23.5	1,430,831	61,886	0.0433	0.9567	57.01
24.5	1,285,551	15,990	0.0124	0.9876	54.55
25.5	1,269,561	12,934	0.0102	0.9898	53.87
26.5	1,252,897	59,095	0.0472	0.9528	53.32
27.5	1,168,611	20,146	0.0172	0.9828	50.80
28.5	1,129,523	6,689	0.0059	0.9941	49.93
29.5	1,120,626	727	0.0006	0.9994	49.63
30.5	1,103,529	21,112	0.0191	0.9809	49.60
31.5	1,078,269	20,316	0.0188	0.9812	48.65
32.5	1,039,138	1,389	0.0013	0.9987	47.73
33.5	997,292	5,553	0.0056	0.9944	47.67
34.5	980,869	5,486	0.0056	0.9944	47.41
35.5	969,041	6,091	0.0063	0.9937	47.14
36.5	921,126	17,581	0.0191	0.9809	46.84
37.5	901,244	75	0.0001	0.9999	45.95
38.5	859,589	13,512	0.0157	0.9843	45.95

NORTHWESTERN ENERGY
ELECTRIC PLANT

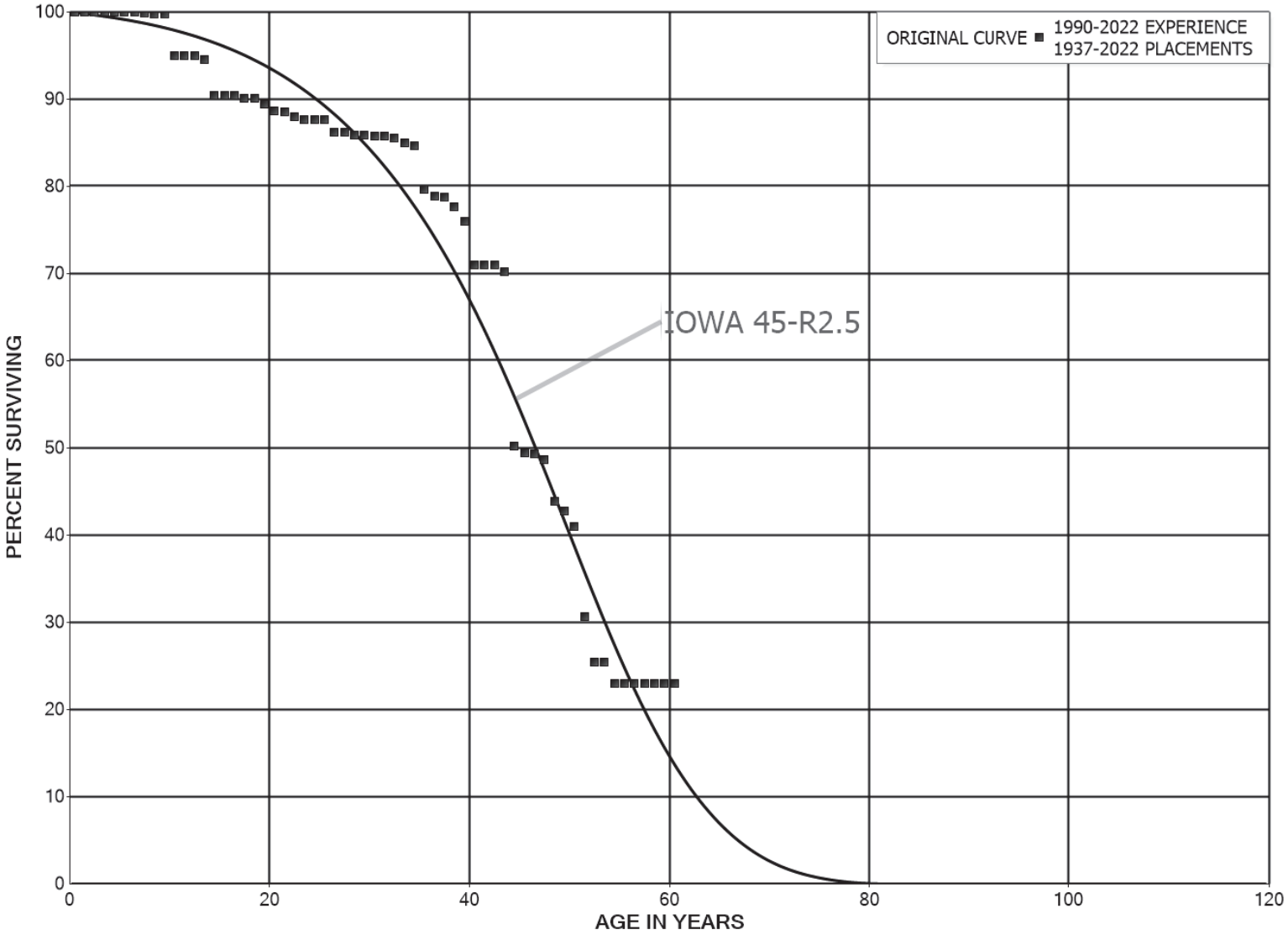
ACCOUNT 316.00 MISCELLANEOUS POWER PLANT EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1973-2022 EXPERIENCE BAND 1990-2022

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	835,384	13,215	0.0158	0.9842	45.22
40.5	816,200	3,349	0.0041	0.9959	44.51
41.5	602,608	22,390	0.0372	0.9628	44.33
42.5	567,706	10,468	0.0184	0.9816	42.68
43.5	557,238		0.0000	1.0000	41.89
44.5	550,817		0.0000	1.0000	41.89
45.5	522,262		0.0000	1.0000	41.89
46.5					41.89

NORTHWESTERN ENERGY
ELECTRIC PLANT
ACCOUNT 341.00 STRUCTURES AND IMPROVEMENTS
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 341.00 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1937-2022 EXPERIENCE BAND 1990-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	12,665,647		0.0000	1.0000	100.00
0.5	12,645,514		0.0000	1.0000	100.00
1.5	12,641,468		0.0000	1.0000	100.00
2.5	12,545,393		0.0000	1.0000	100.00
3.5	12,411,009		0.0000	1.0000	100.00
4.5	11,896,738		0.0000	1.0000	100.00
5.5	11,887,072	5,522	0.0005	0.9995	100.00
6.5	11,348,030	10,507	0.0009	0.9991	99.95
7.5	11,055,091	11,608	0.0011	0.9989	99.86
8.5	10,721,801		0.0000	1.0000	99.76
9.5	326,254	15,820	0.0485	0.9515	99.76
10.5	329,984		0.0000	1.0000	94.92
11.5	400,288		0.0000	1.0000	94.92
12.5	392,065	1,544	0.0039	0.9961	94.92
13.5	391,072	16,948	0.0433	0.9567	94.55
14.5	386,119	41	0.0001	0.9999	90.45
15.5	582,548		0.0000	1.0000	90.44
16.5	617,635	2,183	0.0035	0.9965	90.44
17.5	626,450	379	0.0006	0.9994	90.12
18.5	628,790	4,989	0.0079	0.9921	90.06
19.5	632,647	5,018	0.0079	0.9921	89.35
20.5	655,246	774	0.0012	0.9988	88.64
21.5	630,282	3,986	0.0063	0.9937	88.54
22.5	626,728	2,893	0.0046	0.9954	87.98
23.5	630,711		0.0000	1.0000	87.57
24.5	631,612		0.0000	1.0000	87.57
25.5	633,969	10,227	0.0161	0.9839	87.57
26.5	580,549		0.0000	1.0000	86.16
27.5	658,014	2,367	0.0036	0.9964	86.16
28.5	918,566		0.0000	1.0000	85.85
29.5	904,739	877	0.0010	0.9990	85.85
30.5	892,371	932	0.0010	0.9990	85.76
31.5	810,979	1,309	0.0016	0.9984	85.67
32.5	809,670	5,965	0.0074	0.9926	85.54
33.5	803,705	3,091	0.0038	0.9962	84.91
34.5	800,614	47,241	0.0590	0.9410	84.58
35.5	753,373	7,583	0.0101	0.9899	79.59
36.5	747,582	774	0.0010	0.9990	78.79
37.5	746,808	10,853	0.0145	0.9855	78.71
38.5	735,955	15,251	0.0207	0.9793	77.56

NORTHWESTERN ENERGY
ELECTRIC PLANT

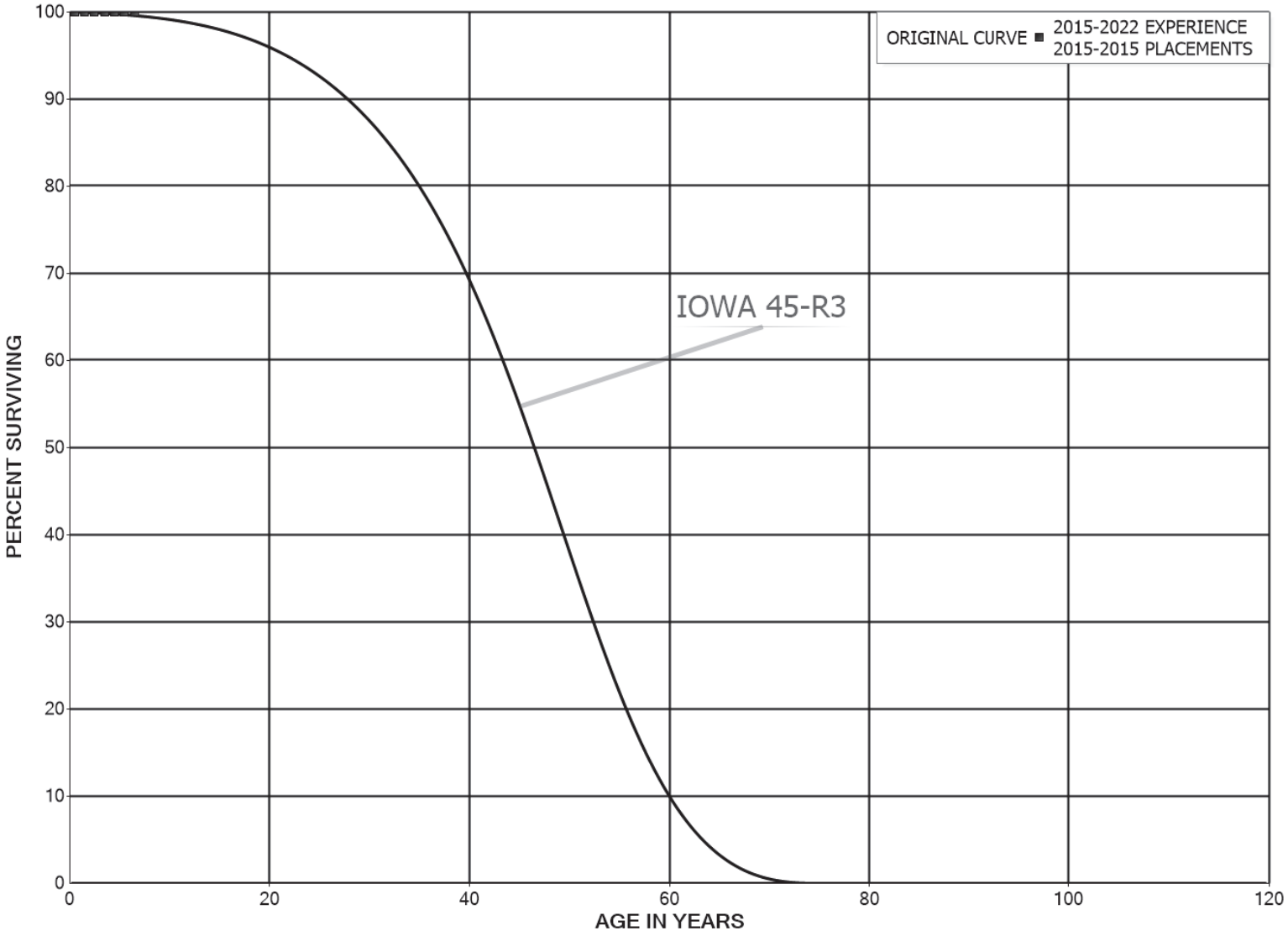
ACCOUNT 341.00 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1937-2022 EXPERIENCE BAND 1990-2022

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	967,154	63,231	0.0654	0.9346	75.96
40.5	899,053	170	0.0002	0.9998	70.99
41.5	896,747	209	0.0002	0.9998	70.98
42.5	893,107	9,605	0.0108	0.9892	70.96
43.5	867,760	247,737	0.2855	0.7145	70.20
44.5	575,971	9,068	0.0157	0.9843	50.16
45.5	566,903	662	0.0012	0.9988	49.37
46.5	566,240	7,528	0.0133	0.9867	49.31
47.5	557,333	54,951	0.0986	0.9014	48.65
48.5	305,250	7,855	0.0257	0.9743	43.86
49.5	297,395	11,957	0.0402	0.9598	42.73
50.5	285,438	71,977	0.2522	0.7478	41.01
51.5	206,122	35,080	0.1702	0.8298	30.67
52.5	190,291		0.0000	1.0000	25.45
53.5	187,189	18,030	0.0963	0.9037	25.45
54.5	169,159		0.0000	1.0000	23.00
55.5	169,159		0.0000	1.0000	23.00
56.5	169,159		0.0000	1.0000	23.00
57.5	169,159		0.0000	1.0000	23.00
58.5	164,605		0.0000	1.0000	23.00
59.5	164,605		0.0000	1.0000	23.00
60.5	164,605		0.0000	1.0000	23.00
61.5					23.00

NORTHWESTERN ENERGY
ELECTRIC PLANT
ACCOUNT 341.10 STRUCTURES AND IMPROVEMENTS - WIND
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
ELECTRIC PLANT

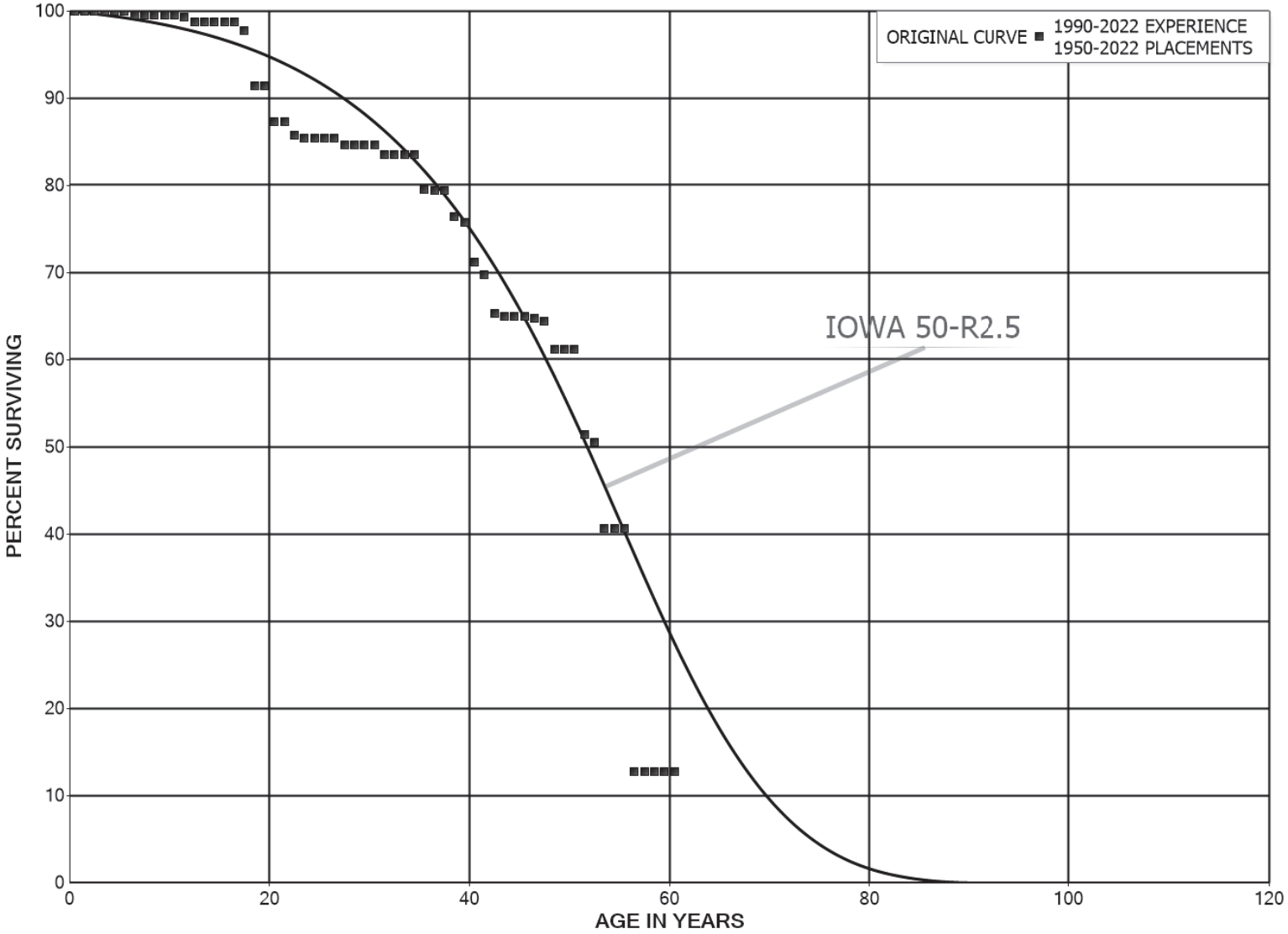
ACCOUNT 341.10 STRUCTURES AND IMPROVEMENTS - WIND

ORIGINAL LIFE TABLE

PLACEMENT BAND 2015-2015 EXPERIENCE BAND 2015-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	13,702,823		0.0000	1.0000	100.00
0.5	13,702,823		0.0000	1.0000	100.00
1.5	14,557,823		0.0000	1.0000	100.00
2.5	14,557,823		0.0000	1.0000	100.00
3.5	14,557,823		0.0000	1.0000	100.00
4.5	14,557,823		0.0000	1.0000	100.00
5.5	14,557,823		0.0000	1.0000	100.00
6.5	14,557,823		0.0000	1.0000	100.00
7.5					100.00

NORTHWESTERN ENERGY
ELECTRIC PLANT
ACCOUNT 342.00 FUEL HOLDERS, PRODUCERS AND ACCESSORIES
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 342.00 FUEL HOLDERS, PRODUCERS AND ACCESSORIES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1950-2022 EXPERIENCE BAND 1990-2022

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	3,521,409		0.0000	1.0000	100.00
0.5	3,512,702		0.0000	1.0000	100.00
1.5	3,485,197		0.0000	1.0000	100.00
2.5	3,485,197		0.0000	1.0000	100.00
3.5	3,337,720		0.0000	1.0000	100.00
4.5	3,337,720		0.0000	1.0000	100.00
5.5	3,191,044	15,000	0.0047	0.9953	100.00
6.5	2,991,059		0.0000	1.0000	99.53
7.5	2,874,692		0.0000	1.0000	99.53
8.5	2,874,692		0.0000	1.0000	99.53
9.5	1,250,283		0.0000	1.0000	99.53
10.5	1,258,932	2,545	0.0020	0.9980	99.53
11.5	1,455,978	8,649	0.0059	0.9941	99.33
12.5	1,447,329		0.0000	1.0000	98.74
13.5	451,874		0.0000	1.0000	98.74
14.5	549,065		0.0000	1.0000	98.74
15.5	609,741	393	0.0006	0.9994	98.74
16.5	609,764	6,034	0.0099	0.9901	98.68
17.5	603,730	38,721	0.0641	0.9359	97.70
18.5	565,009		0.0000	1.0000	91.43
19.5	565,098	25,615	0.0453	0.9547	91.43
20.5	543,454		0.0000	1.0000	87.29
21.5	500,600	8,650	0.0173	0.9827	87.29
22.5	491,949	2,100	0.0043	0.9957	85.78
23.5	482,174		0.0000	1.0000	85.41
24.5	490,526		0.0000	1.0000	85.41
25.5	490,635		0.0000	1.0000	85.41
26.5	415,010	3,697	0.0089	0.9911	85.41
27.5	424,848		0.0000	1.0000	84.65
28.5	489,668		0.0000	1.0000	84.65
29.5	486,441		0.0000	1.0000	84.65
30.5	486,441	6,400	0.0132	0.9868	84.65
31.5	464,449		0.0000	1.0000	83.54
32.5	450,015		0.0000	1.0000	83.54
33.5	450,015		0.0000	1.0000	83.54
34.5	450,015	21,659	0.0481	0.9519	83.54
35.5	428,355	416	0.0010	0.9990	79.52
36.5	427,940		0.0000	1.0000	79.44
37.5	427,940	16,674	0.0390	0.9610	79.44
38.5	411,265	3,092	0.0075	0.9925	76.35

NORTHWESTERN ENERGY
ELECTRIC PLANT

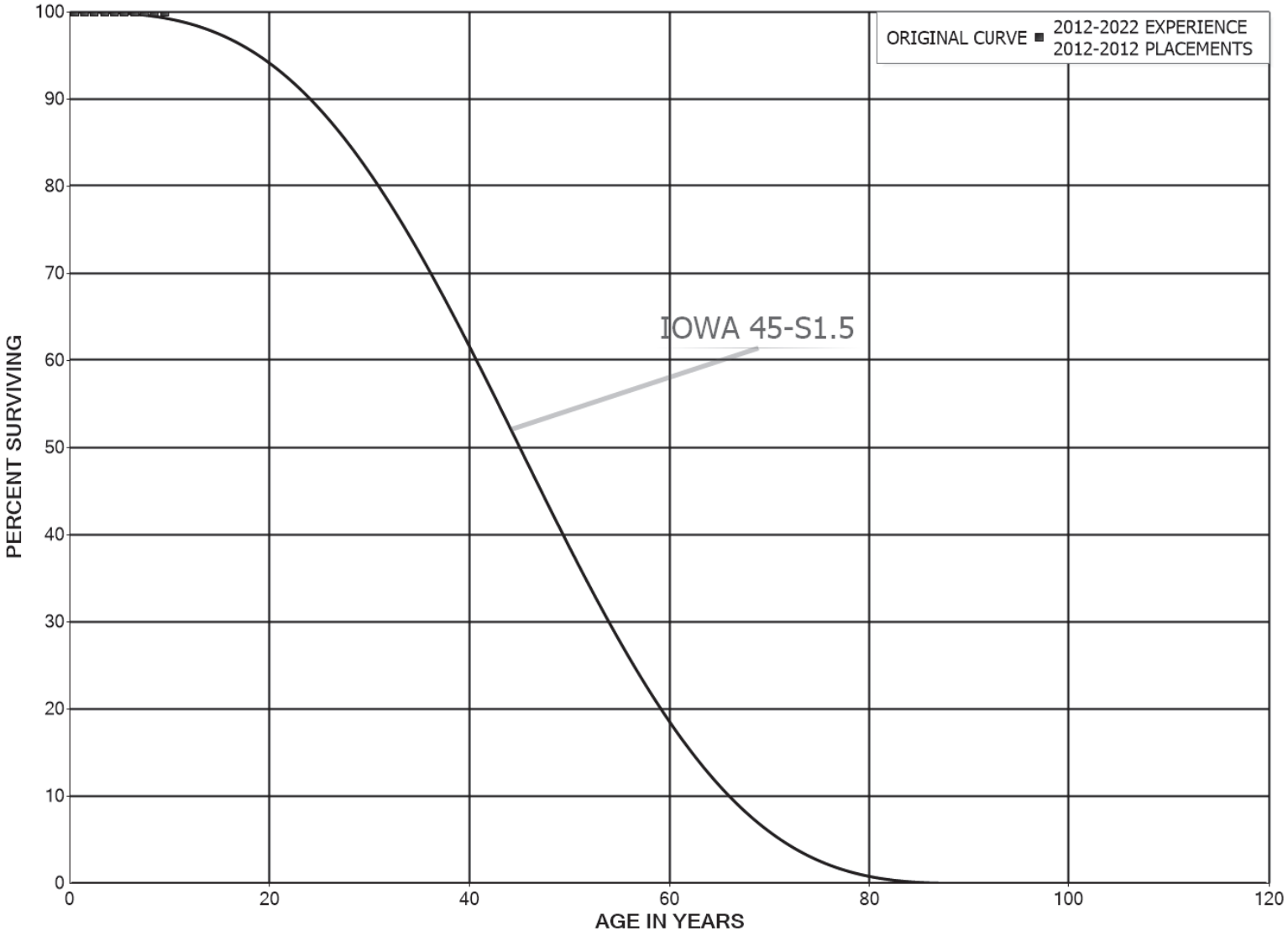
ACCOUNT 342.00 FUEL HOLDERS, PRODUCERS AND ACCESSORIES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1950-2022 EXPERIENCE BAND 1990-2022

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	416,248	25,008	0.0601	0.9399	75.77
40.5	391,240	8,075	0.0206	0.9794	71.22
41.5	383,165	24,754	0.0646	0.9354	69.75
42.5	473,863	2,104	0.0044	0.9956	65.24
43.5	471,758	24	0.0001	0.9999	64.95
44.5	169,497	109	0.0006	0.9994	64.95
45.5	169,388	532	0.0031	0.9969	64.91
46.5	168,856	794	0.0047	0.9953	64.70
47.5	88,076	4,378	0.0497	0.9503	64.40
48.5	83,698		0.0000	1.0000	61.20
49.5	83,698		0.0000	1.0000	61.20
50.5	83,698	13,373	0.1598	0.8402	61.20
51.5	70,326	1,236	0.0176	0.9824	51.42
52.5	69,090	13,559	0.1962	0.8038	50.52
53.5	55,532		0.0000	1.0000	40.60
54.5	55,532		0.0000	1.0000	40.60
55.5	55,532	38,179	0.6875	0.3125	40.60
56.5	17,353		0.0000	1.0000	12.69
57.5	17,353		0.0000	1.0000	12.69
58.5	17,353		0.0000	1.0000	12.69
59.5	17,353		0.0000	1.0000	12.69
60.5	17,353		0.0000	1.0000	12.69
61.5					12.69

NORTHWESTERN ENERGY
ELECTRIC PLANT
ACCOUNT 342.10 FUEL HOLDERS, PRODUCERS AND ACCESSORIES - PIPELINES
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
ELECTRIC PLANT

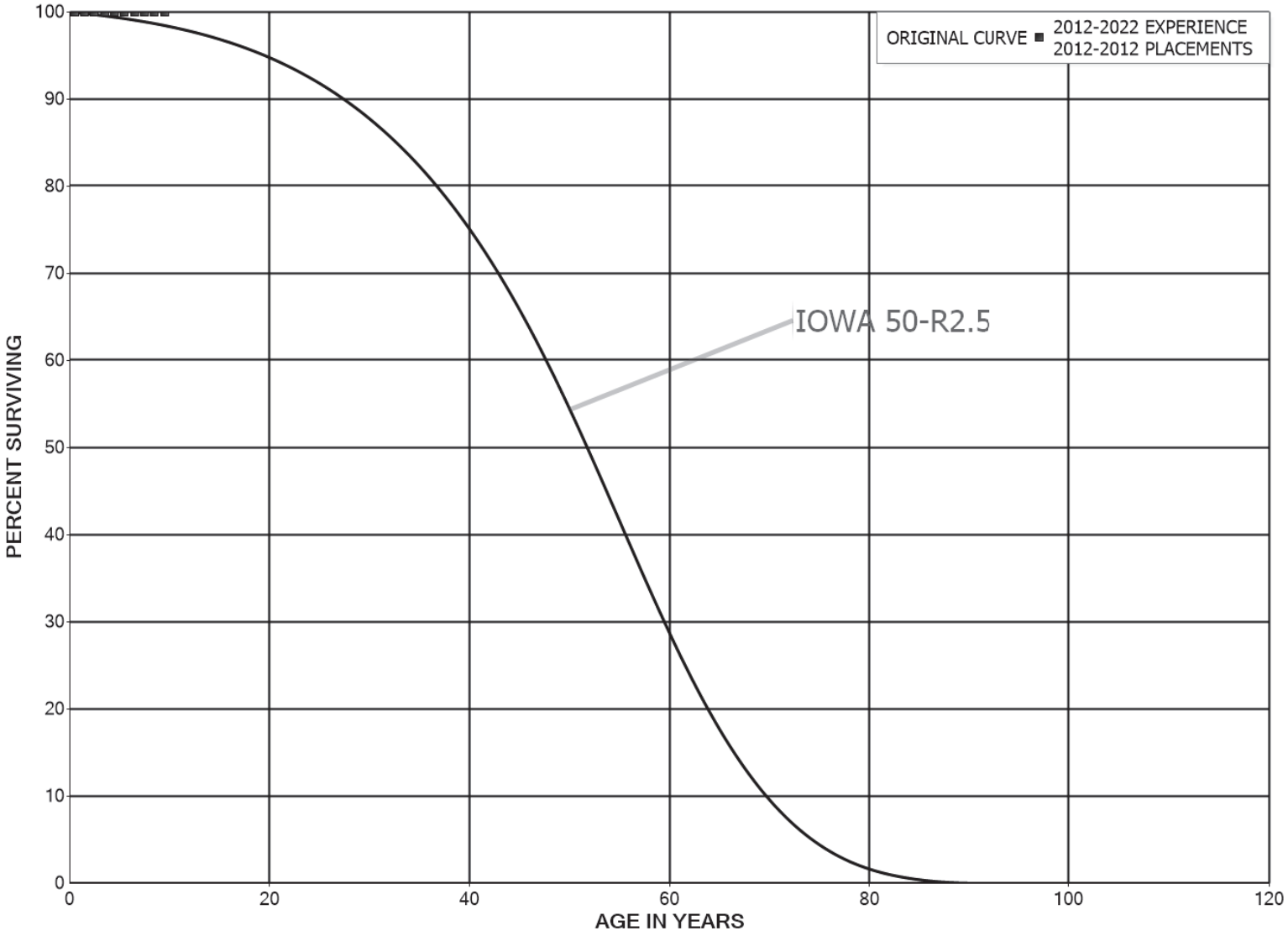
ACCOUNT 342.10 FUEL HOLDERS, PRODUCERS AND ACCESSORIES - PIPELINES

ORIGINAL LIFE TABLE

PLACEMENT BAND 2012-2012 EXPERIENCE BAND 2012-2022

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	1,408,976		0.0000	1.0000	100.00
0.5	1,408,976		0.0000	1.0000	100.00
1.5	1,408,976		0.0000	1.0000	100.00
2.5	1,408,976		0.0000	1.0000	100.00
3.5	1,408,976		0.0000	1.0000	100.00
4.5	1,408,976		0.0000	1.0000	100.00
5.5	1,408,976		0.0000	1.0000	100.00
6.5	1,408,976		0.0000	1.0000	100.00
7.5	1,408,976		0.0000	1.0000	100.00
8.5	1,408,976		0.0000	1.0000	100.00
9.5	1,408,976		0.0000	1.0000	100.00
10.5					100.00

NORTHWESTERN ENERGY
ELECTRIC PLANT
ACCOUNT 342.20 FUEL HOLDERS, PRODUCERS AND ACCESSORIES - COMPRESSORS
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
ELECTRIC PLANT

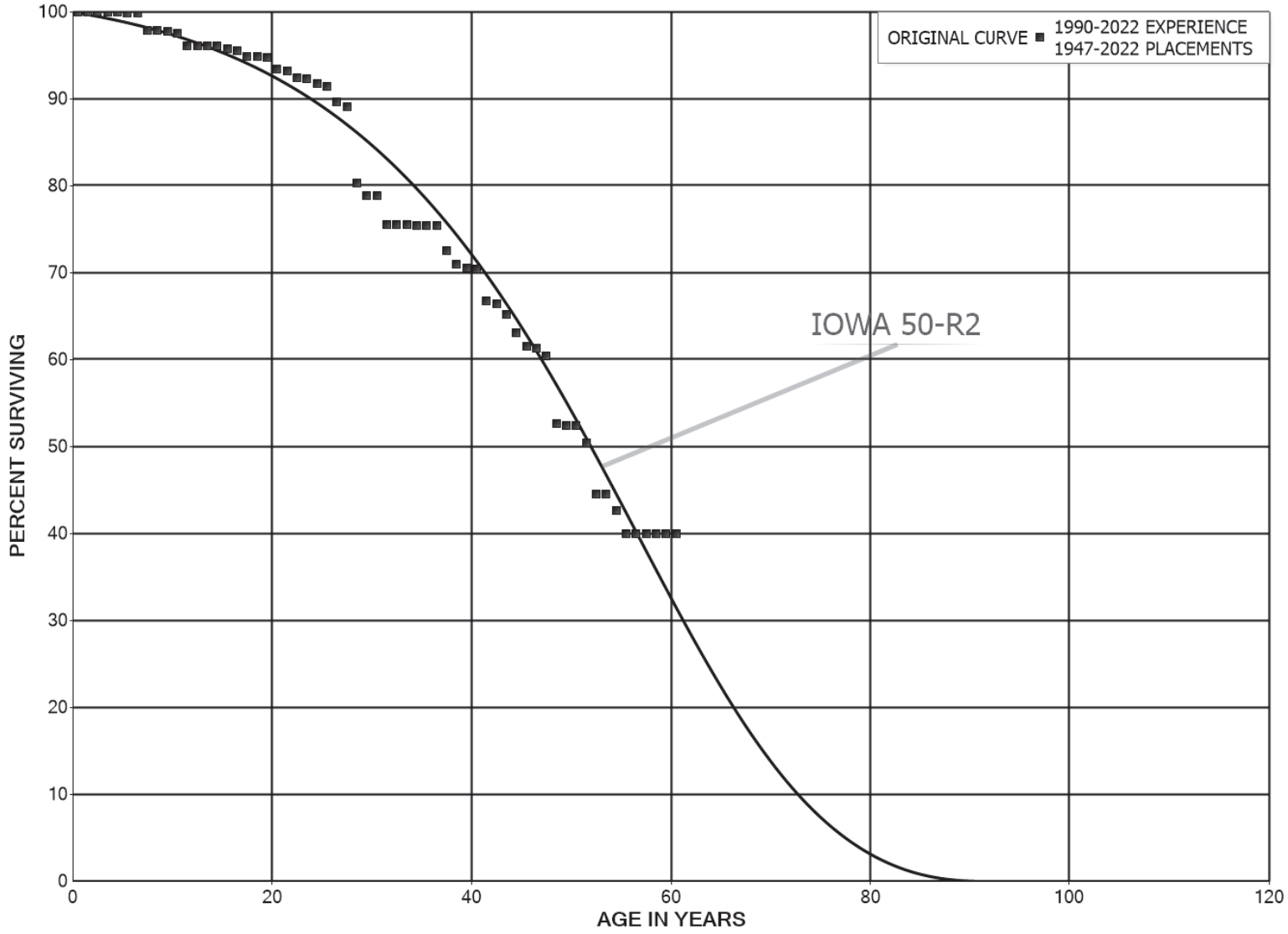
ACCOUNT 342.20 FUEL HOLDERS, PRODUCERS AND ACCESSORIES - COMPRESSORS

ORIGINAL LIFE TABLE

PLACEMENT BAND 2012-2012 EXPERIENCE BAND 2012-2022

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	487,130		0.0000	1.0000	100.00
0.5	487,130		0.0000	1.0000	100.00
1.5	487,130		0.0000	1.0000	100.00
2.5	487,130		0.0000	1.0000	100.00
3.5	487,130		0.0000	1.0000	100.00
4.5	487,130		0.0000	1.0000	100.00
5.5	487,130		0.0000	1.0000	100.00
6.5	487,130		0.0000	1.0000	100.00
7.5	487,130		0.0000	1.0000	100.00
8.5	487,130		0.0000	1.0000	100.00
9.5	487,130		0.0000	1.0000	100.00
10.5					100.00

NORTHWESTERN ENERGY
ELECTRIC PLANT
ACCOUNT 343.00 PRIME MOVERS
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 343.00 PRIME MOVERS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1947-2022 EXPERIENCE BAND 1990-2022

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	137,340,725		0.0000	1.0000	100.00
0.5	52,349,629		0.0000	1.0000	100.00
1.5	52,033,697		0.0000	1.0000	100.00
2.5	44,429,660		0.0000	1.0000	100.00
3.5	44,363,907	27,594	0.0006	0.9994	100.00
4.5	44,219,910	23,311	0.0005	0.9995	99.94
5.5	43,988,346	2,565	0.0001	0.9999	99.89
6.5	42,113,425	839,835	0.0199	0.9801	99.88
7.5	40,971,768	17,500	0.0004	0.9996	97.89
8.5	40,731,820	70,577	0.0017	0.9983	97.85
9.5	16,768,761	24,019	0.0014	0.9986	97.68
10.5	16,740,310	245,799	0.0147	0.9853	97.54
11.5	19,158,268		0.0000	1.0000	96.10
12.5	18,122,168	9,442	0.0005	0.9995	96.10
13.5	17,807,142		0.0000	1.0000	96.05
14.5	18,591,723	53,953	0.0029	0.9971	96.05
15.5	18,000,819	47,935	0.0027	0.9973	95.78
16.5	16,669,895	112,188	0.0067	0.9933	95.52
17.5	16,881,815	5,000	0.0003	0.9997	94.88
18.5	16,481,334	26,832	0.0016	0.9984	94.85
19.5	16,088,860	214,977	0.0134	0.9866	94.69
20.5	16,249,843	39,123	0.0024	0.9976	93.43
21.5	16,065,644	146,780	0.0091	0.9909	93.20
22.5	15,906,207	7,408	0.0005	0.9995	92.35
23.5	15,918,995	103,614	0.0065	0.9935	92.31
24.5	15,805,091	61,109	0.0039	0.9961	91.71
25.5	14,693,986	287,037	0.0195	0.9805	91.35
26.5	6,139,129	31,280	0.0051	0.9949	89.57
27.5	6,735,294	670,810	0.0996	0.9004	89.11
28.5	8,034,754	137,716	0.0171	0.9829	80.24
29.5	8,228,982	3,863	0.0005	0.9995	78.86
30.5	8,225,120	345,002	0.0419	0.9581	78.83
31.5	7,549,002		0.0000	1.0000	75.52
32.5	7,333,079	82	0.0000	1.0000	75.52
33.5	7,332,996	8,845	0.0012	0.9988	75.52
34.5	7,324,152	801	0.0001	0.9999	75.43
35.5	7,919,320	1,667	0.0002	0.9998	75.42
36.5	8,011,413	306,434	0.0382	0.9618	75.40
37.5	7,704,979	166,361	0.0216	0.9784	72.52
38.5	7,538,618	52,007	0.0069	0.9931	70.95

NORTHWESTERN ENERGY
ELECTRIC PLANT

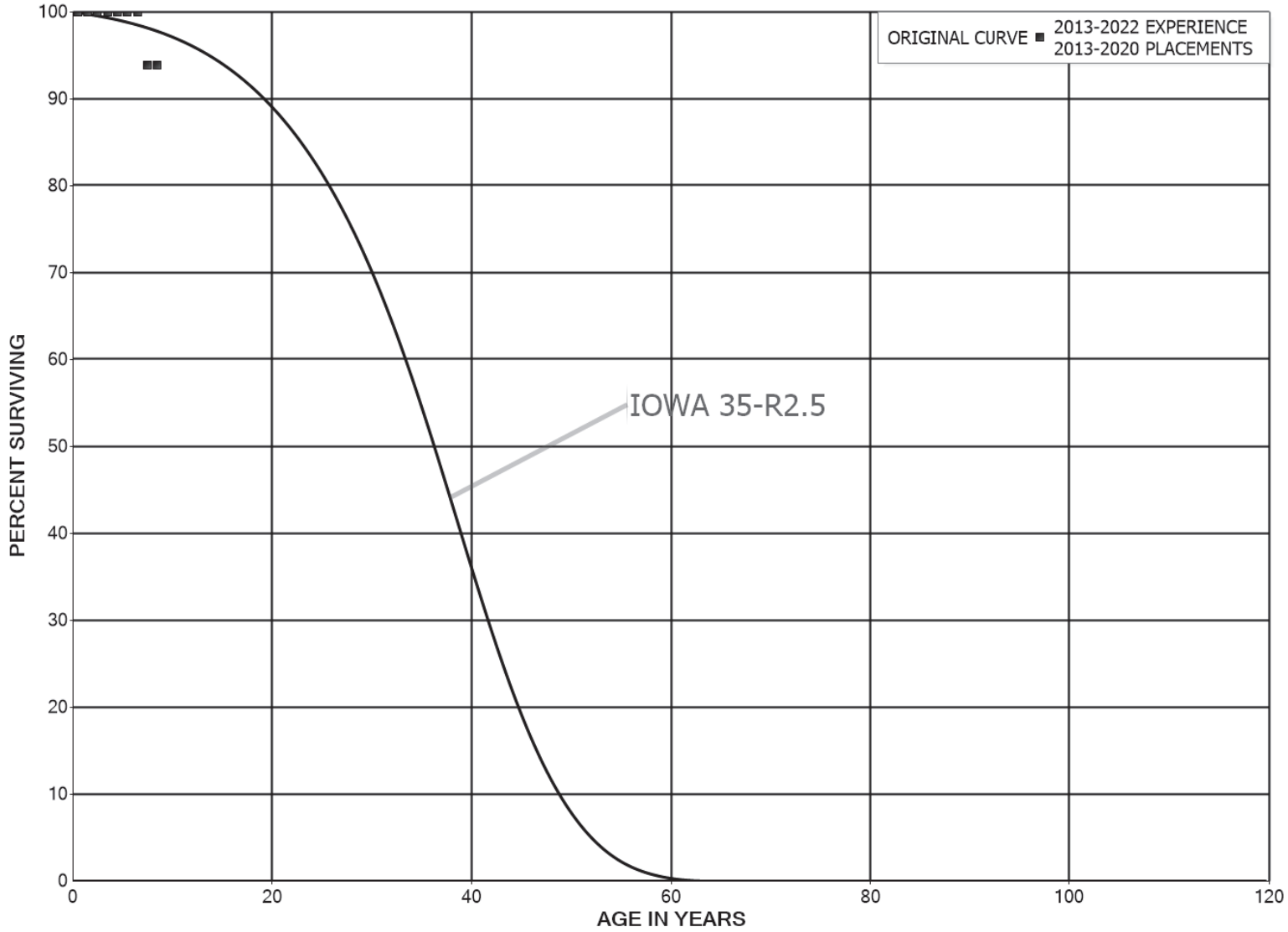
ACCOUNT 343.00 PRIME MOVERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1947-2022 EXPERIENCE BAND 1990-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	7,889,595	4,732	0.0006	0.9994	70.46
40.5	7,884,863	411,282	0.0522	0.9478	70.42
41.5	7,476,378	38,390	0.0051	0.9949	66.75
42.5	7,675,128	139,373	0.0182	0.9818	66.41
43.5	7,535,755	242,043	0.0321	0.9679	65.20
44.5	4,627,821	120,430	0.0260	0.9740	63.11
45.5	4,507,391	10,756	0.0024	0.9976	61.46
46.5	4,496,636	67,480	0.0150	0.9850	61.32
47.5	2,813,870	364,869	0.1297	0.8703	60.40
48.5	2,449,002	5,790	0.0024	0.9976	52.57
49.5	2,443,212	3,566	0.0015	0.9985	52.44
50.5	2,126,659	79,716	0.0375	0.9625	52.36
51.5	2,051,632	240,717	0.1173	0.8827	50.40
52.5	1,810,915		0.0000	1.0000	44.49
53.5	1,601,004	66,995	0.0418	0.9582	44.49
54.5	1,534,009	95,605	0.0623	0.9377	42.63
55.5	1,438,404		0.0000	1.0000	39.97
56.5	1,438,404		0.0000	1.0000	39.97
57.5	1,438,404		0.0000	1.0000	39.97
58.5	1,430,127		0.0000	1.0000	39.97
59.5	1,430,127		0.0000	1.0000	39.97
60.5	889,828		0.0000	1.0000	39.97
61.5					39.97

NORTHWESTERN ENERGY
ELECTRIC PLANT
ACCOUNT 344.00 GENERATORS
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
ELECTRIC PLANT

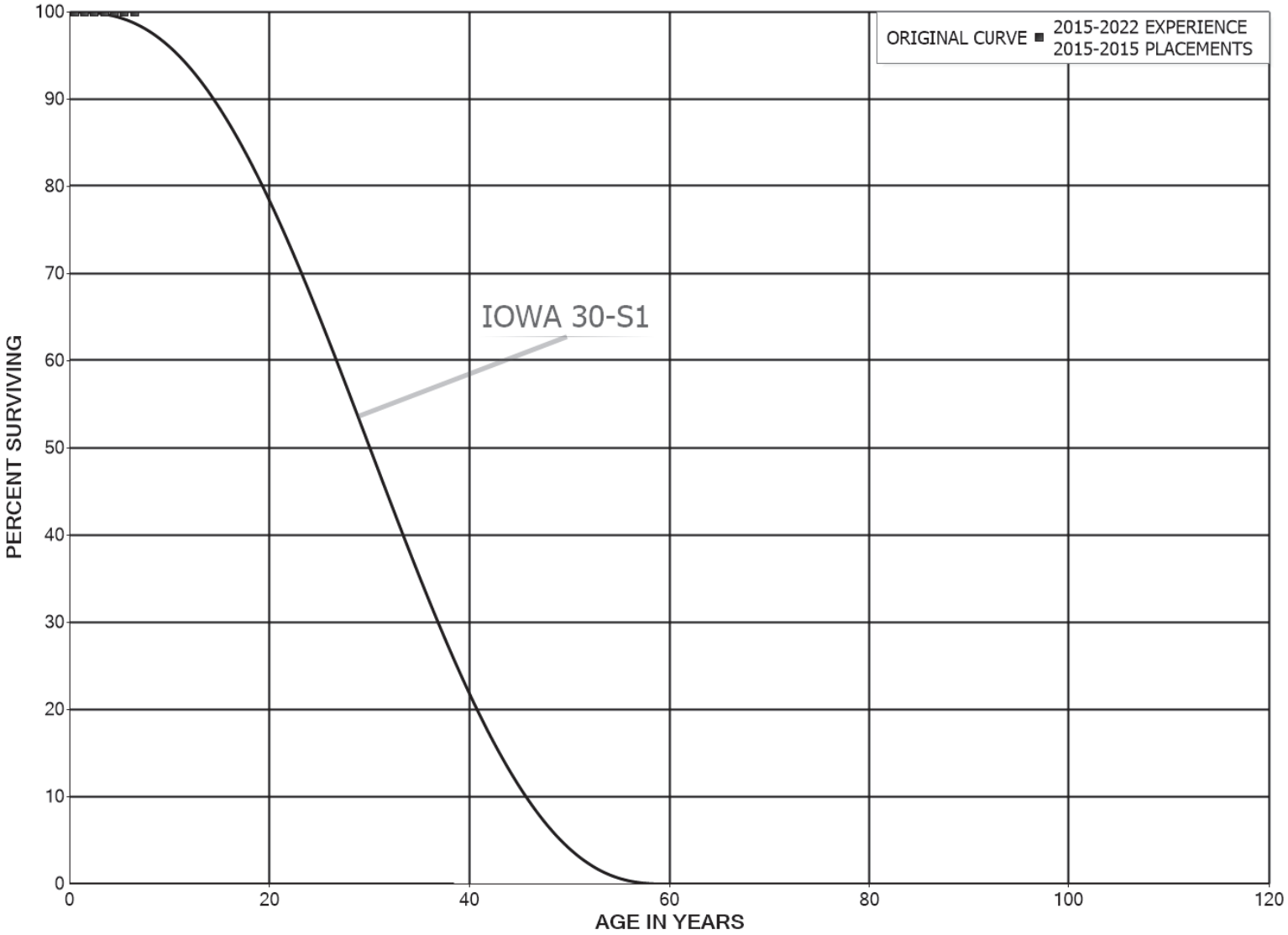
ACCOUNT 344.00 GENERATORS

ORIGINAL LIFE TABLE

PLACEMENT BAND 2013-2020 EXPERIENCE BAND 2013-2022

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	8,444,355		0.0000	1.0000	100.00
0.5	8,444,355		0.0000	1.0000	100.00
1.5	8,444,355		0.0000	1.0000	100.00
2.5	8,349,122		0.0000	1.0000	100.00
3.5	8,349,122		0.0000	1.0000	100.00
4.5	8,195,424		0.0000	1.0000	100.00
5.5	8,195,424		0.0000	1.0000	100.00
6.5	8,192,726	507,986	0.0620	0.9380	100.00
7.5	7,684,741		0.0000	1.0000	93.80
8.5	7,684,741		0.0000	1.0000	93.80
9.5					93.80

NORTHWESTERN ENERGY
ELECTRIC PLANT
ACCOUNT 344.10 GENERATORS - WIND
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
ELECTRIC PLANT

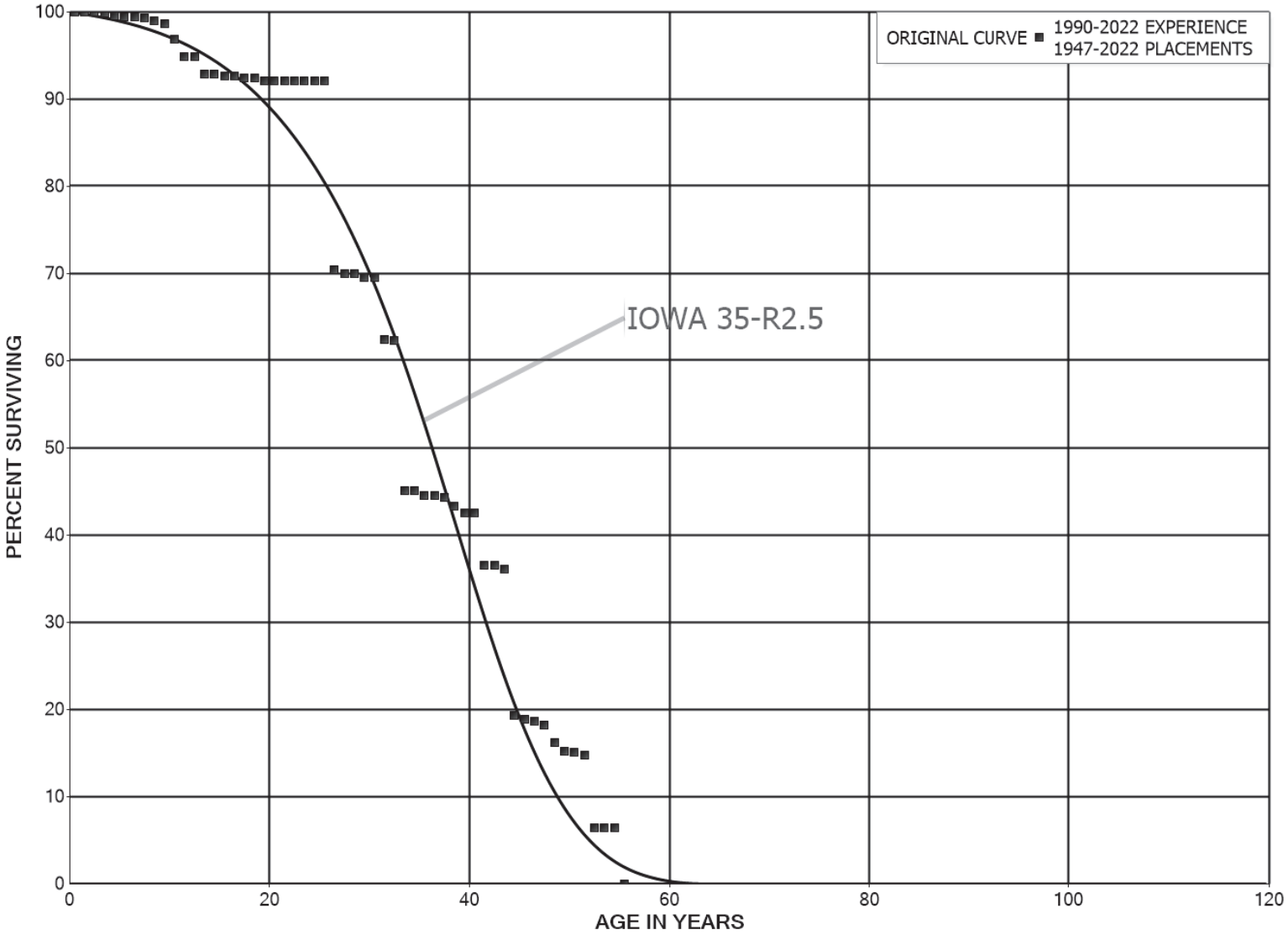
ACCOUNT 344.10 GENERATORS - WIND

ORIGINAL LIFE TABLE

PLACEMENT BAND 2015-2015 EXPERIENCE BAND 2015-2022

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	77,500,078		0.0000	1.0000	100.00
0.5	77,500,078		0.0000	1.0000	100.00
1.5	79,926,259		0.0000	1.0000	100.00
2.5	79,926,259		0.0000	1.0000	100.00
3.5	79,926,259		0.0000	1.0000	100.00
4.5	79,926,259		0.0000	1.0000	100.00
5.5	79,926,259		0.0000	1.0000	100.00
6.5	79,926,259		0.0000	1.0000	100.00
7.5					100.00

NORTHWESTERN ENERGY
ELECTRIC PLANT
ACCOUNT 345.00 ACCESSORY ELECTRIC EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 345.00 ACCESSORY ELECTRIC EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1947-2022 EXPERIENCE BAND 1990-2022

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	3,779,532		0.0000	1.0000	100.00
0.5	3,906,057		0.0000	1.0000	100.00
1.5	3,906,057		0.0000	1.0000	100.00
2.5	3,891,040	7,810	0.0020	0.9980	100.00
3.5	3,883,231	11,360	0.0029	0.9971	99.80
4.5	3,871,795	5,641	0.0015	0.9985	99.51
5.5	3,828,505		0.0000	1.0000	99.36
6.5	3,433,399	1,000	0.0003	0.9997	99.36
7.5	3,275,346	14,209	0.0043	0.9957	99.33
8.5	3,261,137	9,532	0.0029	0.9971	98.90
9.5	929,562	17,103	0.0184	0.9816	98.61
10.5	893,877	18,558	0.0208	0.9792	96.80
11.5	876,952		0.0000	1.0000	94.79
12.5	870,241	18,307	0.0210	0.9790	94.79
13.5	899,920		0.0000	1.0000	92.80
14.5	928,721	1,371	0.0015	0.9985	92.80
15.5	891,363		0.0000	1.0000	92.66
16.5	853,114	2,538	0.0030	0.9970	92.66
17.5	851,686		0.0000	1.0000	92.38
18.5	818,621	2,739	0.0033	0.9967	92.38
19.5	769,299		0.0000	1.0000	92.07
20.5	781,427		0.0000	1.0000	92.07
21.5	781,427	292	0.0004	0.9996	92.07
22.5	783,021		0.0000	1.0000	92.04
23.5	780,106		0.0000	1.0000	92.04
24.5	567,569		0.0000	1.0000	92.04
25.5	572,264	134,897	0.2357	0.7643	92.04
26.5	315,794	1,961	0.0062	0.9938	70.34
27.5	349,279		0.0000	1.0000	69.91
28.5	354,239	2,288	0.0065	0.9935	69.91
29.5	391,277		0.0000	1.0000	69.45
30.5	391,277	39,523	0.1010	0.8990	69.45
31.5	307,286	857	0.0028	0.9972	62.44
32.5	306,430	84,660	0.2763	0.7237	62.27
33.5	221,770	24	0.0001	0.9999	45.06
34.5	221,746	2,840	0.0128	0.9872	45.06
35.5	218,905		0.0000	1.0000	44.48
36.5	218,905	1,174	0.0054	0.9946	44.48
37.5	217,732	4,979	0.0229	0.9771	44.24
38.5	212,753	3,346	0.0157	0.9843	43.23

NORTHWESTERN ENERGY
ELECTRIC PLANT

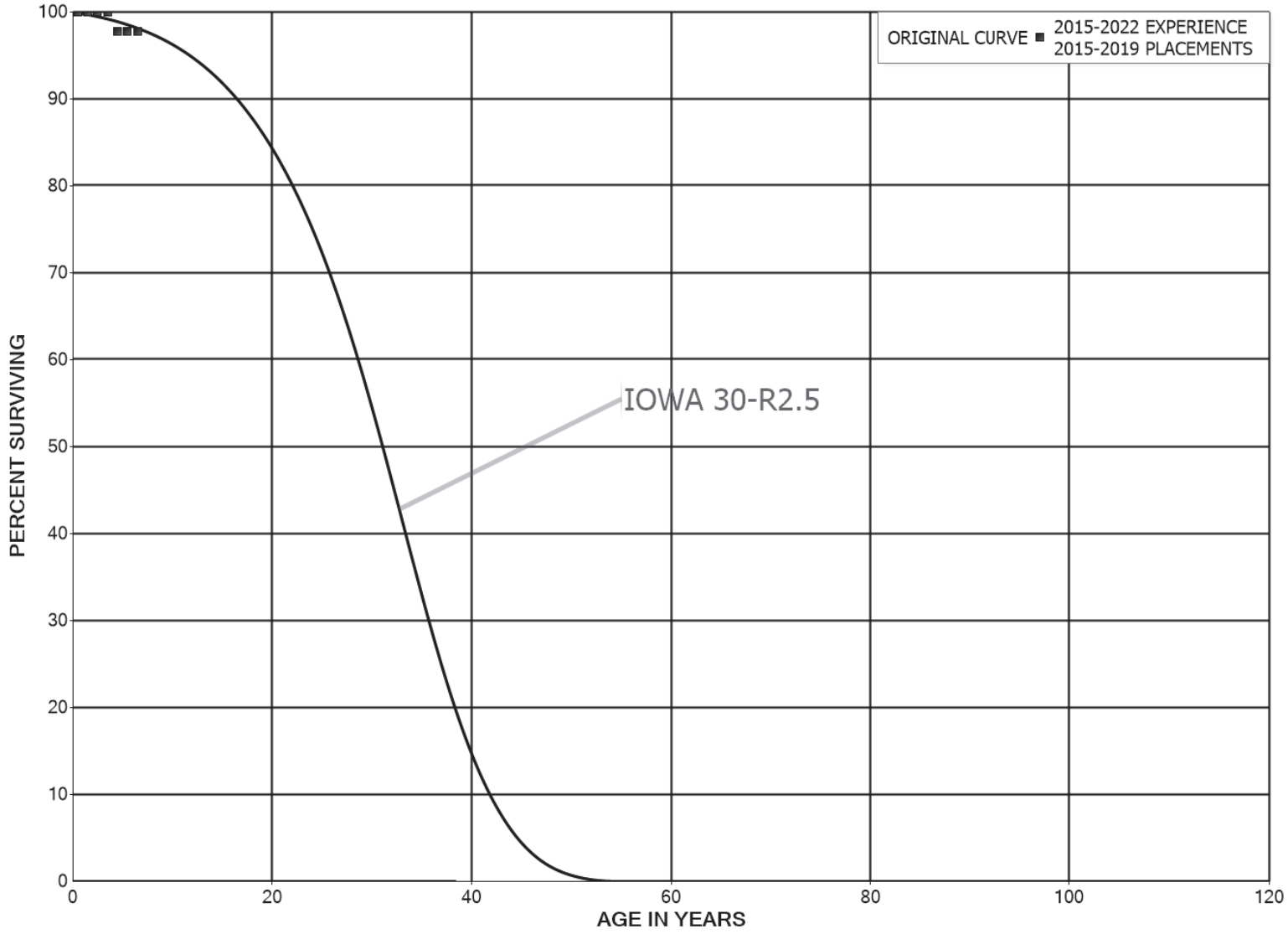
ACCOUNT 345.00 ACCESSORY ELECTRIC EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1947-2022 EXPERIENCE BAND 1990-2022

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	422,146	339	0.0008	0.9992	42.55
40.5	421,807	59,330	0.1407	0.8593	42.52
41.5	362,477	82	0.0002	0.9998	36.54
42.5	376,002	5,014	0.0133	0.9867	36.53
43.5	370,989	172,591	0.4652	0.5348	36.04
44.5	186,639	4,695	0.0252	0.9748	19.27
45.5	181,944	1,873	0.0103	0.9897	18.79
46.5	180,071	4,192	0.0233	0.9767	18.60
47.5	157,879	17,634	0.1117	0.8883	18.16
48.5	140,245	8,037	0.0573	0.9427	16.13
49.5	132,208	1,253	0.0095	0.9905	15.21
50.5	130,955	2,916	0.0223	0.9777	15.07
51.5	128,040	72,471	0.5660	0.4340	14.73
52.5	55,569		0.0000	1.0000	6.39
53.5	55,569		0.0000	1.0000	6.39
54.5	55,569	55,569	1.0000		6.39
55.5					

NORTHWESTERN ENERGY
ELECTRIC PLANT
ACCOUNT 345.10 ACCESSORY ELECTRIC EQUIPMENT - WIND
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
ELECTRIC PLANT

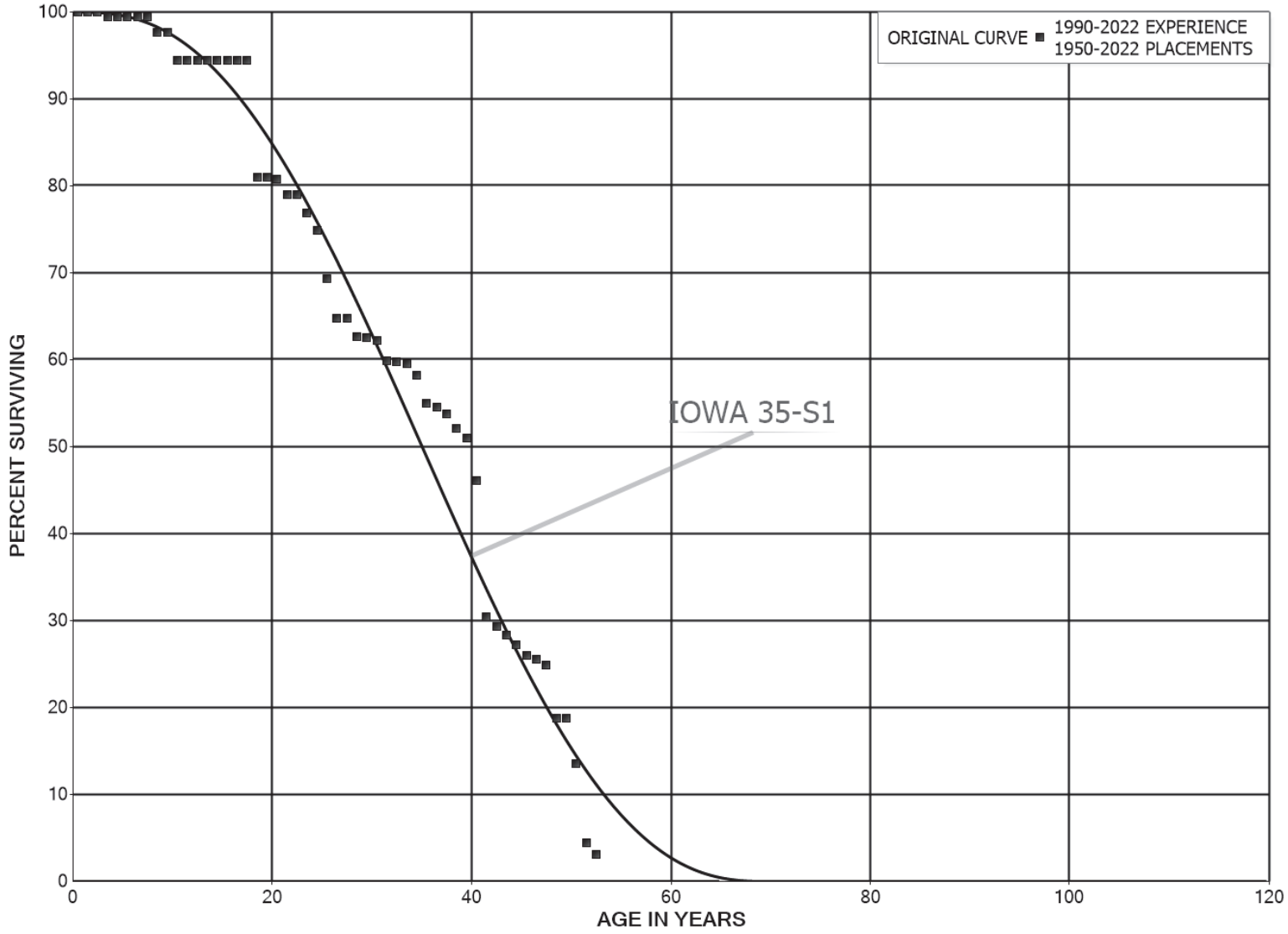
ACCOUNT 345.10 ACCESSORY ELECTRIC EQUIPMENT - WIND

ORIGINAL LIFE TABLE

PLACEMENT BAND 2015-2019 EXPERIENCE BAND 2015-2022

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	4,593,448		0.0000	1.0000	100.00
0.5	4,593,448		0.0000	1.0000	100.00
1.5	4,755,198		0.0000	1.0000	100.00
2.5	4,755,198		0.0000	1.0000	100.00
3.5	4,680,406	106,373	0.0227	0.9773	100.00
4.5	4,574,033		0.0000	1.0000	97.73
5.5	4,574,033		0.0000	1.0000	97.73
6.5	4,574,033		0.0000	1.0000	97.73
7.5					97.73

NORTHWESTERN ENERGY
ELECTRIC PLANT
ACCOUNT 346.00 MISCELLANEOUS POWER PLANT EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 346.00 MISCELLANEOUS POWER PLANT EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1950-2022 EXPERIENCE BAND 1990-2022

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	7,279,392		0.0000	1.0000	100.00
0.5	7,128,278		0.0000	1.0000	100.00
1.5	4,245,426		0.0000	1.0000	100.00
2.5	900,002	5,554	0.0062	0.9938	100.00
3.5	875,072		0.0000	1.0000	99.38
4.5	774,102		0.0000	1.0000	99.38
5.5	774,518		0.0000	1.0000	99.38
6.5	720,452		0.0000	1.0000	99.38
7.5	637,623	11,668	0.0183	0.9817	99.38
8.5	614,885		0.0000	1.0000	97.56
9.5	74,125	2,422	0.0327	0.9673	97.56
10.5	74,828		0.0000	1.0000	94.38
11.5	74,226		0.0000	1.0000	94.38
12.5	76,351		0.0000	1.0000	94.38
13.5	68,721		0.0000	1.0000	94.38
14.5	55,933		0.0000	1.0000	94.38
15.5	58,451		0.0000	1.0000	94.38
16.5	65,066		0.0000	1.0000	94.38
17.5	66,237	9,404	0.1420	0.8580	94.38
18.5	58,557		0.0000	1.0000	80.98
19.5	61,868	193	0.0031	0.9969	80.98
20.5	68,998	1,539	0.0223	0.9777	80.72
21.5	68,153		0.0000	1.0000	78.92
22.5	68,262	1,766	0.0259	0.9741	78.92
23.5	68,354	1,863	0.0273	0.9727	76.88
24.5	71,685	5,284	0.0737	0.9263	74.79
25.5	67,431	4,456	0.0661	0.9339	69.28
26.5	67,161		0.0000	1.0000	64.70
27.5	72,858	2,326	0.0319	0.9681	64.70
28.5	78,613	94	0.0012	0.9988	62.63
29.5	78,272	457	0.0058	0.9942	62.56
30.5	77,815	2,989	0.0384	0.9616	62.19
31.5	74,427	79	0.0011	0.9989	59.80
32.5	71,157	327	0.0046	0.9954	59.74
33.5	69,480	1,471	0.0212	0.9788	59.46
34.5	68,009	3,819	0.0561	0.9439	58.21
35.5	64,190	544	0.0085	0.9915	54.94
36.5	63,647	863	0.0136	0.9864	54.47
37.5	62,784	1,984	0.0316	0.9684	53.73
38.5	50,312	1,025	0.0204	0.9796	52.04

NORTHWESTERN ENERGY
ELECTRIC PLANT

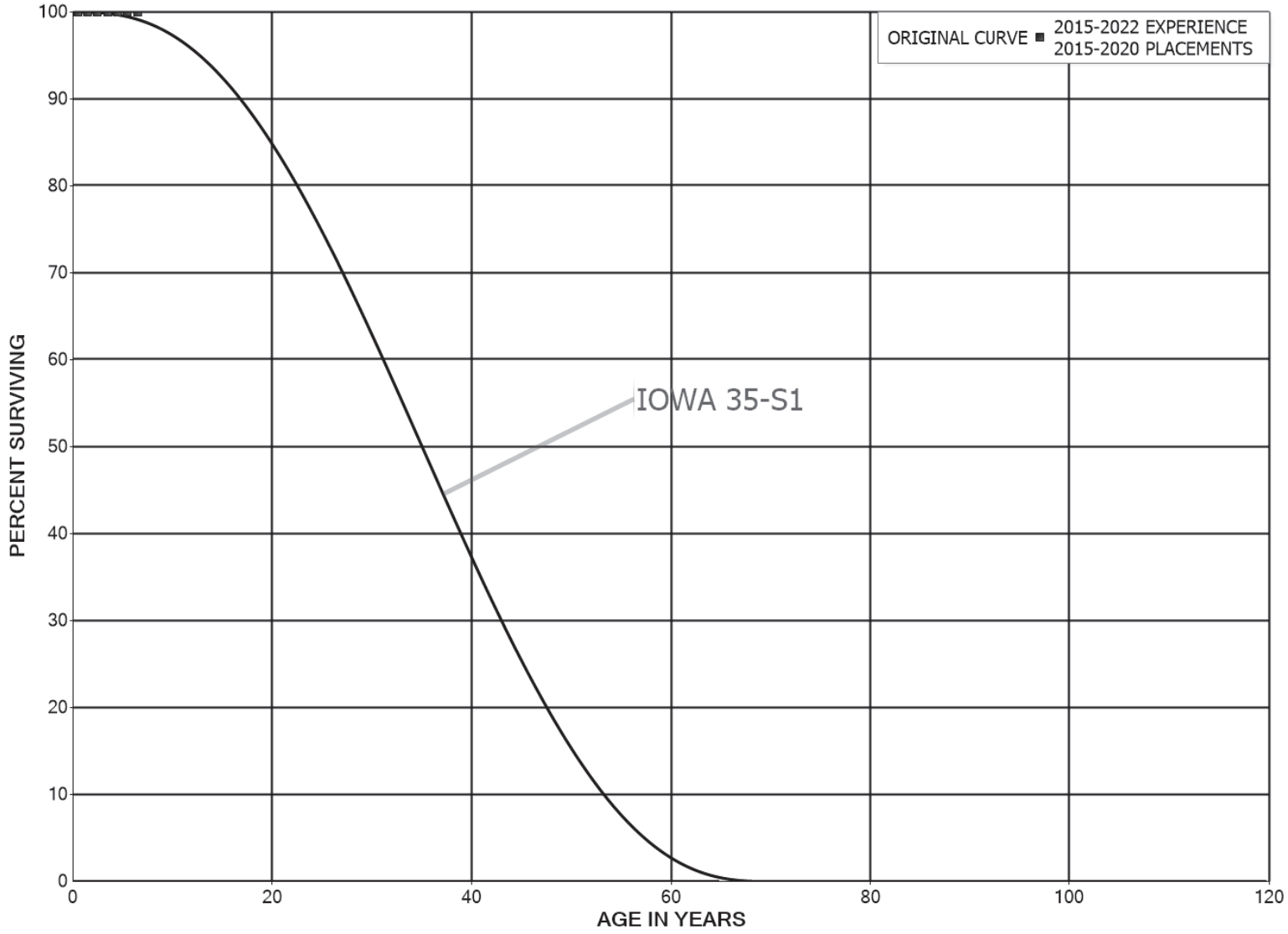
ACCOUNT 346.00 MISCELLANEOUS POWER PLANT EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1950-2022 EXPERIENCE BAND 1990-2022

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	70,458	6,743	0.0957	0.9043	50.98
40.5	63,715	21,698	0.3406	0.6594	46.10
41.5	41,356	1,501	0.0363	0.9637	30.40
42.5	39,855	1,414	0.0355	0.9645	29.30
43.5	37,131	1,385	0.0373	0.9627	28.26
44.5	29,740	1,431	0.0481	0.9519	27.20
45.5	26,575	404	0.0152	0.9848	25.89
46.5	26,170	734	0.0280	0.9720	25.50
47.5	20,923	5,143	0.2458	0.7542	24.78
48.5	14,903		0.0000	1.0000	18.69
49.5	13,502	3,782	0.2801	0.7199	18.69
50.5	9,720	6,520	0.6708	0.3292	13.46
51.5	3,200	989	0.3090	0.6910	4.43
52.5					3.06

NORTHWESTERN ENERGY
ELECTRIC PLANT
ACCOUNT 346.10 MISCELLANEOUS POWER PLANT EQUIPMENT - WIND
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
ELECTRIC PLANT

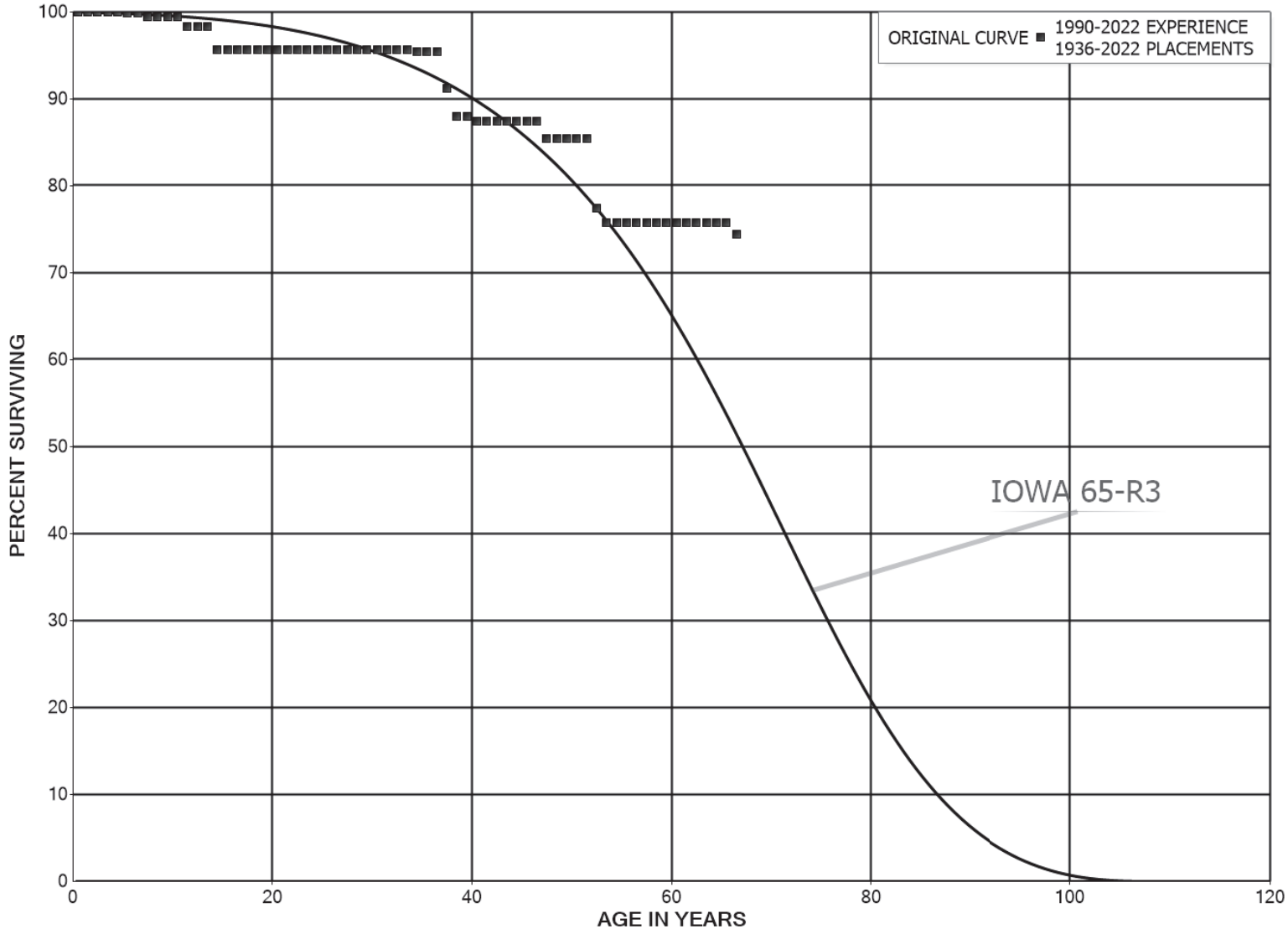
ACCOUNT 346.10 MISCELLANEOUS POWER PLANT EQUIPMENT - WIND

ORIGINAL LIFE TABLE

PLACEMENT BAND 2015-2020 EXPERIENCE BAND 2015-2022

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	18,919,332		0.0000	1.0000	100.00
0.5	18,919,332		0.0000	1.0000	100.00
1.5	15,476,401		0.0000	1.0000	100.00
2.5	15,443,655		0.0000	1.0000	100.00
3.5	15,443,655		0.0000	1.0000	100.00
4.5	15,443,655	13,125	0.0008	0.9992	100.00
5.5	15,232,863		0.0000	1.0000	99.92
6.5	15,232,863		0.0000	1.0000	99.92
7.5					99.92

NORTHWESTERN ENERGY
ELECTRIC PLANT
ACCOUNT 352.00 STRUCTURES AND IMPROVEMENTS
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 352.00 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1936-2022 EXPERIENCE BAND 1990-2022

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	11,172,145		0.0000	1.0000	100.00
0.5	10,960,245		0.0000	1.0000	100.00
1.5	9,976,991	293	0.0000	1.0000	100.00
2.5	9,638,432		0.0000	1.0000	100.00
3.5	9,638,432		0.0000	1.0000	100.00
4.5	7,557,584	12,393	0.0016	0.9984	100.00
5.5	6,735,314		0.0000	1.0000	99.83
6.5	5,700,828	22,156	0.0039	0.9961	99.83
7.5	3,148,653		0.0000	1.0000	99.45
8.5	2,597,611		0.0000	1.0000	99.45
9.5	2,556,330		0.0000	1.0000	99.45
10.5	1,447,123	17,576	0.0121	0.9879	99.45
11.5	665,533		0.0000	1.0000	98.24
12.5	469,914		0.0000	1.0000	98.24
13.5	228,659	6,224	0.0272	0.9728	98.24
14.5	222,434		0.0000	1.0000	95.56
15.5	222,434		0.0000	1.0000	95.56
16.5	220,605		0.0000	1.0000	95.56
17.5	220,605		0.0000	1.0000	95.56
18.5	177,040		0.0000	1.0000	95.56
19.5	147,862		0.0000	1.0000	95.56
20.5	163,969		0.0000	1.0000	95.56
21.5	172,786		0.0000	1.0000	95.56
22.5	247,786		0.0000	1.0000	95.56
23.5	338,841		0.0000	1.0000	95.56
24.5	412,966		0.0000	1.0000	95.56
25.5	412,966		0.0000	1.0000	95.56
26.5	451,873		0.0000	1.0000	95.56
27.5	451,873		0.0000	1.0000	95.56
28.5	265,460		0.0000	1.0000	95.56
29.5	265,460		0.0000	1.0000	95.56
30.5	265,460		0.0000	1.0000	95.56
31.5	265,460		0.0000	1.0000	95.56
32.5	243,460		0.0000	1.0000	95.56
33.5	839,942	1,109	0.0013	0.9987	95.56
34.5	838,833		0.0000	1.0000	95.44
35.5	888,833		0.0000	1.0000	95.44
36.5	888,833	40,000	0.0450	0.9550	95.44
37.5	848,833	30,000	0.0353	0.9647	91.14
38.5	851,981		0.0000	1.0000	87.92

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 352.00 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1936-2022 EXPERIENCE BAND 1990-2022

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	855,485	5,603	0.0065	0.9935	87.92
40.5	907,543		0.0000	1.0000	87.35
41.5	901,135		0.0000	1.0000	87.35
42.5	898,876		0.0000	1.0000	87.35
43.5	898,876		0.0000	1.0000	87.35
44.5	898,876		0.0000	1.0000	87.35
45.5	958,876		0.0000	1.0000	87.35
46.5	880,145	20,000	0.0227	0.9773	87.35
47.5	860,145		0.0000	1.0000	85.36
48.5	860,145		0.0000	1.0000	85.36
49.5	860,145		0.0000	1.0000	85.36
50.5	860,145		0.0000	1.0000	85.36
51.5	822,073	76,314	0.0928	0.9072	85.36
52.5	745,759	16,906	0.0227	0.9773	77.44
53.5	766,660		0.0000	1.0000	75.68
54.5	757,844		0.0000	1.0000	75.68
55.5	757,844		0.0000	1.0000	75.68
56.5	668,977		0.0000	1.0000	75.68
57.5	668,977		0.0000	1.0000	75.68
58.5	668,977		0.0000	1.0000	75.68
59.5	668,977		0.0000	1.0000	75.68
60.5	668,977		0.0000	1.0000	75.68
61.5	668,977		0.0000	1.0000	75.68
62.5	668,977		0.0000	1.0000	75.68
63.5	668,977		0.0000	1.0000	75.68
64.5	668,977		0.0000	1.0000	75.68
65.5	668,977	11,659	0.0174	0.9826	75.68
66.5	132,494		0.0000	1.0000	74.36
67.5	132,494		0.0000	1.0000	74.36
68.5	132,494		0.0000	1.0000	74.36
69.5	132,494		0.0000	1.0000	74.36
70.5	132,494		0.0000	1.0000	74.36
71.5	99,346		0.0000	1.0000	74.36
72.5	55,842		0.0000	1.0000	74.36
73.5	55,842		0.0000	1.0000	74.36
74.5	55,842		0.0000	1.0000	74.36
75.5	55,842		0.0000	1.0000	74.36
76.5	55,842		0.0000	1.0000	74.36
77.5	55,842		0.0000	1.0000	74.36
78.5	55,842		0.0000	1.0000	74.36

NORTHWESTERN ENERGY
ELECTRIC PLANT

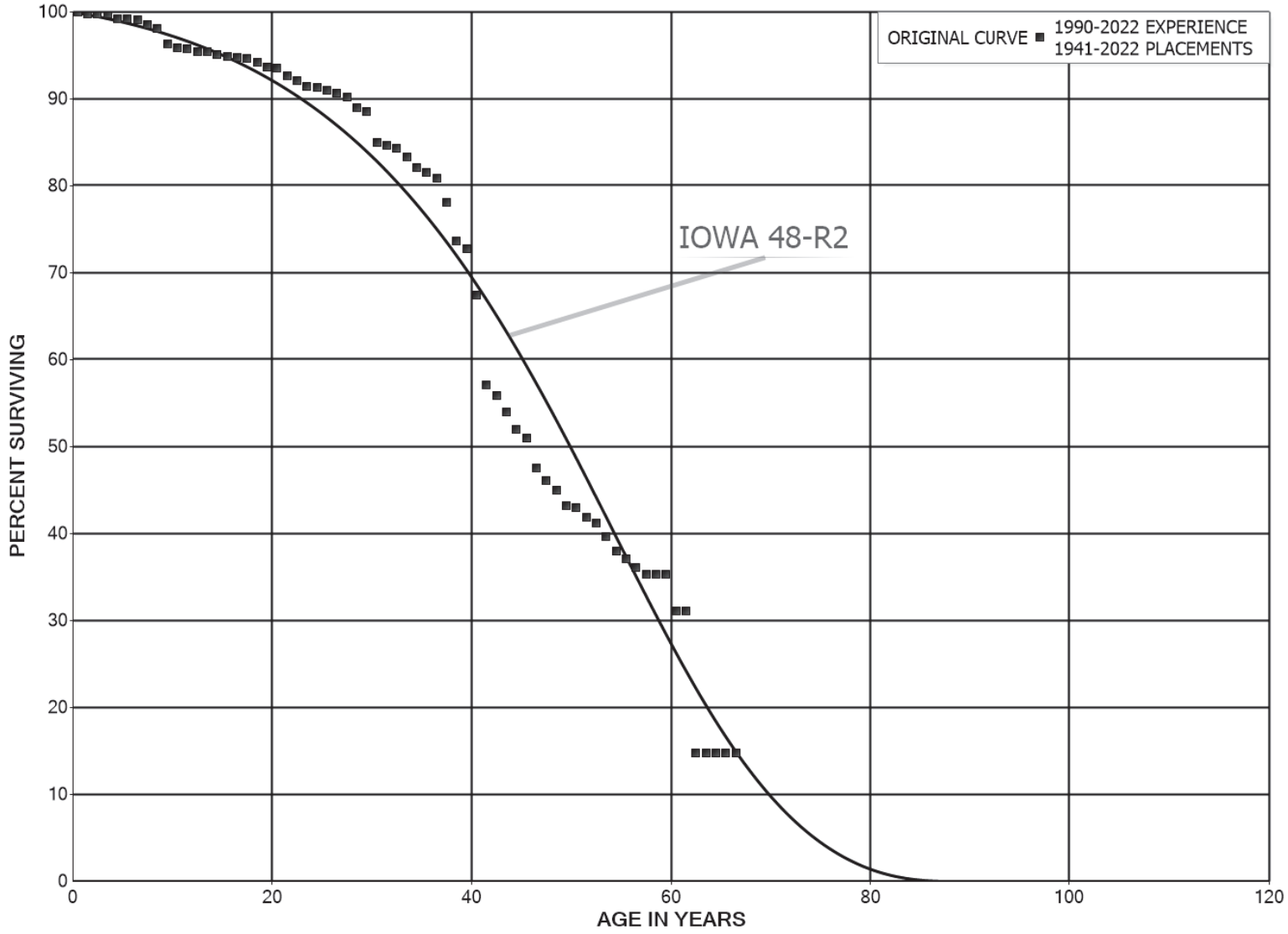
ACCOUNT 352.00 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1936-2022 EXPERIENCE BAND 1990-2022

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	55,842		0.0000	1.0000	74.36
80.5	55,842		0.0000	1.0000	74.36
81.5	55,842		0.0000	1.0000	74.36
82.5	55,842		0.0000	1.0000	74.36
83.5	55,842		0.0000	1.0000	74.36
84.5	53,915		0.0000	1.0000	74.36
85.5	53,915		0.0000	1.0000	74.36
86.5					74.36

NORTHWESTERN ENERGY
ELECTRIC PLANT
ACCOUNT 353.00 STATION EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 353.00 STATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1941-2022 EXPERIENCE BAND 1990-2022

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	91,478,929		0.0000	1.0000	100.00
0.5	91,163,649	283,087	0.0031	0.9969	100.00
1.5	84,375,897	2,637	0.0000	1.0000	99.69
2.5	81,693,516		0.0000	1.0000	99.69
3.5	83,717,596	425,024	0.0051	0.9949	99.69
4.5	74,879,202	18,837	0.0003	0.9997	99.18
5.5	68,649,198	89,586	0.0013	0.9987	99.16
6.5	61,646,702	331,666	0.0054	0.9946	99.03
7.5	49,303,253	206,920	0.0042	0.9958	98.49
8.5	47,669,687	858,897	0.0180	0.9820	98.08
9.5	46,591,641	209,459	0.0045	0.9955	96.31
10.5	37,972,682	73,174	0.0019	0.9981	95.88
11.5	32,454,434	91,132	0.0028	0.9972	95.69
12.5	27,341,954	10,522	0.0004	0.9996	95.43
13.5	27,515,070	101,630	0.0037	0.9963	95.39
14.5	28,530,545	45,869	0.0016	0.9984	95.04
15.5	28,419,129	47,190	0.0017	0.9983	94.88
16.5	28,063,972	46,094	0.0016	0.9984	94.73
17.5	28,508,835	111,892	0.0039	0.9961	94.57
18.5	33,021,616	187,675	0.0057	0.9943	94.20
19.5	32,467,360	69,067	0.0021	0.9979	93.66
20.5	32,466,401	304,839	0.0094	0.9906	93.47
21.5	31,976,538	187,583	0.0059	0.9941	92.59
22.5	31,981,550	211,788	0.0066	0.9934	92.04
23.5	32,057,247	56,896	0.0018	0.9982	91.44
24.5	31,561,084	98,641	0.0031	0.9969	91.27
25.5	31,328,946	136,626	0.0044	0.9956	90.99
26.5	30,712,811	146,990	0.0048	0.9952	90.59
27.5	30,380,410	408,070	0.0134	0.9866	90.16
28.5	28,591,377	149,058	0.0052	0.9948	88.95
29.5	27,548,063	1,093,428	0.0397	0.9603	88.48
30.5	25,792,008	110,713	0.0043	0.9957	84.97
31.5	23,957,163	92,386	0.0039	0.9961	84.61
32.5	22,287,261	261,322	0.0117	0.9883	84.28
33.5	21,365,177	302,529	0.0142	0.9858	83.29
34.5	20,336,403	151,166	0.0074	0.9926	82.11
35.5	19,609,676	163,262	0.0083	0.9917	81.50
36.5	15,690,808	529,860	0.0338	0.9662	80.82
37.5	14,427,574	837,138	0.0580	0.9420	78.09
38.5	13,399,222	160,297	0.0120	0.9880	73.56

NORTHWESTERN ENERGY
ELECTRIC PLANT

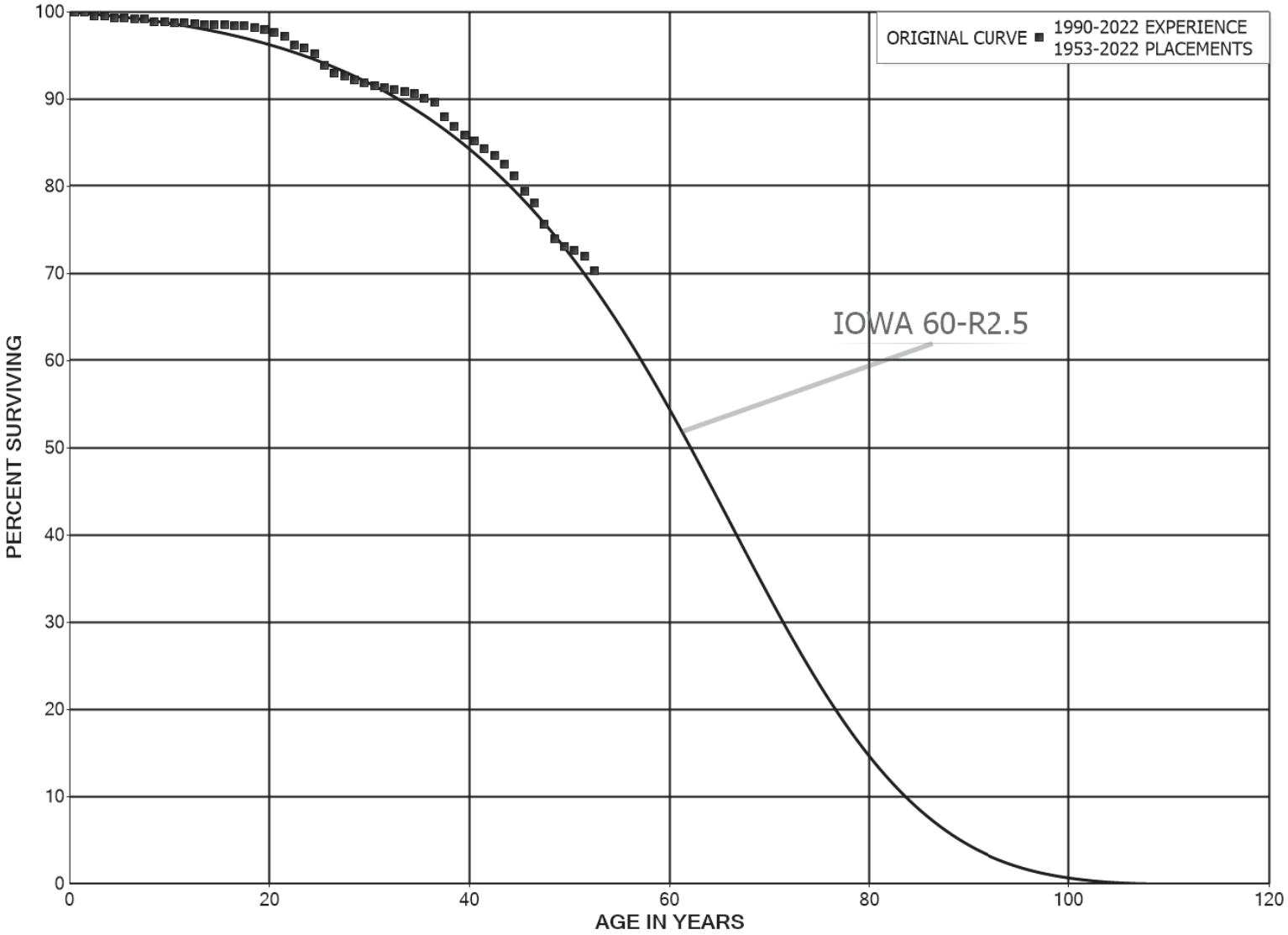
ACCOUNT 353.00 STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1941-2022 EXPERIENCE BAND 1990-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	12,435,907	899,806	0.0724	0.9276	72.68
40.5	10,724,239	1,643,939	0.1533	0.8467	67.42
41.5	8,750,660	189,379	0.0216	0.9784	57.09
42.5	8,009,338	272,932	0.0341	0.9659	55.85
43.5	7,417,288	275,076	0.0371	0.9629	53.95
44.5	6,839,902	123,870	0.0181	0.9819	51.95
45.5	5,806,268	395,880	0.0682	0.9318	51.01
46.5	4,314,127	134,770	0.0312	0.9688	47.53
47.5	3,154,156	71,780	0.0228	0.9772	46.05
48.5	3,002,755	118,018	0.0393	0.9607	45.00
49.5	2,808,018	16,662	0.0059	0.9941	43.23
50.5	2,538,778	70,358	0.0277	0.9723	42.97
51.5	1,122,563	15,251	0.0136	0.9864	41.78
52.5	1,098,907	43,792	0.0399	0.9601	41.21
53.5	998,573	39,767	0.0398	0.9602	39.57
54.5	805,398	20,845	0.0259	0.9741	38.00
55.5	542,789	13,678	0.0252	0.9748	37.01
56.5	241,928	5,341	0.0221	0.9779	36.08
57.5	97,660		0.0000	1.0000	35.28
58.5	82,912		0.0000	1.0000	35.28
59.5	72,453	8,659	0.1195	0.8805	35.28
60.5	16,026		0.0000	1.0000	31.07
61.5	15,707	8,250	0.5252	0.4748	31.07
62.5	3,326		0.0000	1.0000	14.75
63.5	3,167		0.0000	1.0000	14.75
64.5	3,167		0.0000	1.0000	14.75
65.5	3,167		0.0000	1.0000	14.75
66.5	3,017		0.0000	1.0000	14.75
67.5	3,017		0.0000	1.0000	14.75
68.5	3,017		0.0000	1.0000	14.75
69.5	3,017		0.0000	1.0000	14.75
70.5	3,017	1,010	0.3349	0.6651	14.75
71.5	2,006		0.0000	1.0000	9.81
72.5	2,006		0.0000	1.0000	9.81
73.5	2,006		0.0000	1.0000	9.81
74.5	2,006		0.0000	1.0000	9.81
75.5	1,912		0.0000	1.0000	9.81
76.5	1,912		0.0000	1.0000	9.81
77.5	1,912	1,912	1.0000		9.81
78.5					

NORTHWESTERN ENERGY
ELECTRIC PLANT
ACCOUNT 355.00 POLES AND FIXTURES
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 355.00 POLES AND FIXTURES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1953-2022 EXPERIENCE BAND 1990-2022

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	47,577,956	8	0.0000	1.0000	100.00
0.5	43,357,033	32,674	0.0008	0.9992	100.00
1.5	39,788,056	162,242	0.0041	0.9959	99.92
2.5	37,620,969	16,895	0.0004	0.9996	99.52
3.5	35,931,604	73,748	0.0021	0.9979	99.47
4.5	33,853,965	4,981	0.0001	0.9999	99.27
5.5	32,748,636	15,653	0.0005	0.9995	99.25
6.5	31,646,038	4,003	0.0001	0.9999	99.21
7.5	30,985,829	121,136	0.0039	0.9961	99.19
8.5	29,260,048	3,062	0.0001	0.9999	98.81
9.5	28,233,239	7,717	0.0003	0.9997	98.80
10.5	26,429,989	22,379	0.0008	0.9992	98.77
11.5	24,206,516	6,706	0.0003	0.9997	98.68
12.5	23,149,392	28,130	0.0012	0.9988	98.66
13.5	22,083,178	357	0.0000	1.0000	98.54
14.5	21,462,616	17,553	0.0008	0.9992	98.54
15.5	20,650,353	4,968	0.0002	0.9998	98.46
16.5	17,563,063	5,707	0.0003	0.9997	98.43
17.5	17,798,496	32,361	0.0018	0.9982	98.40
18.5	17,994,052	58,694	0.0033	0.9967	98.22
19.5	19,105,696	51,407	0.0027	0.9973	97.90
20.5	21,430,336	103,965	0.0049	0.9951	97.64
21.5	21,372,150	211,936	0.0099	0.9901	97.16
22.5	21,181,112	80,019	0.0038	0.9962	96.20
23.5	21,054,475	136,971	0.0065	0.9935	95.84
24.5	20,993,121	314,571	0.0150	0.9850	95.21
25.5	20,610,692	190,870	0.0093	0.9907	93.79
26.5	20,439,033	75,054	0.0037	0.9963	92.92
27.5	19,952,015	84,851	0.0043	0.9957	92.58
28.5	19,337,179	68,077	0.0035	0.9965	92.18
29.5	18,840,818	66,688	0.0035	0.9965	91.86
30.5	18,207,775	44,191	0.0024	0.9976	91.53
31.5	17,600,738	57,973	0.0033	0.9967	91.31
32.5	16,954,063	27,826	0.0016	0.9984	91.01
33.5	16,787,452	44,539	0.0027	0.9973	90.86
34.5	16,364,619	95,070	0.0058	0.9942	90.62
35.5	15,427,574	76,232	0.0049	0.9951	90.09
36.5	15,089,602	277,822	0.0184	0.9816	89.65
37.5	14,524,968	199,846	0.0138	0.9862	88.00
38.5	13,477,847	146,742	0.0109	0.9891	86.79

NORTHWESTERN ENERGY
ELECTRIC PLANT

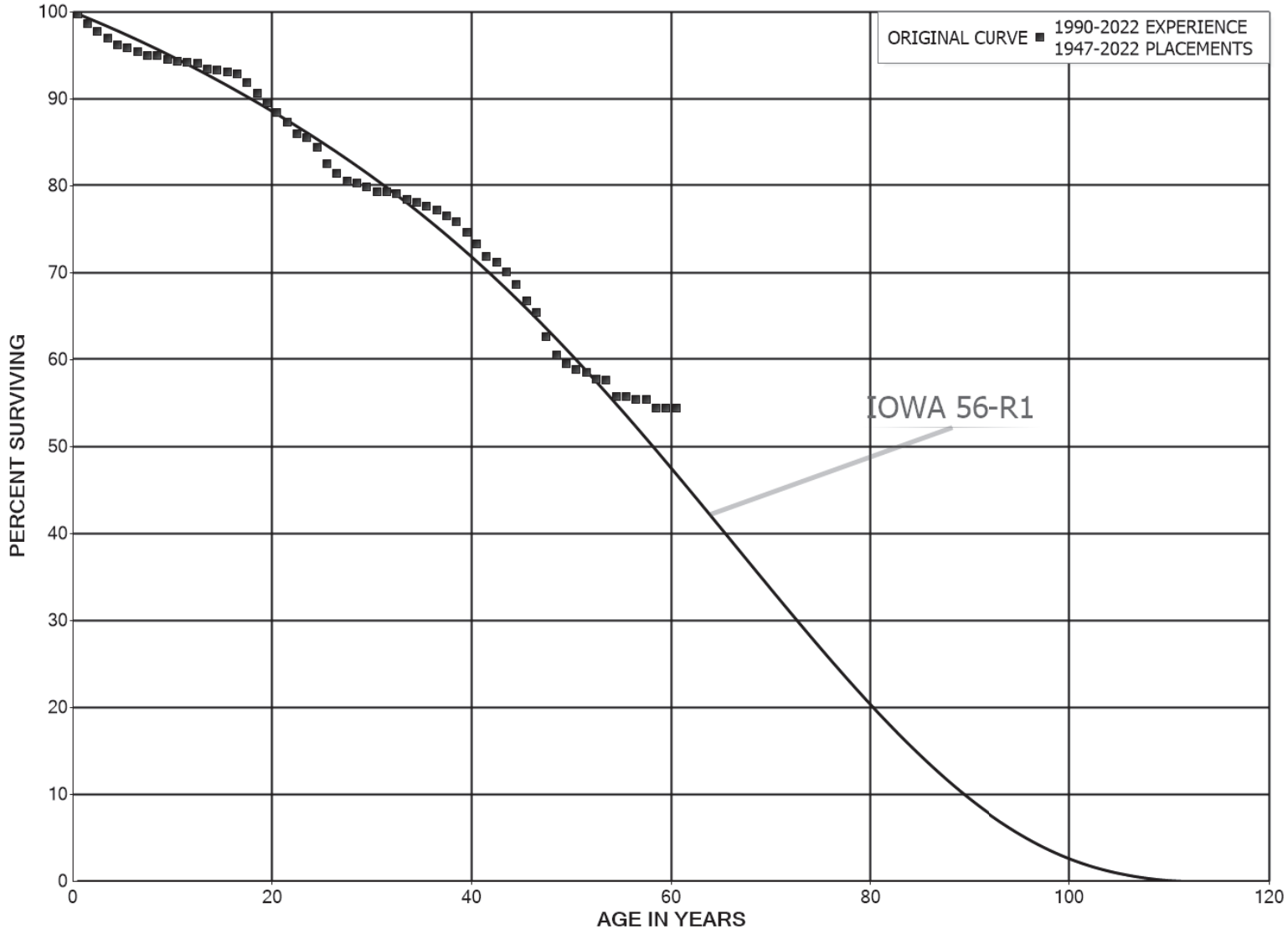
ACCOUNT 355.00 POLES AND FIXTURES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1953-2022 EXPERIENCE BAND 1990-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	12,561,569	99,940	0.0080	0.9920	85.84
40.5	9,934,256	97,571	0.0098	0.9902	85.16
41.5	9,462,770	85,719	0.0091	0.9909	84.32
42.5	8,541,041	104,670	0.0123	0.9877	83.56
43.5	7,145,463	117,182	0.0164	0.9836	82.53
44.5	6,237,519	139,159	0.0223	0.9777	81.18
45.5	5,916,446	93,352	0.0158	0.9842	79.37
46.5	5,193,557	164,955	0.0318	0.9682	78.12
47.5	4,502,807	97,963	0.0218	0.9782	75.64
48.5	4,330,334	57,000	0.0132	0.9868	73.99
49.5	4,056,682	22,080	0.0054	0.9946	73.02
50.5	3,588,936	34,484	0.0096	0.9904	72.62
51.5	3,084,457	72,503	0.0235	0.9765	71.92
52.5	1,780,761	21,055	0.0118	0.9882	70.23
53.5					69.40

NORTHWESTERN ENERGY
ELECTRIC PLANT
ACCOUNT 356.00 OVERHEAD CONDUCTORS AND DEVICES
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 356.00 OVERHEAD CONDUCTORS AND DEVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1947-2022 EXPERIENCE BAND 1990-2022

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	24,703,748	73,920	0.0030	0.9970	100.00
0.5	23,757,113	248,332	0.0105	0.9895	99.70
1.5	22,128,696	220,701	0.0100	0.9900	98.66
2.5	22,334,049	157,431	0.0070	0.9930	97.67
3.5	21,335,924	179,074	0.0084	0.9916	96.99
4.5	20,212,407	73,582	0.0036	0.9964	96.17
5.5	20,160,788	81,073	0.0040	0.9960	95.82
6.5	20,373,521	93,789	0.0046	0.9954	95.44
7.5	20,260,811	15,631	0.0008	0.9992	95.00
8.5	20,483,357	93,307	0.0046	0.9954	94.92
9.5	18,123,564	41,150	0.0023	0.9977	94.49
10.5	15,643,955	8,357	0.0005	0.9995	94.28
11.5	14,265,040	25,833	0.0018	0.9982	94.23
12.5	13,964,330	104,883	0.0075	0.9925	94.06
13.5	13,912,525	2,237	0.0002	0.9998	93.35
14.5	13,574,371	33,076	0.0024	0.9976	93.33
15.5	13,414,737	31,732	0.0024	0.9976	93.11
16.5	11,777,981	131,043	0.0111	0.9889	92.89
17.5	11,955,201	154,074	0.0129	0.9871	91.85
18.5	12,185,074	155,197	0.0127	0.9873	90.67
19.5	13,068,157	156,736	0.0120	0.9880	89.51
20.5	13,602,275	183,001	0.0135	0.9865	88.44
21.5	14,074,019	202,045	0.0144	0.9856	87.25
22.5	14,148,429	84,419	0.0060	0.9940	86.00
23.5	14,331,944	189,112	0.0132	0.9868	85.49
24.5	14,218,384	319,046	0.0224	0.9776	84.36
25.5	13,889,823	175,258	0.0126	0.9874	82.46
26.5	13,771,125	147,578	0.0107	0.9893	81.42
27.5	14,611,256	49,831	0.0034	0.9966	80.55
28.5	14,527,167	74,074	0.0051	0.9949	80.28
29.5	14,487,121	99,100	0.0068	0.9932	79.87
30.5	14,300,246	14,737	0.0010	0.9990	79.32
31.5	14,185,859	26,230	0.0018	0.9982	79.24
32.5	14,051,747	117,030	0.0083	0.9917	79.09
33.5	13,830,811	72,484	0.0052	0.9948	78.43
34.5	13,520,081	63,198	0.0047	0.9953	78.02
35.5	12,980,169	84,408	0.0065	0.9935	77.66
36.5	12,693,363	115,052	0.0091	0.9909	77.15
37.5	12,391,444	100,186	0.0081	0.9919	76.45
38.5	11,564,648	191,070	0.0165	0.9835	75.84

NORTHWESTERN ENERGY
ELECTRIC PLANT

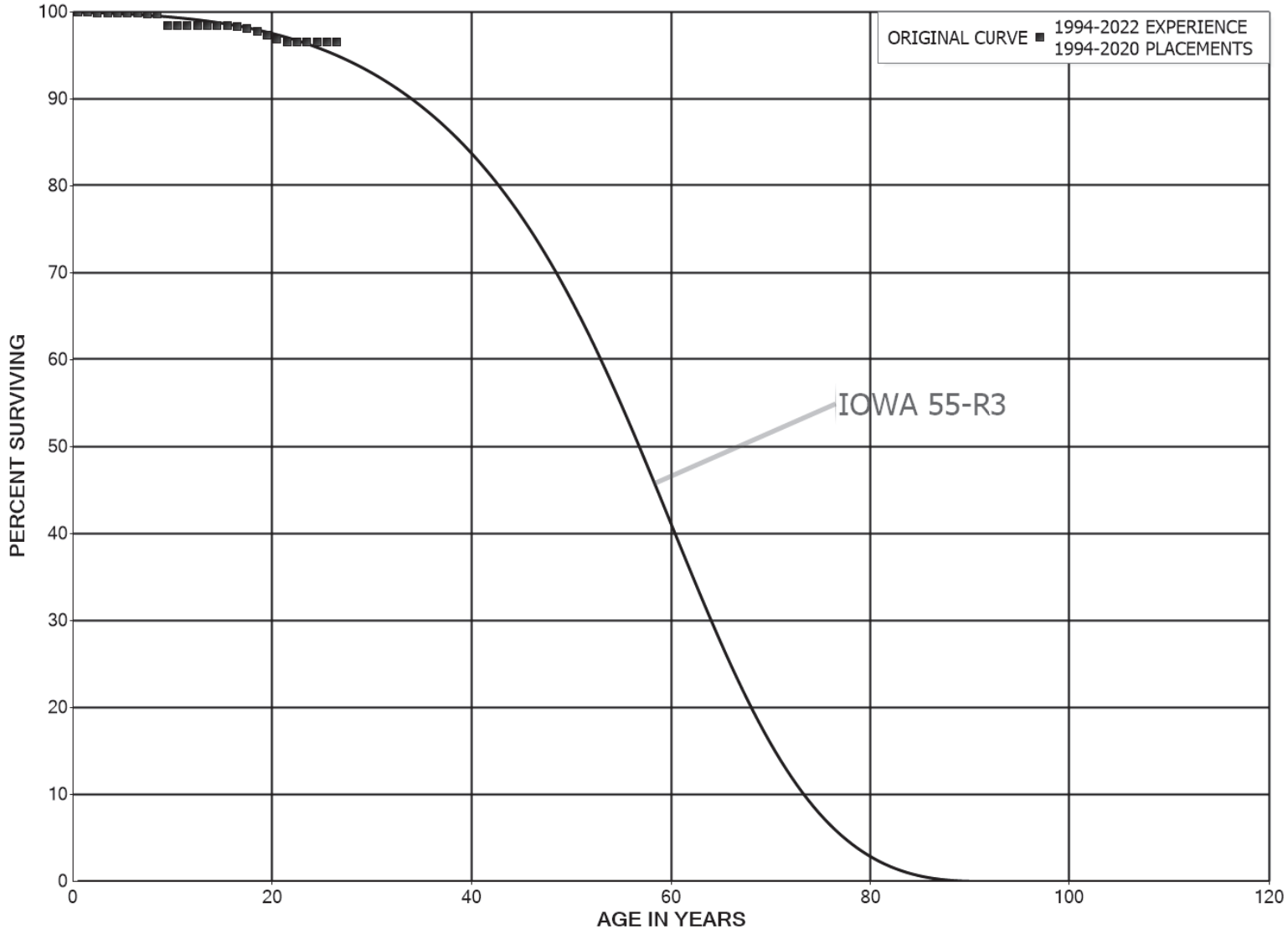
ACCOUNT 356.00 OVERHEAD CONDUCTORS AND DEVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1947-2022 EXPERIENCE BAND 1990-2022

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	10,737,785	184,897	0.0172	0.9828	74.58
40.5	8,439,899	169,369	0.0201	0.9799	73.30
41.5	7,829,274	73,034	0.0093	0.9907	71.83
42.5	7,037,626	110,941	0.0158	0.9842	71.16
43.5	6,036,689	122,630	0.0203	0.9797	70.04
44.5	5,187,092	143,786	0.0277	0.9723	68.61
45.5	4,856,808	98,194	0.0202	0.9798	66.71
46.5	4,423,994	186,660	0.0422	0.9578	65.36
47.5	3,973,387	130,100	0.0327	0.9673	62.60
48.5	3,797,173	65,161	0.0172	0.9828	60.56
49.5	3,657,806	43,057	0.0118	0.9882	59.52
50.5	3,239,674	19,582	0.0060	0.9940	58.82
51.5	2,789,769	33,036	0.0118	0.9882	58.46
52.5	1,941,894	6,099	0.0031	0.9969	57.77
53.5	1,556,482	50,132	0.0322	0.9678	57.59
54.5	1,172,090	162	0.0001	0.9999	55.73
55.5	981,413	4,948	0.0050	0.9950	55.72
56.5	783,566		0.0000	1.0000	55.44
57.5	783,566	14,309	0.0183	0.9817	55.44
58.5	769,253	615	0.0008	0.9992	54.43
59.5	768,638		0.0000	1.0000	54.39
60.5	2,276		0.0000	1.0000	54.39
61.5	2,276		0.0000	1.0000	54.39
62.5	2,276		0.0000	1.0000	54.39
63.5	2,276		0.0000	1.0000	54.39
64.5					54.39

NORTHWESTERN ENERGY
ELECTRIC PLANT
ACCOUNT 357.00 UNDERGROUND CONDUIT
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
ELECTRIC PLANT

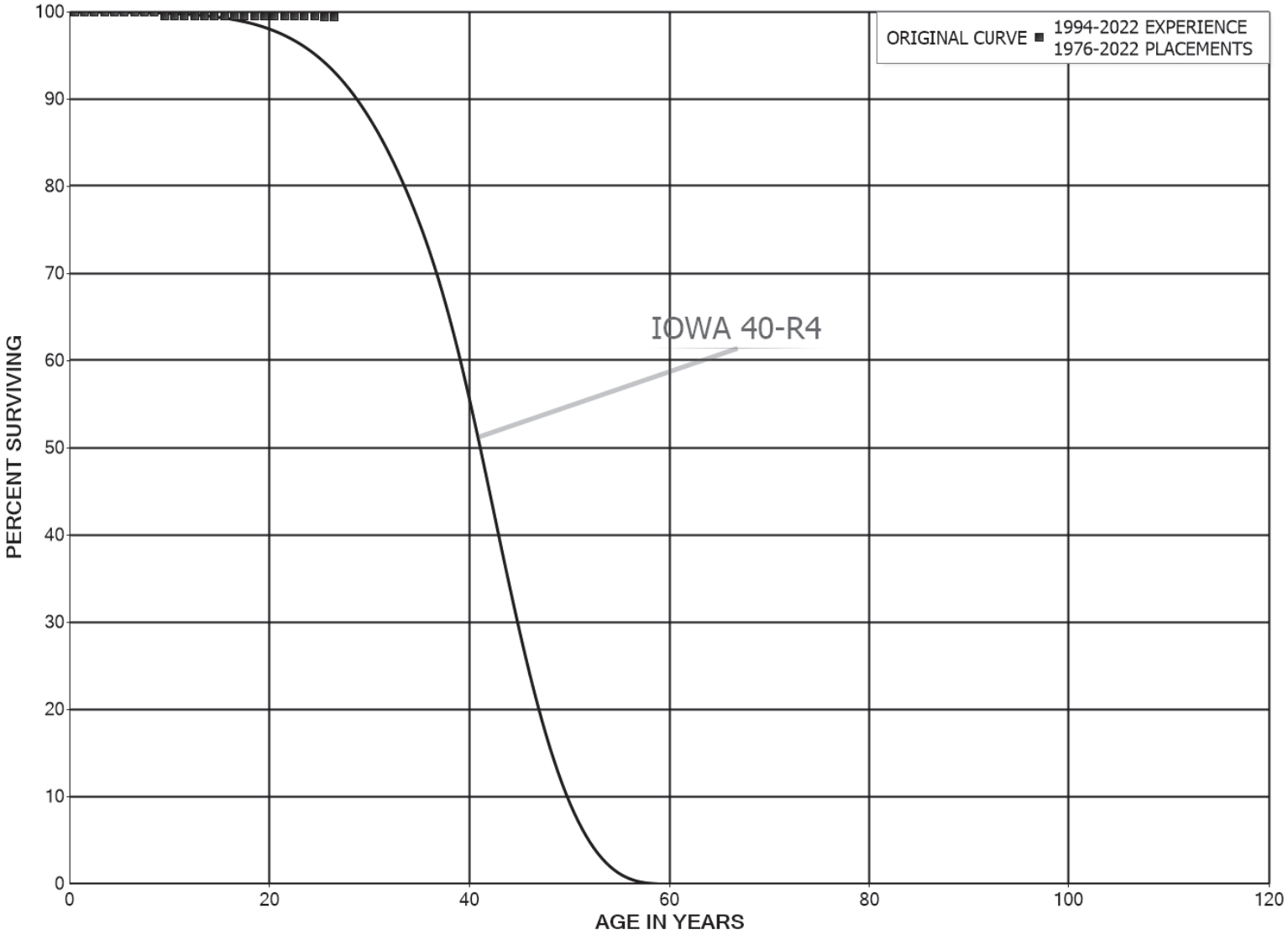
ACCOUNT 357.00 UNDERGROUND CONDUIT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1994-2020 EXPERIENCE BAND 1994-2022

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	654,423		0.0000	1.0000	100.00
0.5	654,423	204	0.0003	0.9997	100.00
1.5	654,016	843	0.0013	0.9987	99.97
2.5	625,941		0.0000	1.0000	99.84
3.5	625,941		0.0000	1.0000	99.84
4.5	614,865	170	0.0003	0.9997	99.84
5.5	573,760		0.0000	1.0000	99.81
6.5	573,760	375	0.0007	0.9993	99.81
7.5	431,258		0.0000	1.0000	99.75
8.5	431,258	5,766	0.0134	0.9866	99.75
9.5	425,492	44	0.0001	0.9999	98.41
10.5	382,063	44	0.0001	0.9999	98.40
11.5	382,019	44	0.0001	0.9999	98.39
12.5	370,965	44	0.0001	0.9999	98.38
13.5	371,272	44	0.0001	0.9999	98.37
14.5	371,579	44	0.0001	0.9999	98.36
15.5	371,886	44	0.0001	0.9999	98.35
16.5	372,193	1,186	0.0032	0.9968	98.33
17.5	371,007	1,142	0.0031	0.9969	98.02
18.5	264,182	1,142	0.0043	0.9957	97.72
19.5	263,040	1,142	0.0043	0.9957	97.30
20.5	261,898	1,142	0.0044	0.9956	96.87
21.5	217,824		0.0000	1.0000	96.45
22.5	174,893		0.0000	1.0000	96.45
23.5	131,962		0.0000	1.0000	96.45
24.5	89,030		0.0000	1.0000	96.45
25.5	46,099		0.0000	1.0000	96.45
26.5	5,412		0.0000	1.0000	96.45
27.5					96.45

NORTHWESTERN ENERGY
ELECTRIC PLANT
ACCOUNT 358.00 UNDERGROUND CONDUCTORS AND DEVICES
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
ELECTRIC PLANT

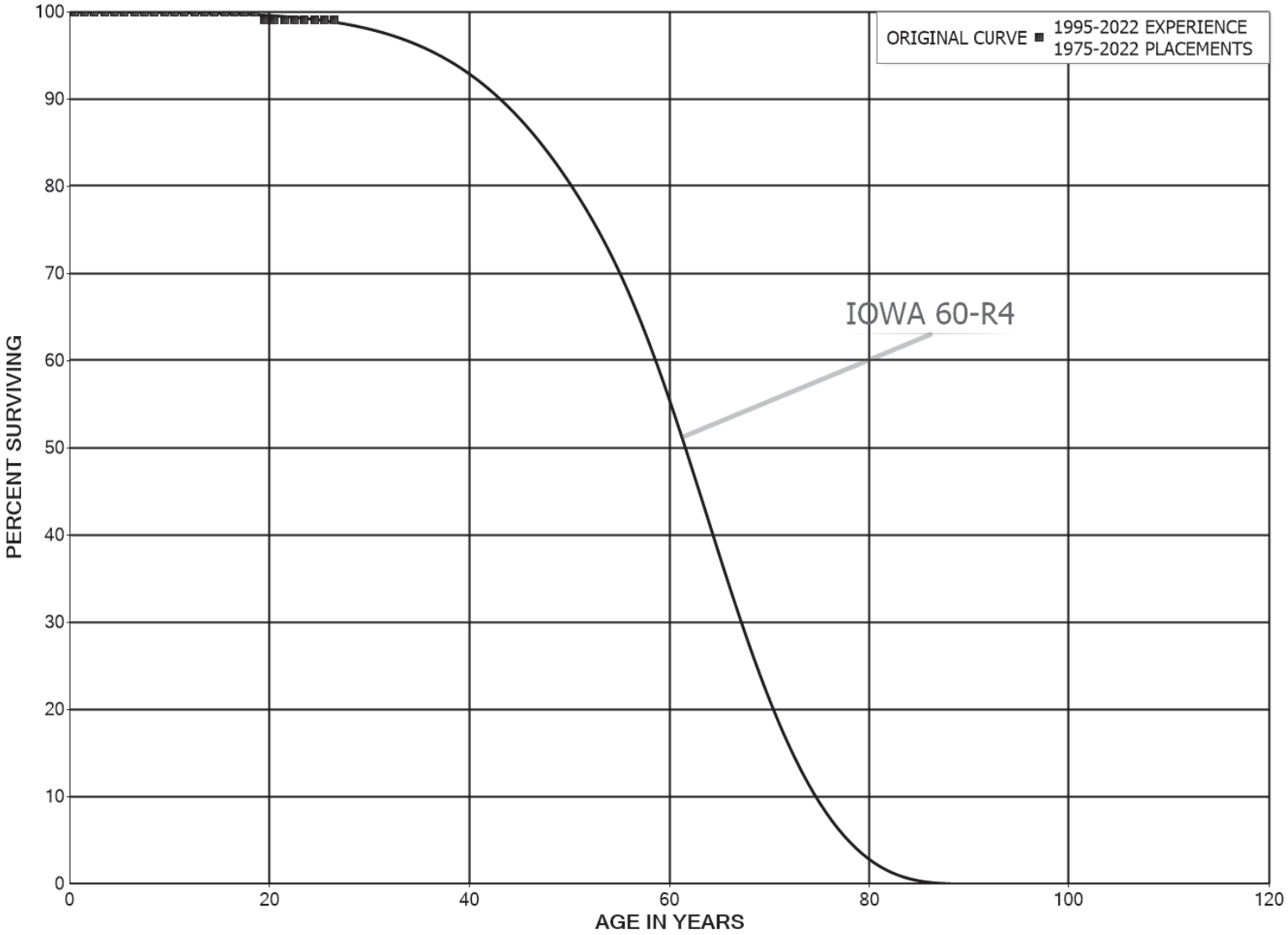
ACCOUNT 358.00 UNDERGROUND CONDUCTORS AND DEVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1976-2022 EXPERIENCE BAND 1994-2022

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	4,202,348		0.0000	1.0000	100.00
0.5	4,787,213	204	0.0000	1.0000	100.00
1.5	4,486,233	349	0.0001	0.9999	100.00
2.5	4,404,185		0.0000	1.0000	99.99
3.5	3,350,421		0.0000	1.0000	99.99
4.5	3,073,694		0.0000	1.0000	99.99
5.5	2,807,729		0.0000	1.0000	99.99
6.5	2,788,668		0.0000	1.0000	99.99
7.5	2,353,546		0.0000	1.0000	99.99
8.5	2,353,546	12,606	0.0054	0.9946	99.99
9.5	2,340,941		0.0000	1.0000	99.45
10.5	2,226,573		0.0000	1.0000	99.45
11.5	2,226,573		0.0000	1.0000	99.45
12.5	1,738,151		0.0000	1.0000	99.45
13.5	1,738,151		0.0000	1.0000	99.45
14.5	1,738,151		0.0000	1.0000	99.45
15.5	1,738,151		0.0000	1.0000	99.45
16.5	1,174,723		0.0000	1.0000	99.45
17.5	1,175,739		0.0000	1.0000	99.45
18.5	245,511		0.0000	1.0000	99.45
19.5	245,511		0.0000	1.0000	99.45
20.5	245,511		0.0000	1.0000	99.45
21.5	216,053		0.0000	1.0000	99.45
22.5	186,596		0.0000	1.0000	99.45
23.5	157,138		0.0000	1.0000	99.45
24.5	127,680	128	0.0010	0.9990	99.45
25.5	98,094		0.0000	1.0000	99.35
26.5	72,790		0.0000	1.0000	99.35
27.5					99.35

NORTHWESTERN ENERGY
ELECTRIC PLANT
ACCOUNT 361.00 STRUCTURES AND IMPROVEMENTS
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 361.00 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1975-2022 EXPERIENCE BAND 1995-2022

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	1,498,451		0.0000	1.0000	100.00
0.5	1,370,359		0.0000	1.0000	100.00
1.5	1,370,359		0.0000	1.0000	100.00
2.5	1,035,030		0.0000	1.0000	100.00
3.5	1,035,030		0.0000	1.0000	100.00
4.5	944,598		0.0000	1.0000	100.00
5.5	944,326		0.0000	1.0000	100.00
6.5	925,562		0.0000	1.0000	100.00
7.5	833,110		0.0000	1.0000	100.00
8.5	718,388		0.0000	1.0000	100.00
9.5	655,204		0.0000	1.0000	100.00
10.5	533,342		0.0000	1.0000	100.00
11.5	525,280		0.0000	1.0000	100.00
12.5	344,699		0.0000	1.0000	100.00
13.5	344,699		0.0000	1.0000	100.00
14.5	242,887		0.0000	1.0000	100.00
15.5	242,887		0.0000	1.0000	100.00
16.5	242,887		0.0000	1.0000	100.00
17.5	242,887		0.0000	1.0000	100.00
18.5	242,887	2,404	0.0099	0.9901	100.00
19.5	240,483		0.0000	1.0000	99.01
20.5	92,312		0.0000	1.0000	99.01
21.5	92,312		0.0000	1.0000	99.01
22.5	92,312		0.0000	1.0000	99.01
23.5	92,312		0.0000	1.0000	99.01
24.5	92,312		0.0000	1.0000	99.01
25.5	92,312		0.0000	1.0000	99.01
26.5	92,312		0.0000	1.0000	99.01
27.5					99.01
28.5					
29.5					
30.5					
31.5					
32.5					
33.5					
34.5					
35.5					
36.5					
37.5					
38.5					

NORTHWESTERN ENERGY
ELECTRIC PLANT

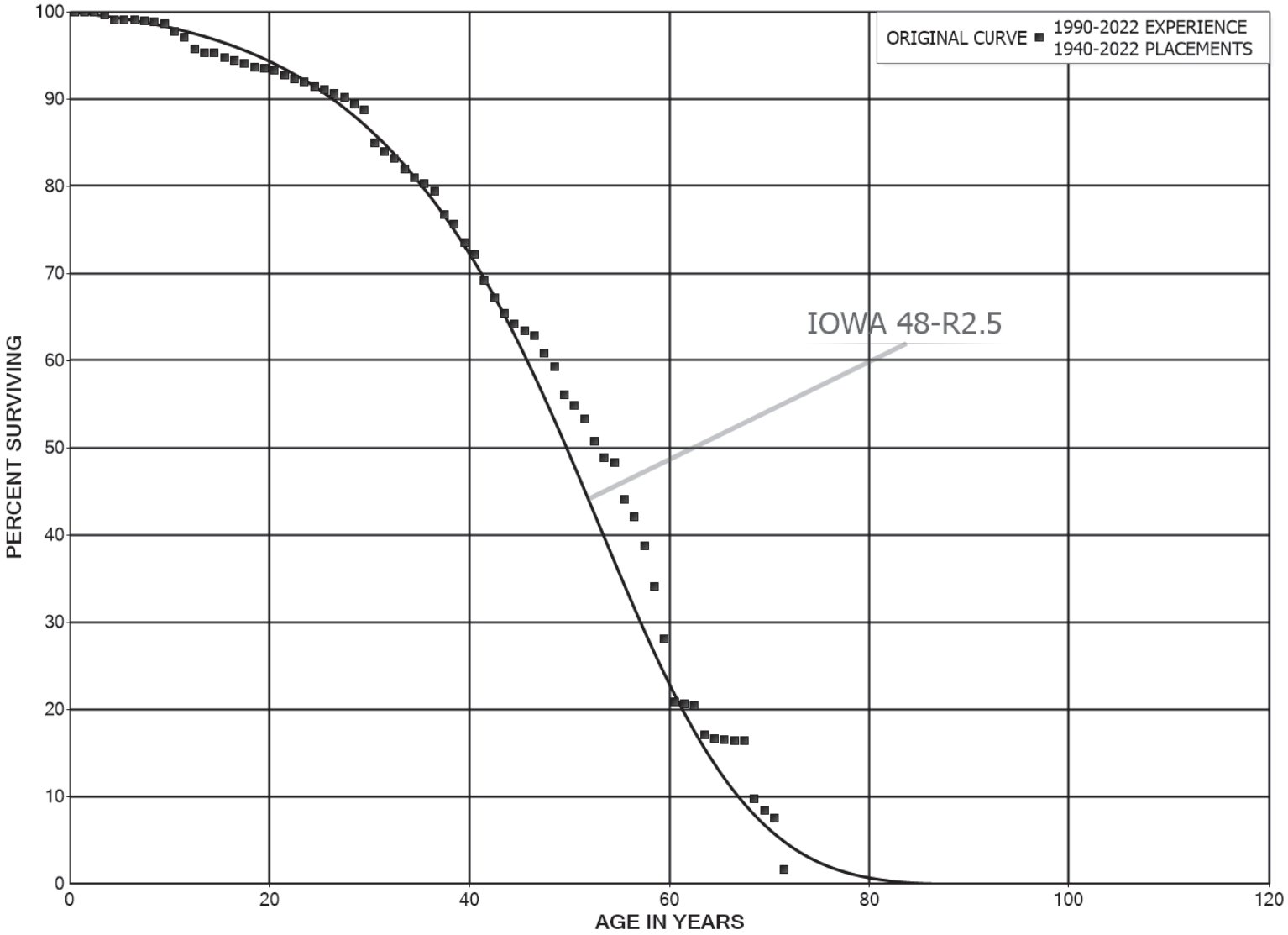
ACCOUNT 361.00 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1975-2022 EXPERIENCE BAND 1995-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5					
40.5					
41.5					
42.5					
43.5	5,556		0.0000		
44.5	5,556		0.0000		
45.5	5,556		0.0000		
46.5	5,556		0.0000		
47.5					

NORTHWESTERN ENERGY
ELECTRIC PLANT
ACCOUNT 362.00 STATION EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 362.00 STATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1940-2022 EXPERIENCE BAND 1990-2022

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	39,647,817	363	0.0000	1.0000	100.00
0.5	39,002,891	13,821	0.0004	0.9996	100.00
1.5	32,481,909	2,761	0.0001	0.9999	99.96
2.5	28,467,410	109,387	0.0038	0.9962	99.96
3.5	26,452,528	120,605	0.0046	0.9954	99.57
4.5	24,530,602	10,975	0.0004	0.9996	99.12
5.5	24,612,556	6,684	0.0003	0.9997	99.07
6.5	24,486,839	28,380	0.0012	0.9988	99.05
7.5	23,977,216	33,147	0.0014	0.9986	98.93
8.5	24,034,267	42,650	0.0018	0.9982	98.79
9.5	23,697,332	203,944	0.0086	0.9914	98.62
10.5	22,457,389	161,489	0.0072	0.9928	97.77
11.5	21,360,902	285,587	0.0134	0.9866	97.07
12.5	20,066,669	91,667	0.0046	0.9954	95.77
13.5	20,072,171	5,629	0.0003	0.9997	95.33
14.5	18,545,597	107,658	0.0058	0.9942	95.31
15.5	18,558,589	68,313	0.0037	0.9963	94.75
16.5	18,665,750	69,559	0.0037	0.9963	94.40
17.5	18,910,961	92,060	0.0049	0.9951	94.05
18.5	19,603,456	26,464	0.0013	0.9987	93.59
19.5	19,466,070	38,247	0.0020	0.9980	93.47
20.5	18,438,145	110,743	0.0060	0.9940	93.28
21.5	18,065,853	78,924	0.0044	0.9956	92.72
22.5	17,541,860	72,295	0.0041	0.9959	92.32
23.5	17,662,080	100,805	0.0057	0.9943	91.94
24.5	17,163,575	68,993	0.0040	0.9960	91.41
25.5	17,125,981	81,537	0.0048	0.9952	91.05
26.5	15,639,923	83,592	0.0053	0.9947	90.61
27.5	14,976,999	114,588	0.0077	0.9923	90.13
28.5	13,640,764	109,351	0.0080	0.9920	89.44
29.5	13,286,538	556,534	0.0419	0.9581	88.72
30.5	12,126,250	145,393	0.0120	0.9880	85.00
31.5	11,330,354	114,597	0.0101	0.9899	83.99
32.5	10,393,869	152,362	0.0147	0.9853	83.14
33.5	9,130,820	104,001	0.0114	0.9886	81.92
34.5	8,869,000	72,393	0.0082	0.9918	80.98
35.5	8,506,976	92,740	0.0109	0.9891	80.32
36.5	7,918,788	275,189	0.0348	0.9652	79.45
37.5	7,546,813	105,234	0.0139	0.9861	76.69
38.5	7,153,775	195,017	0.0273	0.9727	75.62

NORTHWESTERN ENERGY
ELECTRIC PLANT

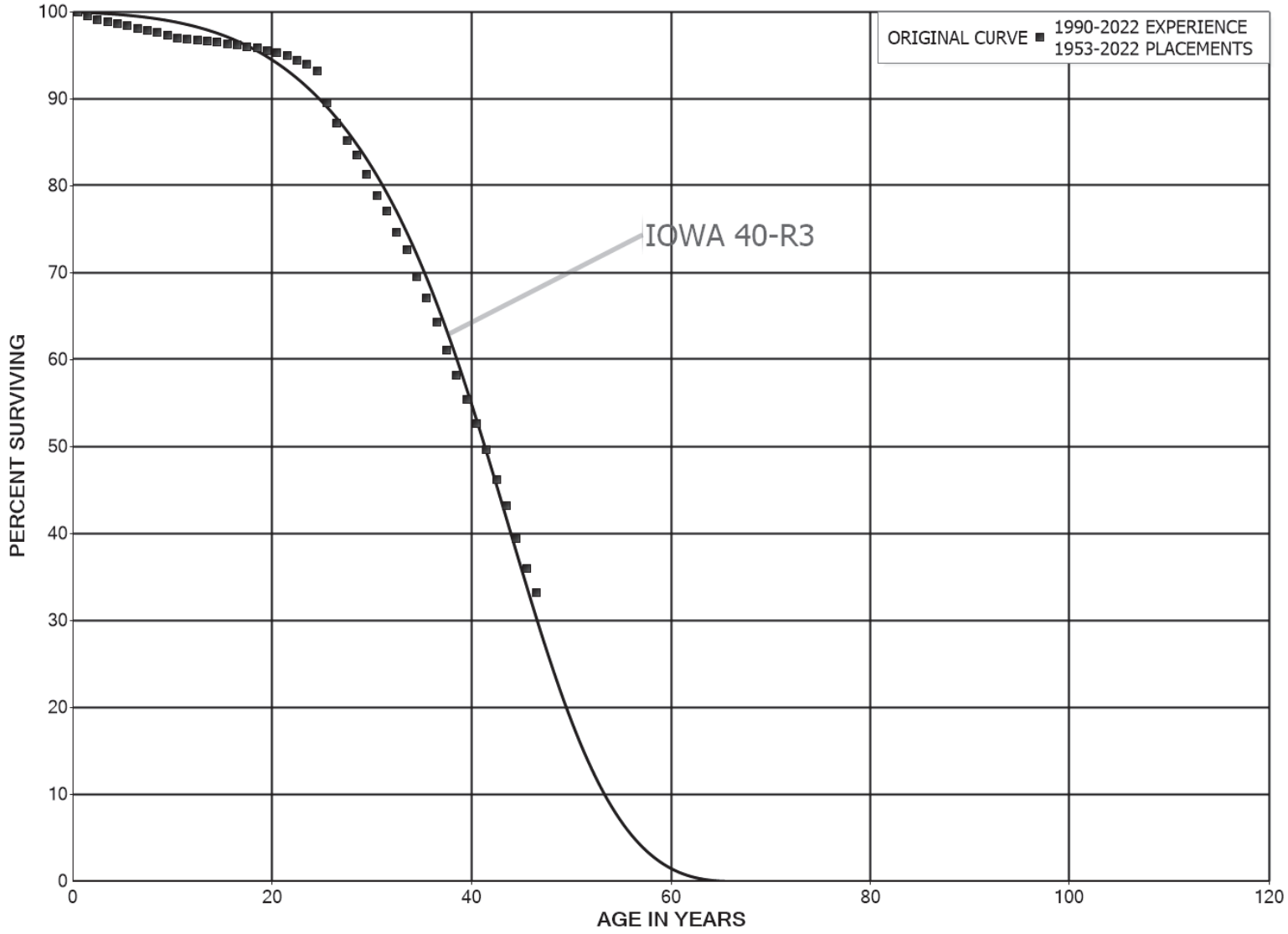
ACCOUNT 362.00 STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1940-2022 EXPERIENCE BAND 1990-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	6,719,077	122,676	0.0183	0.9817	73.56
40.5	6,343,274	270,999	0.0427	0.9573	72.21
41.5	5,475,552	151,015	0.0276	0.9724	69.13
42.5	4,981,210	134,335	0.0270	0.9730	67.22
43.5	4,344,088	79,851	0.0184	0.9816	65.41
44.5	3,969,358	46,932	0.0118	0.9882	64.21
45.5	3,811,718	36,160	0.0095	0.9905	63.45
46.5	3,383,857	106,769	0.0316	0.9684	62.85
47.5	3,140,187	83,960	0.0267	0.9733	60.86
48.5	2,854,620	153,149	0.0536	0.9464	59.24
49.5	2,559,363	57,721	0.0226	0.9774	56.06
50.5	2,312,288	65,052	0.0281	0.9719	54.79
51.5	1,302,654	62,837	0.0482	0.9518	53.25
52.5	1,144,999	42,521	0.0371	0.9629	50.68
53.5	913,035	10,122	0.0111	0.9889	48.80
54.5	837,386	73,113	0.0873	0.9127	48.26
55.5	717,099	32,183	0.0449	0.9551	44.05
56.5	609,070	48,099	0.0790	0.9210	42.07
57.5	413,701	49,732	0.1202	0.8798	38.75
58.5	332,786	58,303	0.1752	0.8248	34.09
59.5	225,903	58,408	0.2586	0.7414	28.12
60.5	159,239	1,429	0.0090	0.9910	20.85
61.5	136,409	1,950	0.0143	0.9857	20.66
62.5	117,534	19,311	0.1643	0.8357	20.36
63.5	98,241	2,373	0.0242	0.9758	17.02
64.5	95,550	831	0.0087	0.9913	16.61
65.5	93,836	290	0.0031	0.9969	16.46
66.5	78,352		0.0000	1.0000	16.41
67.5	78,043	31,741	0.4067	0.5933	16.41
68.5	40,184	5,750	0.1431	0.8569	9.74
69.5	34,030	3,486	0.1024	0.8976	8.34
70.5	30,361	23,832	0.7850	0.2150	7.49
71.5	6,385	214	0.0335	0.9665	1.61
72.5	4,004	190	0.0475	0.9525	1.56
73.5	3,814	75	0.0196	0.9804	1.48
74.5	1,015		0.0000	1.0000	1.45
75.5	485		0.0000	1.0000	1.45
76.5	485	321	0.6616	0.3384	1.45
77.5					0.49

NORTHWESTERN ENERGY
ELECTRIC PLANT
ACCOUNT 364.00 POLES, TOWERS AND FIXTURES
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 364.00 POLES, TOWERS AND FIXTURES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1953-2022 EXPERIENCE BAND 1990-2022

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	53,465,928	8,005	0.0001	0.9999	100.00
0.5	49,446,592	240,515	0.0049	0.9951	99.99
1.5	46,702,809	185,087	0.0040	0.9960	99.50
2.5	42,157,813	101,849	0.0024	0.9976	99.10
3.5	37,793,999	115,218	0.0030	0.9970	98.86
4.5	34,802,416	56,697	0.0016	0.9984	98.56
5.5	32,376,150	124,652	0.0039	0.9961	98.40
6.5	30,479,401	59,058	0.0019	0.9981	98.02
7.5	29,180,761	75,513	0.0026	0.9974	97.83
8.5	27,555,694	95,249	0.0035	0.9965	97.58
9.5	26,484,420	69,873	0.0026	0.9974	97.24
10.5	25,059,880	31,629	0.0013	0.9987	96.99
11.5	24,449,434	31,430	0.0013	0.9987	96.86
12.5	23,526,551	29,819	0.0013	0.9987	96.74
13.5	30,710,234	45,795	0.0015	0.9985	96.62
14.5	29,250,203	45,506	0.0016	0.9984	96.47
15.5	28,712,197	55,567	0.0019	0.9981	96.32
16.5	26,084,285	34,508	0.0013	0.9987	96.14
17.5	25,273,256	55,238	0.0022	0.9978	96.01
18.5	24,477,651	62,911	0.0026	0.9974	95.80
19.5	23,921,297	63,476	0.0027	0.9973	95.55
20.5	21,790,627	78,678	0.0036	0.9964	95.30
21.5	21,397,079	125,834	0.0059	0.9941	94.96
22.5	20,959,515	103,210	0.0049	0.9951	94.40
23.5	20,530,558	171,757	0.0084	0.9916	93.93
24.5	20,058,859	774,011	0.0386	0.9614	93.15
25.5	18,910,879	506,145	0.0268	0.9732	89.55
26.5	18,026,677	398,935	0.0221	0.9779	87.16
27.5	17,142,648	347,791	0.0203	0.9797	85.23
28.5	16,274,936	429,956	0.0264	0.9736	83.50
29.5	15,337,845	473,583	0.0309	0.9691	81.29
30.5	14,367,157	314,869	0.0219	0.9781	78.78
31.5	13,596,013	432,725	0.0318	0.9682	77.06
32.5	12,706,565	347,413	0.0273	0.9727	74.60
33.5	11,919,108	493,461	0.0414	0.9586	72.56
34.5	10,969,116	394,536	0.0360	0.9640	69.56
35.5	10,127,329	417,008	0.0412	0.9588	67.06
36.5	9,722,003	486,192	0.0500	0.9500	64.30
37.5	8,829,157	423,295	0.0479	0.9521	61.08
38.5	8,014,047	383,505	0.0479	0.9521	58.15

NORTHWESTERN ENERGY
ELECTRIC PLANT

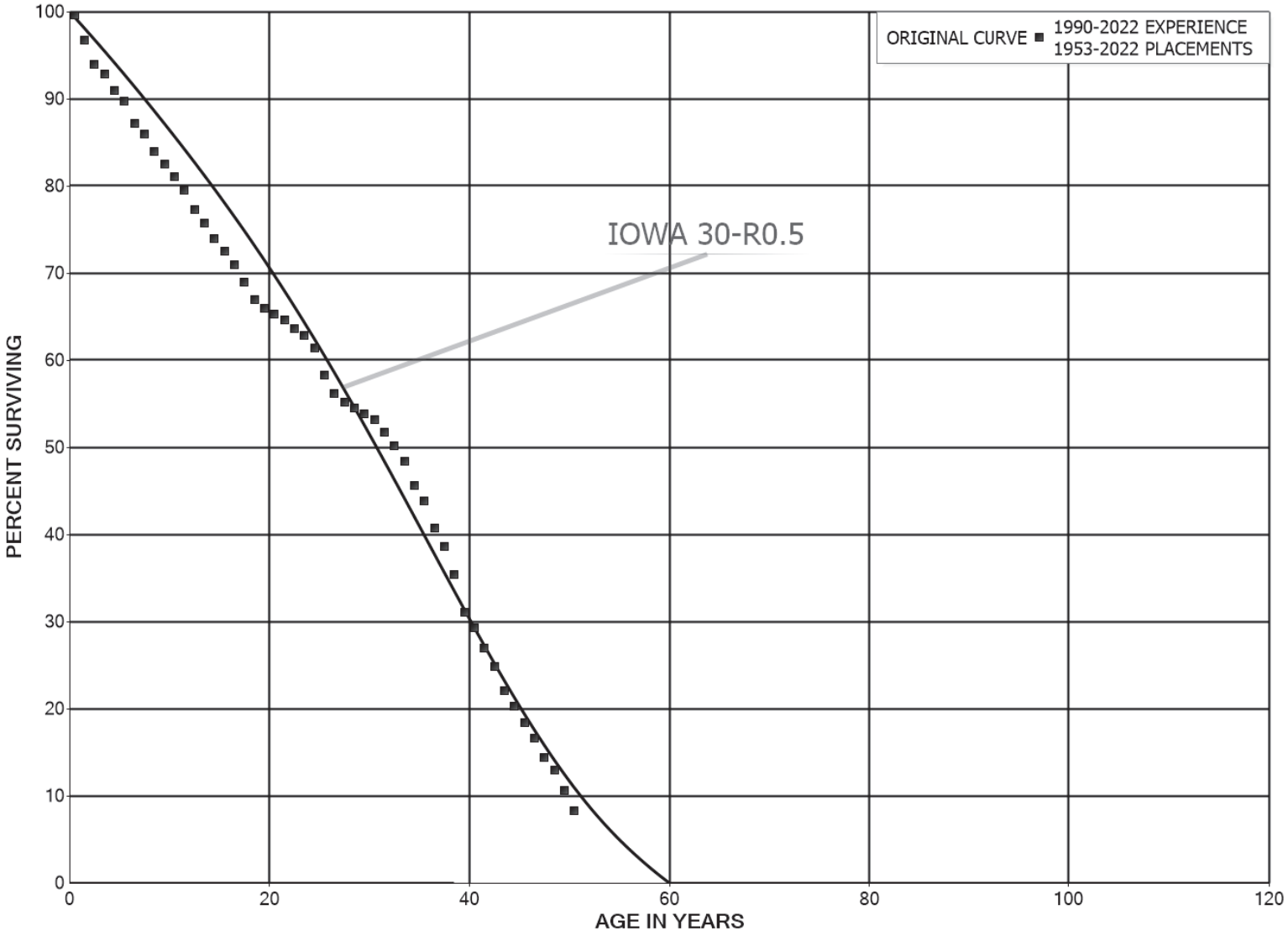
ACCOUNT 364.00 POLES, TOWERS AND FIXTURES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1953-2022 EXPERIENCE BAND 1990-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	7,238,840	359,155	0.0496	0.9504	55.37
40.5	6,491,329	365,985	0.0564	0.9436	52.62
41.5	5,749,024	400,181	0.0696	0.9304	49.66
42.5	5,005,114	330,107	0.0660	0.9340	46.20
43.5	4,387,652	379,992	0.0866	0.9134	43.15
44.5	3,789,294	329,269	0.0869	0.9131	39.41
45.5	3,320,063	258,331	0.0778	0.9222	35.99
46.5					33.19

NORTHWESTERN ENERGY
ELECTRIC PLANT
ACCOUNT 365.00 OVERHEAD CONDUCTORS AND DEVICES
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 365.00 OVERHEAD CONDUCTORS AND DEVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1953-2022 EXPERIENCE BAND 1990-2022

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	26,818,533	94,347	0.0035	0.9965	100.00
0.5	24,963,410	726,963	0.0291	0.9709	99.65
1.5	22,832,629	655,743	0.0287	0.9713	96.75
2.5	20,077,604	240,732	0.0120	0.9880	93.97
3.5	18,446,909	383,467	0.0208	0.9792	92.84
4.5	17,145,926	226,825	0.0132	0.9868	90.91
5.5	16,504,664	473,842	0.0287	0.9713	89.71
6.5	15,438,655	218,439	0.0141	0.9859	87.13
7.5	14,707,312	328,086	0.0223	0.9777	85.90
8.5	13,689,637	236,542	0.0173	0.9827	83.98
9.5	12,960,173	229,191	0.0177	0.9823	82.53
10.5	12,014,817	226,955	0.0189	0.9811	81.07
11.5	11,747,905	327,092	0.0278	0.9722	79.54
12.5	10,986,744	229,404	0.0209	0.9791	77.33
13.5	10,826,243	256,482	0.0237	0.9763	75.71
14.5	10,108,228	190,742	0.0189	0.9811	73.92
15.5	9,970,724	220,777	0.0221	0.9779	72.52
16.5	8,980,356	252,864	0.0282	0.9718	70.92
17.5	8,776,830	252,745	0.0288	0.9712	68.92
18.5	16,051,272	224,255	0.0140	0.9860	66.94
19.5	15,592,784	162,763	0.0104	0.9896	66.00
20.5	14,661,960	149,247	0.0102	0.9898	65.31
21.5	14,646,926	231,345	0.0158	0.9842	64.65
22.5	14,440,878	167,273	0.0116	0.9884	63.63
23.5	14,306,017	332,203	0.0232	0.9768	62.89
24.5	14,001,035	723,874	0.0517	0.9483	61.43
25.5	13,216,728	460,139	0.0348	0.9652	58.25
26.5	12,680,976	243,869	0.0192	0.9808	56.23
27.5	12,326,321	136,389	0.0111	0.9889	55.14
28.5	12,070,947	156,594	0.0130	0.9870	54.53
29.5	11,791,089	149,164	0.0127	0.9873	53.83
30.5	11,553,178	315,939	0.0273	0.9727	53.15
31.5	11,134,272	319,192	0.0287	0.9713	51.69
32.5	10,692,083	387,193	0.0362	0.9638	50.21
33.5	10,177,718	582,267	0.0572	0.9428	48.39
34.5	9,469,212	379,317	0.0401	0.9599	45.62
35.5	8,965,280	633,886	0.0707	0.9293	43.80
36.5	8,485,011	437,257	0.0515	0.9485	40.70
37.5	7,930,801	651,859	0.0822	0.9178	38.60
38.5	7,189,099	874,519	0.1216	0.8784	35.43

NORTHWESTERN ENERGY
ELECTRIC PLANT

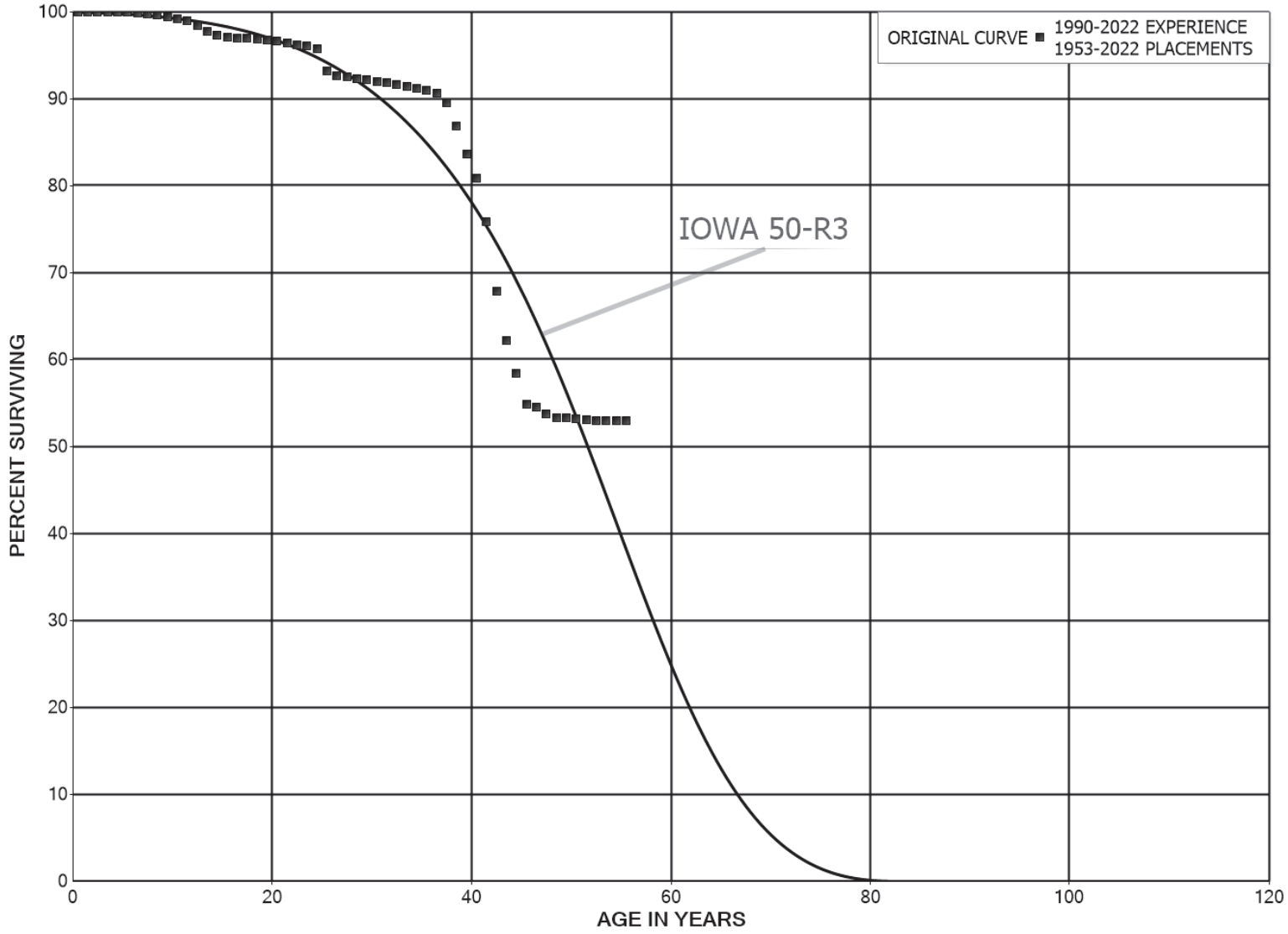
ACCOUNT 365.00 OVERHEAD CONDUCTORS AND DEVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1953-2022 EXPERIENCE BAND 1990-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	6,227,311	375,726	0.0603	0.9397	31.12
40.5	5,785,064	454,020	0.0785	0.9215	29.24
41.5	5,323,238	408,548	0.0767	0.9233	26.95
42.5	5,158,801	594,754	0.1153	0.8847	24.88
43.5	4,514,519	354,735	0.0786	0.9214	22.01
44.5	4,112,657	393,492	0.0957	0.9043	20.28
45.5	3,676,057	352,010	0.0958	0.9042	18.34
46.5	3,282,481	439,872	0.1340	0.8660	16.58
47.5	2,803,310	266,094	0.0949	0.9051	14.36
48.5	2,504,569	461,375	0.1842	0.8158	13.00
49.5	2,014,863	440,536	0.2186	0.7814	10.60
50.5	1,549,006	279,858	0.1807	0.8193	8.29
51.5					6.79

NORTHWESTERN ENERGY
ELECTRIC PLANT
ACCOUNT 366.00 UNDERGROUND CONDUIT
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 366.00 UNDERGROUND CONDUIT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1953-2022 EXPERIENCE BAND 1990-2022

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	10,393,902	8	0.0000	1.0000	100.00
0.5	9,725,048	550	0.0001	0.9999	100.00
1.5	9,523,262	1,215	0.0001	0.9999	99.99
2.5	9,190,313	1,626	0.0002	0.9998	99.98
3.5	8,839,261	2,205	0.0002	0.9998	99.96
4.5	8,610,516	4,144	0.0005	0.9995	99.94
5.5	8,244,466	8,106	0.0010	0.9990	99.89
6.5	8,038,072	5,840	0.0007	0.9993	99.79
7.5	7,928,155	8,941	0.0011	0.9989	99.72
8.5	7,879,106	14,370	0.0018	0.9982	99.61
9.5	7,853,108	17,984	0.0023	0.9977	99.43
10.5	7,570,283	17,936	0.0024	0.9976	99.20
11.5	7,353,200	42,115	0.0057	0.9943	98.96
12.5	6,727,146	44,984	0.0067	0.9933	98.40
13.5	6,546,055	33,903	0.0052	0.9948	97.74
14.5	6,197,391	13,934	0.0022	0.9978	97.23
15.5	6,051,078	2,898	0.0005	0.9995	97.01
16.5	5,698,993	3,786	0.0007	0.9993	96.97
17.5	5,528,228	3,601	0.0007	0.9993	96.90
18.5	4,527,367	4,853	0.0011	0.9989	96.84
19.5	3,354,919	5,178	0.0015	0.9985	96.74
20.5	1,992,190	3,060	0.0015	0.9985	96.59
21.5	1,988,765	4,701	0.0024	0.9976	96.44
22.5	1,984,735	3,642	0.0018	0.9982	96.21
23.5	1,981,623	5,246	0.0026	0.9974	96.03
24.5	1,982,630	53,666	0.0271	0.9729	95.78
25.5	1,931,837	11,388	0.0059	0.9941	93.19
26.5	1,923,193	3,382	0.0018	0.9982	92.64
27.5	1,922,759	3,382	0.0018	0.9982	92.47
28.5	1,920,446	3,615	0.0019	0.9981	92.31
29.5	1,900,714	3,412	0.0018	0.9982	92.14
30.5	1,849,960	3,541	0.0019	0.9981	91.97
31.5	1,790,650	3,936	0.0022	0.9978	91.80
32.5	1,731,236	3,528	0.0020	0.9980	91.59
33.5	1,672,085	3,791	0.0023	0.9977	91.41
34.5	1,612,729	3,879	0.0024	0.9976	91.20
35.5	1,553,489	6,212	0.0040	0.9960	90.98
36.5	1,499,134	18,451	0.0123	0.9877	90.62
37.5	1,425,410	42,046	0.0295	0.9705	89.50
38.5	1,328,236	49,506	0.0373	0.9627	86.86

NORTHWESTERN ENERGY
ELECTRIC PLANT

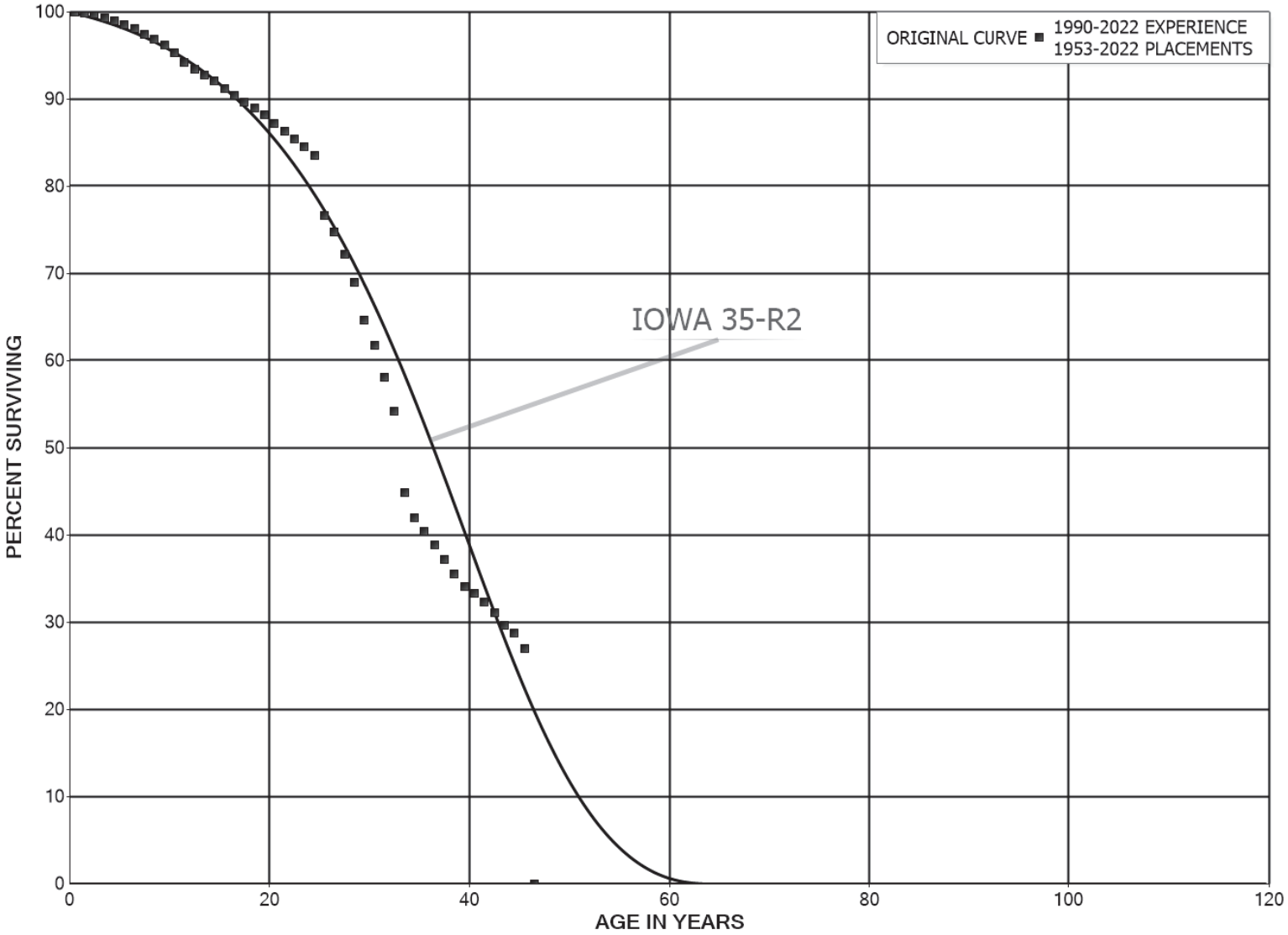
ACCOUNT 366.00 UNDERGROUND CONDUIT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1953-2022 EXPERIENCE BAND 1990-2022

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	1,223,485	41,080	0.0336	0.9664	83.62
40.5	1,127,307	69,619	0.0618	0.9382	80.82
41.5	1,002,472	105,678	0.1054	0.8946	75.83
42.5	842,075	70,111	0.0833	0.9167	67.83
43.5	716,868	44,021	0.0614	0.9386	62.18
44.5	617,839	37,123	0.0601	0.9399	58.37
45.5	526,029	2,941	0.0056	0.9944	54.86
46.5	468,255	7,516	0.0161	0.9839	54.55
47.5	406,139	2,745	0.0068	0.9932	53.68
48.5	348,561	437	0.0013	0.9987	53.31
49.5	293,728	379	0.0013	0.9987	53.25
50.5	238,310	350	0.0015	0.9985	53.18
51.5	183,651	320	0.0017	0.9983	53.10
52.5	136,603	116	0.0009	0.9991	53.01
53.5	90,954		0.0000	1.0000	52.96
54.5	67,941		0.0000	1.0000	52.96
55.5	55,569		0.0000	1.0000	52.96
56.5	43,227		0.0000	1.0000	52.96
57.5	30,914		0.0000	1.0000	52.96
58.5	18,601		0.0000	1.0000	52.96
59.5	6,259		0.0000	1.0000	52.96
60.5					52.96

NORTHWESTERN ENERGY
ELECTRIC PLANT
ACCOUNT 367.00 UNDERGROUND CONDUCTORS AND DEVICES
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 367.00 UNDERGROUND CONDUCTORS AND DEVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1953-2022 EXPERIENCE BAND 1990-2022

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	63,363,248	23,554	0.0004	0.9996	100.00
0.5	59,500,620	59,820	0.0010	0.9990	99.96
1.5	56,642,644	102,030	0.0018	0.9982	99.86
2.5	52,277,793	206,897	0.0040	0.9960	99.68
3.5	48,815,558	176,322	0.0036	0.9964	99.29
4.5	46,320,096	178,380	0.0039	0.9961	98.93
5.5	42,681,705	205,755	0.0048	0.9952	98.55
6.5	40,041,088	258,712	0.0065	0.9935	98.07
7.5	37,291,268	214,732	0.0058	0.9942	97.44
8.5	34,854,592	236,294	0.0068	0.9932	96.88
9.5	33,010,950	330,935	0.0100	0.9900	96.22
10.5	30,249,489	327,545	0.0108	0.9892	95.26
11.5	28,784,453	239,963	0.0083	0.9917	94.23
12.5	30,815,437	219,431	0.0071	0.9929	93.44
13.5	29,074,929	227,863	0.0078	0.9922	92.77
14.5	27,134,045	265,346	0.0098	0.9902	92.05
15.5	25,308,859	211,818	0.0084	0.9916	91.15
16.5	22,914,586	198,205	0.0086	0.9914	90.38
17.5	21,500,124	170,450	0.0079	0.9921	89.60
18.5	20,398,134	166,640	0.0082	0.9918	88.89
19.5	19,779,771	215,389	0.0109	0.9891	88.17
20.5	17,899,621	177,835	0.0099	0.9901	87.21
21.5	17,232,743	189,958	0.0110	0.9890	86.34
22.5	16,556,859	166,697	0.0101	0.9899	85.39
23.5	15,922,109	201,541	0.0127	0.9873	84.53
24.5	15,296,209	1,255,253	0.0821	0.9179	83.46
25.5	13,616,338	327,189	0.0240	0.9760	76.61
26.5	12,867,165	454,083	0.0353	0.9647	74.77
27.5	12,005,414	531,409	0.0443	0.9557	72.13
28.5	11,066,105	693,099	0.0626	0.9374	68.94
29.5	9,961,875	441,649	0.0443	0.9557	64.62
30.5	9,115,608	537,751	0.0590	0.9410	61.75
31.5	8,176,264	551,432	0.0674	0.9326	58.11
32.5	7,228,149	1,244,488	0.1722	0.8278	54.19
33.5	5,539,859	354,964	0.0641	0.9359	44.86
34.5	4,844,058	179,905	0.0371	0.9629	41.99
35.5	4,290,084	166,233	0.0387	0.9613	40.43
36.5	3,870,274	162,597	0.0420	0.9580	38.86
37.5	3,336,329	157,114	0.0471	0.9529	37.23
38.5	2,813,189	109,699	0.0390	0.9610	35.48

NORTHWESTERN ENERGY
ELECTRIC PLANT

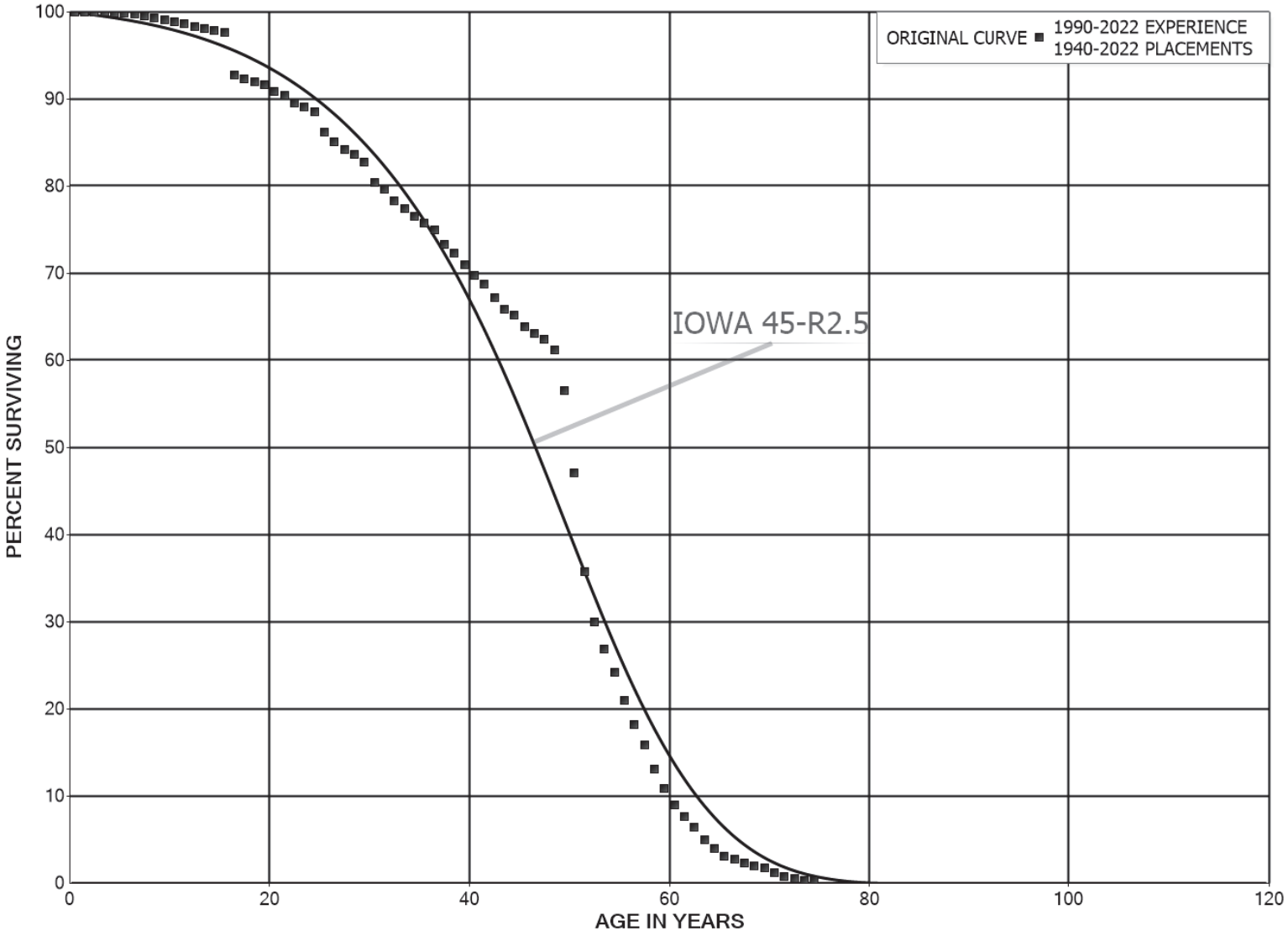
ACCOUNT 367.00 UNDERGROUND CONDUCTORS AND DEVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1953-2022 EXPERIENCE BAND 1990-2022

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	2,342,745	56,690	0.0242	0.9758	34.09
40.5	1,930,858	58,188	0.0301	0.9699	33.27
41.5	1,525,097	57,463	0.0377	0.9623	32.26
42.5	1,123,616	52,773	0.0470	0.9530	31.05
43.5	753,221	23,399	0.0311	0.9689	29.59
44.5	493,723	28,756	0.0582	0.9418	28.67
45.5	365	365	1.0000		27.00
46.5					

NORTHWESTERN ENERGY
ELECTRIC PLANT
ACCOUNT 368.00 LINE TRANSFORMERS
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 368.00 LINE TRANSFORMERS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1940-2022 EXPERIENCE BAND 1990-2022

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	39,097,177	4,395	0.0001	0.9999	100.00
0.5	38,712,135	2,520	0.0001	0.9999	99.99
1.5	37,624,960	15,411	0.0004	0.9996	99.98
2.5	36,008,680	5,005	0.0001	0.9999	99.94
3.5	34,839,248	24,569	0.0007	0.9993	99.93
4.5	33,759,655	15,915	0.0005	0.9995	99.86
5.5	32,711,349	40,979	0.0013	0.9987	99.81
6.5	31,522,998	70,208	0.0022	0.9978	99.68
7.5	30,311,811	54,752	0.0018	0.9982	99.46
8.5	29,509,282	69,336	0.0023	0.9977	99.28
9.5	28,152,219	71,377	0.0025	0.9975	99.05
10.5	25,910,433	45,725	0.0018	0.9982	98.80
11.5	24,000,428	72,561	0.0030	0.9970	98.62
12.5	22,334,799	64,825	0.0029	0.9971	98.33
13.5	20,793,199	41,500	0.0020	0.9980	98.04
14.5	18,997,050	52,739	0.0028	0.9972	97.85
15.5	17,891,566	887,204	0.0496	0.9504	97.57
16.5	16,746,107	77,385	0.0046	0.9954	92.74
17.5	16,098,590	59,188	0.0037	0.9963	92.31
18.5	15,697,573	64,221	0.0041	0.9959	91.97
19.5	15,075,277	119,917	0.0080	0.9920	91.59
20.5	14,129,767	71,723	0.0051	0.9949	90.86
21.5	14,013,395	136,171	0.0097	0.9903	90.40
22.5	13,672,438	63,413	0.0046	0.9954	89.52
23.5	13,359,498	87,821	0.0066	0.9934	89.11
24.5	13,121,519	348,178	0.0265	0.9735	88.52
25.5	12,627,986	157,184	0.0124	0.9876	86.17
26.5	11,599,974	119,238	0.0103	0.9897	85.10
27.5	11,145,009	85,578	0.0077	0.9923	84.23
28.5	10,526,067	107,980	0.0103	0.9897	83.58
29.5	10,053,062	278,845	0.0277	0.9723	82.72
30.5	9,305,613	88,162	0.0095	0.9905	80.43
31.5	8,609,331	153,141	0.0178	0.9822	79.66
32.5	7,971,482	82,057	0.0103	0.9897	78.25
33.5	7,514,257	86,356	0.0115	0.9885	77.44
34.5	7,075,426	77,801	0.0110	0.9890	76.55
35.5	6,697,684	70,962	0.0106	0.9894	75.71
36.5	6,657,532	140,062	0.0210	0.9790	74.91
37.5	6,135,864	89,680	0.0146	0.9854	73.33
38.5	5,720,751	100,530	0.0176	0.9824	72.26

NORTHWESTERN ENERGY
ELECTRIC PLANT

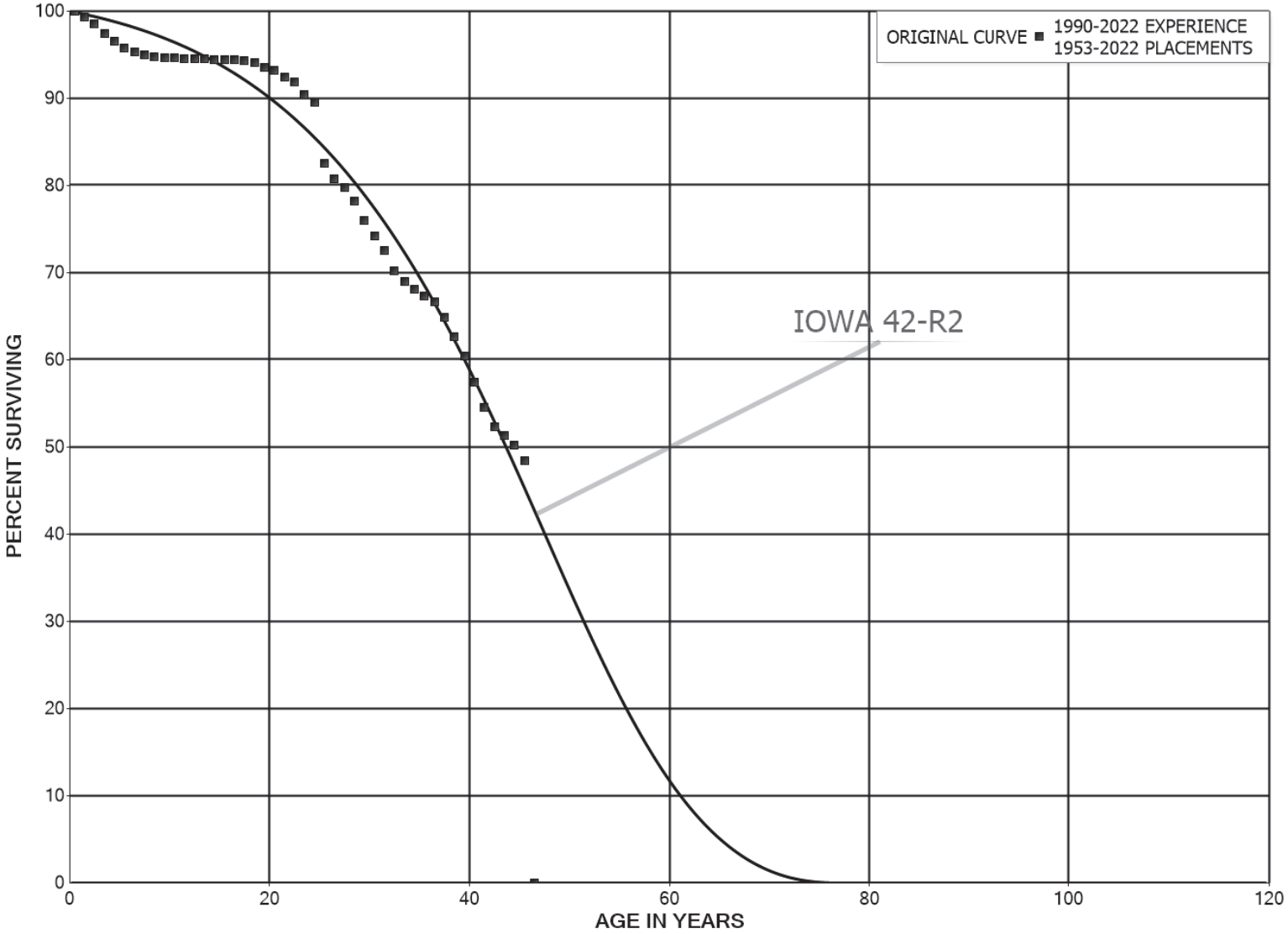
ACCOUNT 368.00 LINE TRANSFORMERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1940-2022 EXPERIENCE BAND 1990-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	5,496,476	95,031	0.0173	0.9827	70.99
40.5	5,117,986	78,173	0.0153	0.9847	69.76
41.5	4,610,643	104,709	0.0227	0.9773	68.70
42.5	4,198,047	83,977	0.0200	0.9800	67.14
43.5	3,797,373	38,524	0.0101	0.9899	65.79
44.5	3,351,691	65,399	0.0195	0.9805	65.13
45.5	3,041,803	39,084	0.0128	0.9872	63.86
46.5	2,774,072	27,919	0.0101	0.9899	63.04
47.5	2,678,382	52,288	0.0195	0.9805	62.40
48.5	2,408,600	183,169	0.0760	0.9240	61.18
49.5	1,981,392	332,990	0.1681	0.8319	56.53
50.5	1,648,402	397,104	0.2409	0.7591	47.03
51.5	1,251,298	203,488	0.1626	0.8374	35.70
52.5	1,046,959	105,268	0.1005	0.8995	29.89
53.5	941,691	95,952	0.1019	0.8981	26.89
54.5	845,739	113,841	0.1346	0.8654	24.15
55.5	731,899	94,659	0.1293	0.8707	20.90
56.5	637,239	82,130	0.1289	0.8711	18.20
57.5	555,109	96,376	0.1736	0.8264	15.85
58.5	458,733	79,256	0.1728	0.8272	13.10
59.5	379,477	64,931	0.1711	0.8289	10.84
60.5	314,545	49,280	0.1567	0.8433	8.98
61.5	265,265	39,917	0.1505	0.8495	7.57
62.5	225,348	53,311	0.2366	0.7634	6.43
63.5	172,037	35,133	0.2042	0.7958	4.91
64.5	136,904	28,992	0.2118	0.7882	3.91
65.5	107,912	12,988	0.1204	0.8796	3.08
66.5	94,924	13,244	0.1395	0.8605	2.71
67.5	81,679	12,411	0.1519	0.8481	2.33
68.5	69,268	10,290	0.1485	0.8515	1.98
69.5	58,978	15,976	0.2709	0.7291	1.68
70.5	43,003	16,996	0.3952	0.6048	1.23
71.5	26,006	8,722	0.3354	0.6646	0.74
72.5	17,284	5,867	0.3395	0.6605	0.49
73.5	11,417	2,511	0.2200	0.7800	0.33
74.5	8,906	2,532	0.2843	0.7157	0.25
75.5	6,374	2,544	0.3992	0.6008	0.18
76.5	3,829	1,299	0.3393	0.6607	0.11
77.5	2,530	2,530	1.0000		0.07
78.5					

NORTHWESTERN ENERGY
ELECTRIC PLANT
ACCOUNTS 369.10 AND 369.20 SERVICES
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNTS 369.10 AND 369.20 SERVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1953-2022 EXPERIENCE BAND 1990-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	21,923,752	8,369	0.0004	0.9996	100.00
0.5	21,171,397	133,742	0.0063	0.9937	99.96
1.5	20,689,433	179,487	0.0087	0.9913	99.33
2.5	20,143,491	211,867	0.0105	0.9895	98.47
3.5	19,505,040	183,176	0.0094	0.9906	97.43
4.5	18,985,625	157,332	0.0083	0.9917	96.52
5.5	18,142,968	86,201	0.0048	0.9952	95.72
6.5	17,613,165	54,989	0.0031	0.9969	95.26
7.5	17,215,324	39,707	0.0023	0.9977	94.97
8.5	16,890,190	20,017	0.0012	0.9988	94.75
9.5	16,643,214	10,066	0.0006	0.9994	94.63
10.5	16,397,482	5,683	0.0003	0.9997	94.58
11.5	16,168,586	4,776	0.0003	0.9997	94.54
12.5	15,909,403	4,941	0.0003	0.9997	94.52
13.5	15,468,596	7,375	0.0005	0.9995	94.49
14.5	14,811,968	7,896	0.0005	0.9995	94.44
15.5	14,306,620	7,528	0.0005	0.9995	94.39
16.5	13,612,569	8,604	0.0006	0.9994	94.34
17.5	13,020,143	33,514	0.0026	0.9974	94.28
18.5	12,767,492	68,864	0.0054	0.9946	94.04
19.5	12,314,246	43,628	0.0035	0.9965	93.53
20.5	11,216,769	92,255	0.0082	0.9918	93.20
21.5	10,743,476	74,310	0.0069	0.9931	92.43
22.5	10,206,482	152,135	0.0149	0.9851	91.80
23.5	9,514,962	101,554	0.0107	0.9893	90.43
24.5	8,972,768	692,692	0.0772	0.9228	89.46
25.5	7,486,745	169,196	0.0226	0.9774	82.56
26.5	6,343,457	78,062	0.0123	0.9877	80.69
27.5	5,225,627	97,566	0.0187	0.9813	79.70
28.5	4,227,283	122,661	0.0290	0.9710	78.21
29.5	3,710,962	87,099	0.0235	0.9765	75.94
30.5	3,142,309	69,365	0.0221	0.9779	74.16
31.5	2,736,728	89,413	0.0327	0.9673	72.52
32.5	2,247,585	39,600	0.0176	0.9824	70.15
33.5	1,708,950	21,381	0.0125	0.9875	68.91
34.5	1,243,291	14,575	0.0117	0.9883	68.05
35.5	991,595	9,269	0.0093	0.9907	67.25
36.5	1,006,914	27,363	0.0272	0.9728	66.63
37.5	823,191	27,965	0.0340	0.9660	64.82
38.5	765,955	26,563	0.0347	0.9653	62.61

NORTHWESTERN ENERGY
ELECTRIC PLANT

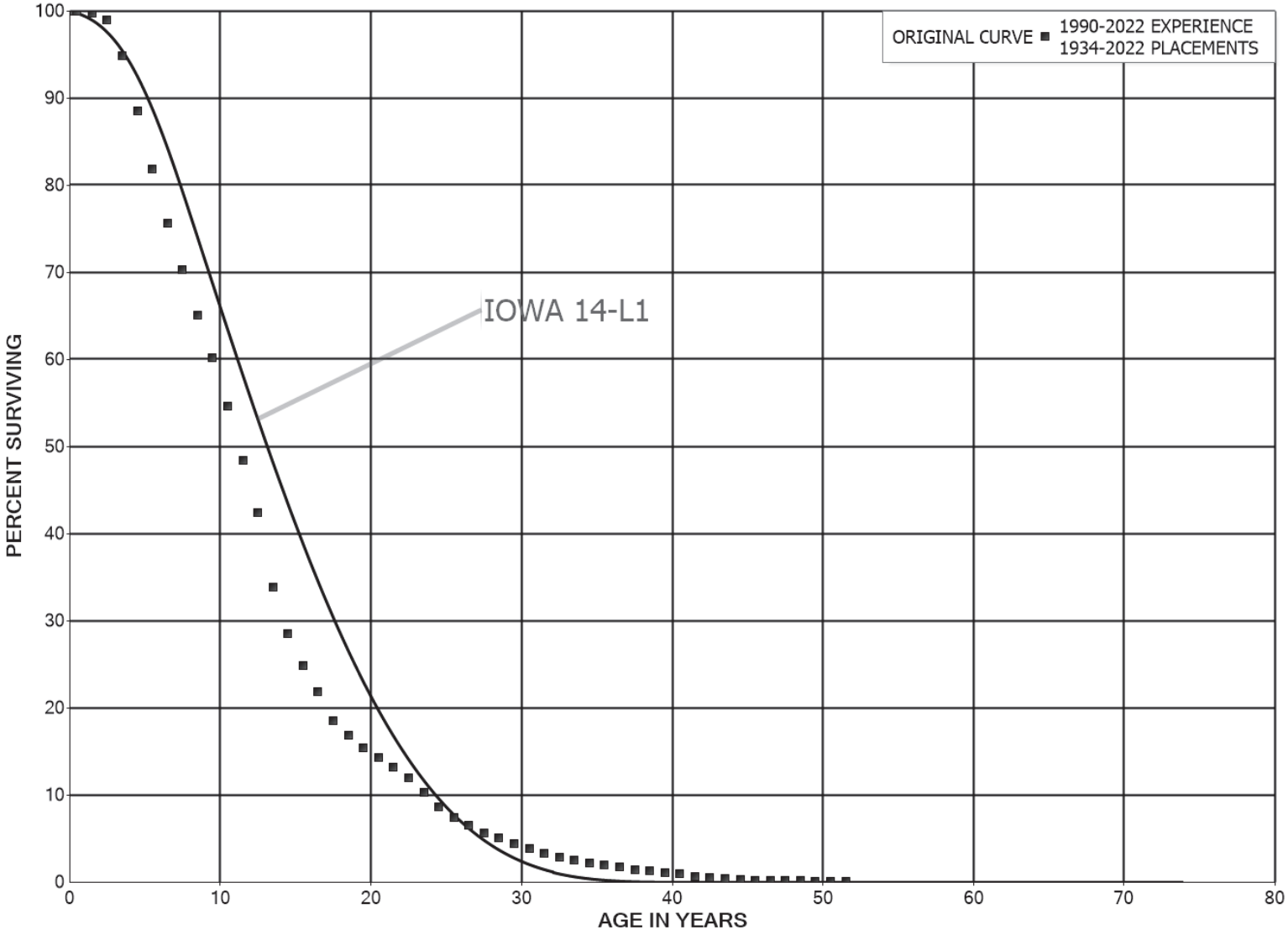
ACCOUNTS 369.10 AND 369.20 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1953-2022 EXPERIENCE BAND 1990-2022

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	720,829	36,396	0.0505	0.9495	60.44
40.5	617,735	30,690	0.0497	0.9503	57.39
41.5	509,918	20,783	0.0408	0.9592	54.54
42.5	434,597	9,017	0.0207	0.9793	52.32
43.5	385,924	7,841	0.0203	0.9797	51.23
44.5	316,225	11,570	0.0366	0.9634	50.19
45.5	1,261	1,261	1.0000		48.35
46.5					

NORTHWESTERN ENERGY
ELECTRIC PLANT
ACCOUNT 370.00 METERS
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 370.00 METERS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1934-2022 EXPERIENCE BAND 1990-2022

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	11,471,338	2,229	0.0002	0.9998	100.00
0.5	11,679,278	35,315	0.0030	0.9970	99.98
1.5	11,689,926	86,489	0.0074	0.9926	99.68
2.5	11,726,726	487,137	0.0415	0.9585	98.94
3.5	11,326,005	756,308	0.0668	0.9332	94.83
4.5	10,441,734	780,568	0.0748	0.9252	88.50
5.5	9,612,684	738,862	0.0769	0.9231	81.88
6.5	8,815,420	613,033	0.0695	0.9305	75.59
7.5	8,356,844	630,178	0.0754	0.9246	70.33
8.5	7,816,314	577,033	0.0738	0.9262	65.03
9.5	6,995,894	654,859	0.0936	0.9064	60.23
10.5	6,419,240	730,945	0.1139	0.8861	54.59
11.5	5,765,937	708,310	0.1228	0.8772	48.37
12.5	5,111,967	1,040,505	0.2035	0.7965	42.43
13.5	4,122,753	641,190	0.1555	0.8445	33.80
14.5	3,537,930	457,891	0.1294	0.8706	28.54
15.5	3,133,072	380,868	0.1216	0.8784	24.85
16.5	2,810,542	432,072	0.1537	0.8463	21.83
17.5	2,427,952	214,491	0.0883	0.9117	18.47
18.5	2,261,314	186,704	0.0826	0.9174	16.84
19.5	2,126,988	160,879	0.0756	0.9244	15.45
20.5	1,960,405	145,331	0.0741	0.9259	14.28
21.5	1,830,484	181,394	0.0991	0.9009	13.22
22.5	1,694,310	226,519	0.1337	0.8663	11.91
23.5	1,530,580	254,079	0.1660	0.8340	10.32
24.5	1,319,461	187,652	0.1422	0.8578	8.61
25.5	1,168,848	146,381	0.1252	0.8748	7.38
26.5	1,062,823	134,535	0.1266	0.8734	6.46
27.5	966,869	101,441	0.1049	0.8951	5.64
28.5	914,822	118,584	0.1296	0.8704	5.05
29.5	837,520	107,705	0.1286	0.8714	4.39
30.5	782,463	103,477	0.1322	0.8678	3.83
31.5	718,986	97,151	0.1351	0.8649	3.32
32.5	662,342	78,692	0.1188	0.8812	2.87
33.5	621,515	76,729	0.1235	0.8765	2.53
34.5	567,132	64,557	0.1138	0.8862	2.22
35.5	547,909	77,542	0.1415	0.8585	1.97
36.5	595,872	86,763	0.1456	0.8544	1.69
37.5	523,037	69,998	0.1338	0.8662	1.44
38.5	453,634	68,624	0.1513	0.8487	1.25

NORTHWESTERN ENERGY
ELECTRIC PLANT

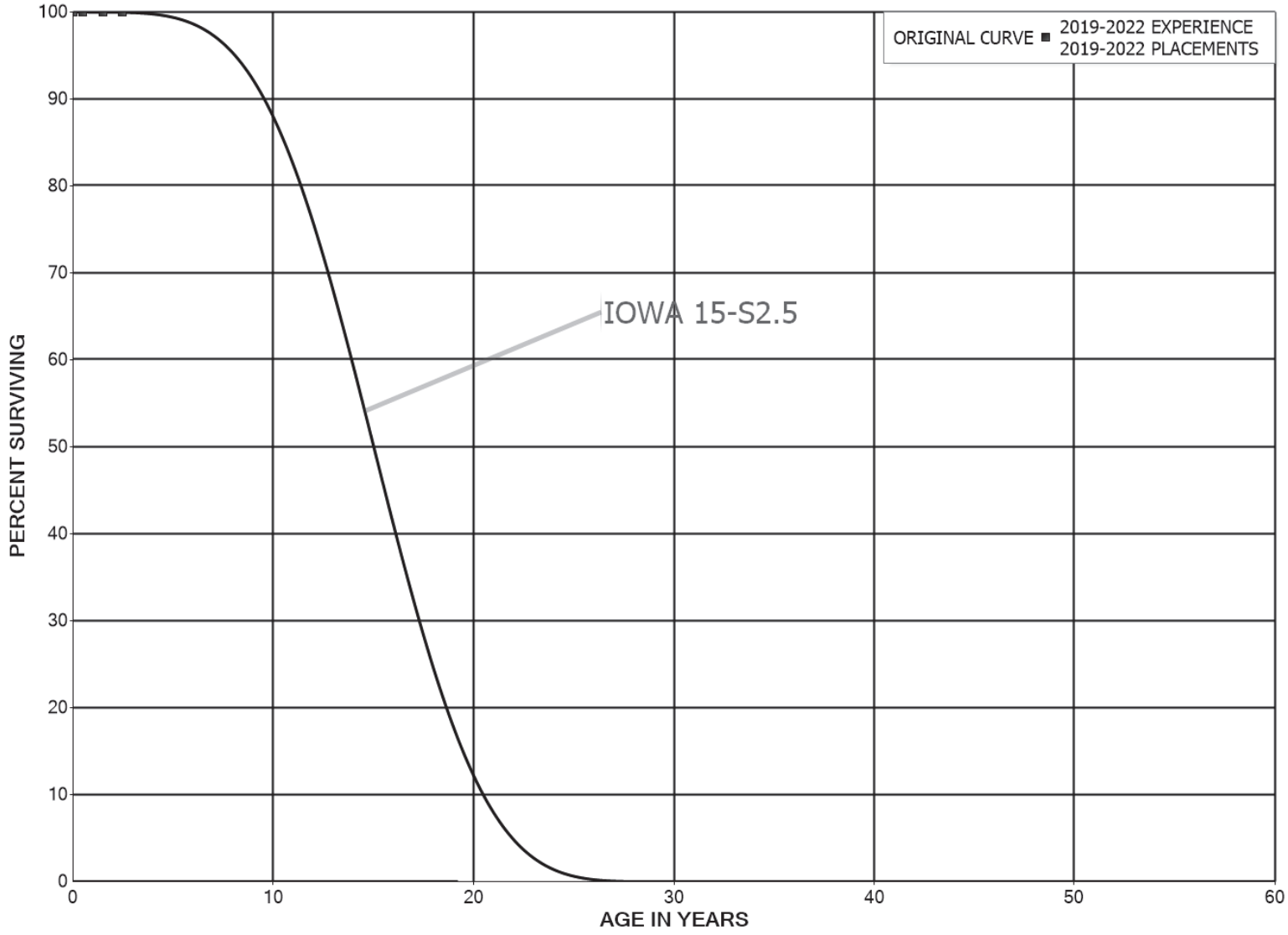
ACCOUNT 370.00 METERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1934-2022 EXPERIENCE BAND 1990-2022

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	385,493	61,940	0.1607	0.8393	1.06
40.5	323,553	109,939	0.3398	0.6602	0.89
41.5	213,951	33,286	0.1556	0.8444	0.59
42.5	179,818	27,044	0.1504	0.8496	0.50
43.5	152,774	46,929	0.3072	0.6928	0.42
44.5	105,971	25,488	0.2405	0.7595	0.29
45.5	80,483	8,605	0.1069	0.8931	0.22
46.5	72,532	17,744	0.2446	0.7554	0.20
47.5	55,286	7,278	0.1316	0.8684	0.15
48.5	48,130	4,744	0.0986	0.9014	0.13
49.5	43,446	2,116	0.0487	0.9513	0.12
50.5	41,329	7,921	0.1917	0.8083	0.11
51.5	33,408	3,690	0.1104	0.8896	0.09
52.5	28,719	5,663	0.1972	0.8028	0.08
53.5	23,056	1,726	0.0749	0.9251	0.06
54.5	21,330	8,897	0.4171	0.5829	0.06
55.5	12,834	4,076	0.3176	0.6824	0.03
56.5	8,758	1,134	0.1295	0.8705	0.02
57.5	7,624	590	0.0774	0.9226	0.02
58.5	7,034	1,129	0.1605	0.8395	0.02
59.5	5,905	2,547	0.4313	0.5687	0.02
60.5	3,358	833	0.2481	0.7519	0.01
61.5	2,525	940	0.3723	0.6277	0.01
62.5	1,585	540	0.3407	0.6593	0.00
63.5	1,045	420	0.4022	0.5978	0.00
64.5	625	20	0.0325	0.9675	0.00
65.5	604	61	0.1016	0.8984	0.00
66.5	543		0.0000	1.0000	0.00
67.5	543	30	0.0558	0.9442	0.00
68.5	513	118	0.2294	0.7706	0.00
69.5	395		0.0000	1.0000	0.00
70.5	395	138	0.3483	0.6517	0.00
71.5	257		0.0000	1.0000	0.00
72.5	257		0.0000	1.0000	0.00
73.5	257	163	0.6340	0.3660	0.00
74.5	94	65	0.6859	0.3141	0.00
75.5	30	30	1.0000		0.00
76.5					

NORTHWESTERN ENERGY
ELECTRIC PLANT
ACCOUNT 370.30 METERS - AMI
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
ELECTRIC PLANT

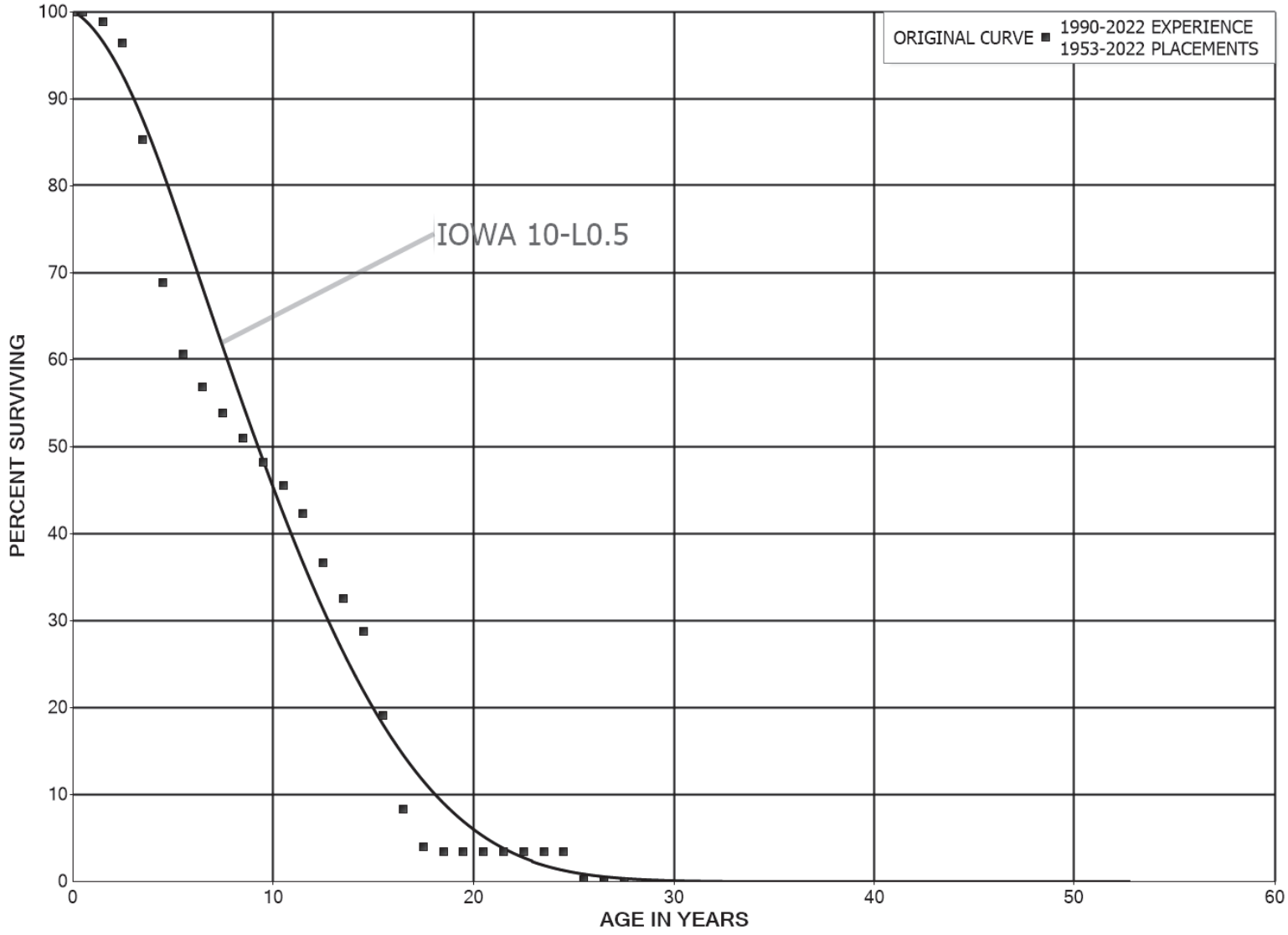
ACCOUNT 370.30 METERS - AMI

ORIGINAL LIFE TABLE

PLACEMENT BAND 2019-2022 EXPERIENCE BAND 2019-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	13,670,558		0.0000	1.0000	100.00
0.5	13,151,553		0.0000	1.0000	100.00
1.5	12,613,450		0.0000	1.0000	100.00
2.5	12,483,220	53,578	0.0043	0.9957	100.00
3.5					99.57

NORTHWESTERN ENERGY
ELECTRIC PLANT
ACCOUNT 371.00 INSTALLATIONS ON CUSTOMERS' PREMISES
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 371.00 INSTALLATIONS ON CUSTOMERS' PREMISES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1953-2022 EXPERIENCE BAND 1990-2022

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	1,563,639	1,213	0.0008	0.9992	100.00
0.5	1,590,363	16,563	0.0104	0.9896	99.92
1.5	1,604,116	39,648	0.0247	0.9753	98.88
2.5	1,940,316	224,630	0.1158	0.8842	96.44
3.5	1,704,615	328,306	0.1926	0.8074	85.27
4.5	1,372,770	164,514	0.1198	0.8802	68.85
5.5	1,199,549	74,070	0.0617	0.9383	60.60
6.5	1,122,521	60,186	0.0536	0.9464	56.86
7.5	1,057,795	57,258	0.0541	0.9459	53.81
8.5	998,835	53,043	0.0531	0.9469	50.90
9.5	944,124	53,459	0.0566	0.9434	48.19
10.5	889,463	61,381	0.0690	0.9310	45.46
11.5	827,572	111,612	0.1349	0.8651	42.33
12.5	715,824	80,659	0.1127	0.8873	36.62
13.5	673,027	78,242	0.1163	0.8837	32.49
14.5	626,222	211,253	0.3373	0.6627	28.71
15.5	418,910	235,844	0.5630	0.4370	19.03
16.5	183,066	95,812	0.5234	0.4766	8.32
17.5	87,254	13,716	0.1572	0.8428	3.96
18.5	73,537		0.0000	1.0000	3.34
19.5	73,537		0.0000	1.0000	3.34
20.5	73,537		0.0000	1.0000	3.34
21.5	73,537		0.0000	1.0000	3.34
22.5	73,537		0.0000	1.0000	3.34
23.5	73,537		0.0000	1.0000	3.34
24.5	73,551	69,596	0.9462	0.0538	3.34
25.5	3,955	3,941	0.9964	0.0036	0.18
26.5	14	14	1.0000		0.00
27.5	45,076	17,303	0.3839	0.6161	
28.5	28,928	23,942	0.8276		
29.5	4,986	4,986	1.0000		
30.5					
31.5					
32.5					
33.5					
34.5					
35.5					
36.5	128,075		0.0000		
37.5	128,075		0.0000		
38.5	128,075	16,260	0.1270		

NORTHWESTERN ENERGY
ELECTRIC PLANT

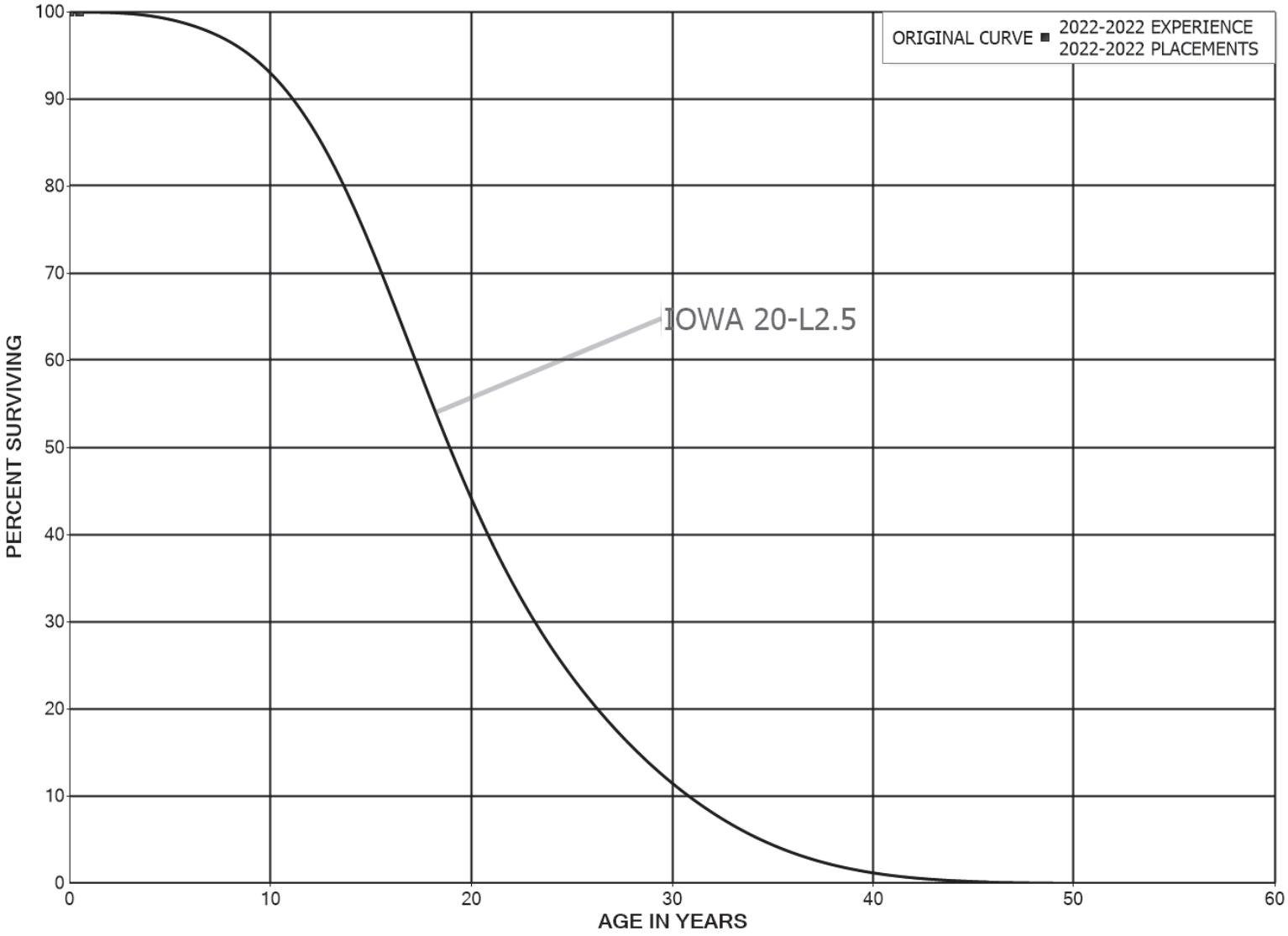
ACCOUNT 371.00 INSTALLATIONS ON CUSTOMERS' PREMISES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1953-2022 EXPERIENCE BAND 1990-2022

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	111,815	25,711	0.2299		
40.5	86,104	21,200	0.2462		
41.5	64,904	21,069	0.3246		
42.5	43,835	12,747	0.2908		
43.5	31,088	14,108	0.4538		
44.5	16,980	13,440	0.7915		
45.5	3,540	3,540	1.0000		
46.5					

NORTHWESTERN ENERGY
ELECTRIC PLANT
ACCOUNT 371.50 LED YARD LIGHTS
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
ELECTRIC PLANT

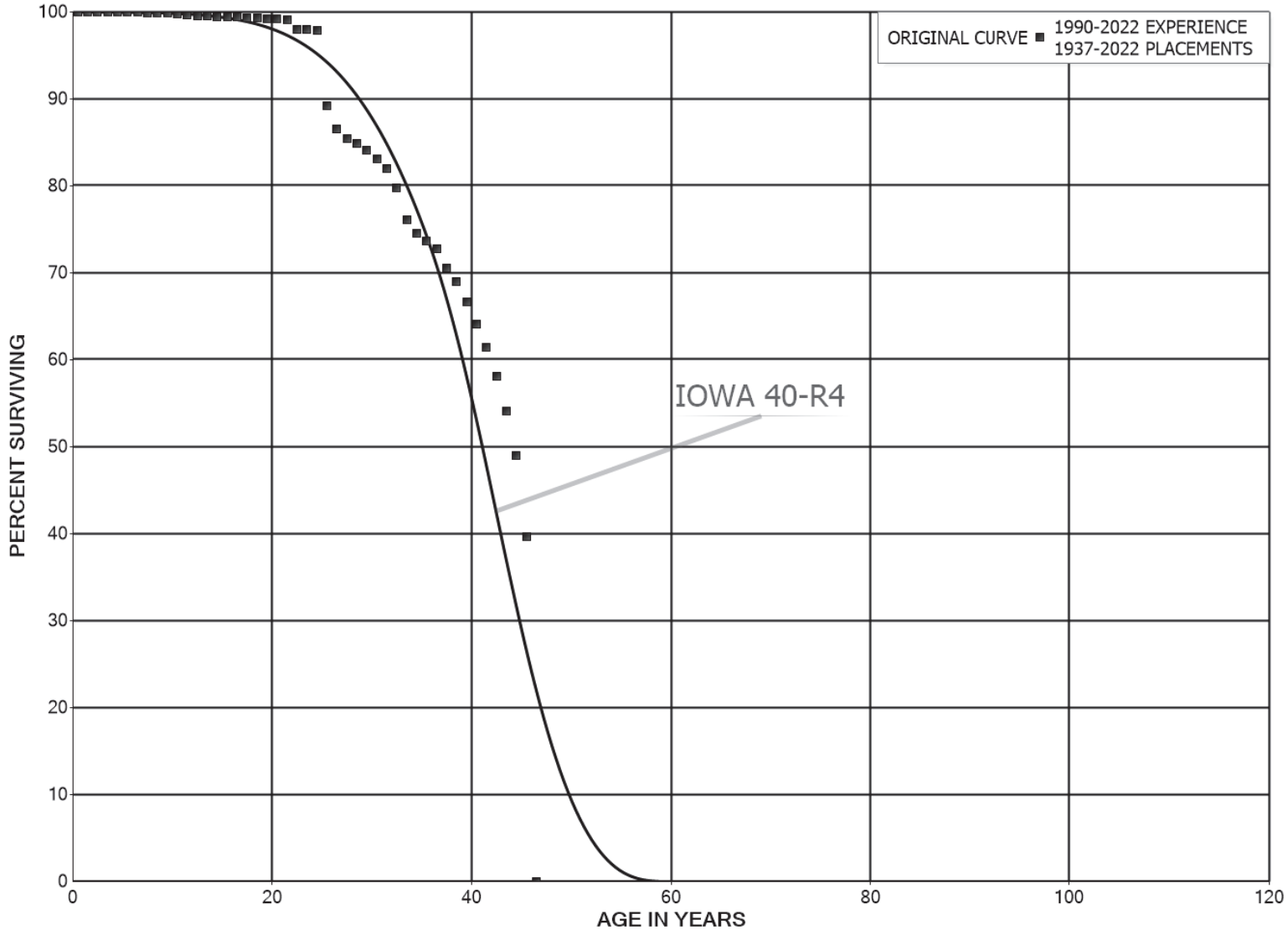
ACCOUNT 371.50 LED YARD LIGHTS

ORIGINAL LIFE TABLE

PLACEMENT BAND 2022-2022 EXPERIENCE BAND 2022-2022

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	654,266		0.0000	1.0000	100.00
0.5					100.00

NORTHWESTERN ENERGY
ELECTRIC PLANT
ACCOUNT 373.00 STREET LIGHTING AND SIGNAL SYSTEMS
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 373.00 STREET LIGHTING AND SIGNAL SYSTEMS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1937-2022 EXPERIENCE BAND 1990-2022

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	7,572,153		0.0000	1.0000	100.00
0.5	7,414,802		0.0000	1.0000	100.00
1.5	7,264,281		0.0000	1.0000	100.00
2.5	7,173,084	453	0.0001	0.9999	100.00
3.5	7,200,735	709	0.0001	0.9999	99.99
4.5	7,127,072	4,253	0.0006	0.9994	99.98
5.5	7,089,696	1,464	0.0002	0.9998	99.92
6.5	7,110,706	2,328	0.0003	0.9997	99.90
7.5	6,904,342		0.0000	1.0000	99.87
8.5	6,855,729	1,750	0.0003	0.9997	99.87
9.5	6,926,607	8,185	0.0012	0.9988	99.85
10.5	6,677,672	9,055	0.0014	0.9986	99.73
11.5	6,480,548	5,862	0.0009	0.9991	99.59
12.5	6,028,762	1,965	0.0003	0.9997	99.50
13.5	5,932,204	1,707	0.0003	0.9997	99.47
14.5	5,725,578	1,966	0.0003	0.9997	99.44
15.5	5,434,688	2,391	0.0004	0.9996	99.41
16.5	5,178,553	2,976	0.0006	0.9994	99.36
17.5	4,992,179	3,217	0.0006	0.9994	99.31
18.5	4,671,543	1,050	0.0002	0.9998	99.24
19.5	4,205,657	2,413	0.0006	0.9994	99.22
20.5	3,764,931	1,830	0.0005	0.9995	99.16
21.5	3,703,429	44,390	0.0120	0.9880	99.11
22.5	3,579,453		0.0000	1.0000	97.93
23.5	3,483,098	1,526	0.0004	0.9996	97.93
24.5	3,423,308	302,889	0.0885	0.9115	97.88
25.5	3,039,336	93,043	0.0306	0.9694	89.22
26.5	2,853,756	35,865	0.0126	0.9874	86.49
27.5	2,730,449	18,601	0.0068	0.9932	85.40
28.5	2,632,241	23,874	0.0091	0.9909	84.82
29.5	2,530,846	30,188	0.0119	0.9881	84.05
30.5	2,429,817	31,417	0.0129	0.9871	83.05
31.5	2,330,439	63,197	0.0271	0.9729	81.98
32.5	2,203,173	101,070	0.0459	0.9541	79.75
33.5	2,042,621	42,232	0.0207	0.9793	76.10
34.5	1,890,331	24,005	0.0127	0.9873	74.52
35.5	1,716,264	20,082	0.0117	0.9883	73.58
36.5	1,668,313	50,724	0.0304	0.9696	72.71
37.5	1,410,345	32,083	0.0227	0.9773	70.50
38.5	1,186,476	39,044	0.0329	0.9671	68.90

NORTHWESTERN ENERGY
ELECTRIC PLANT

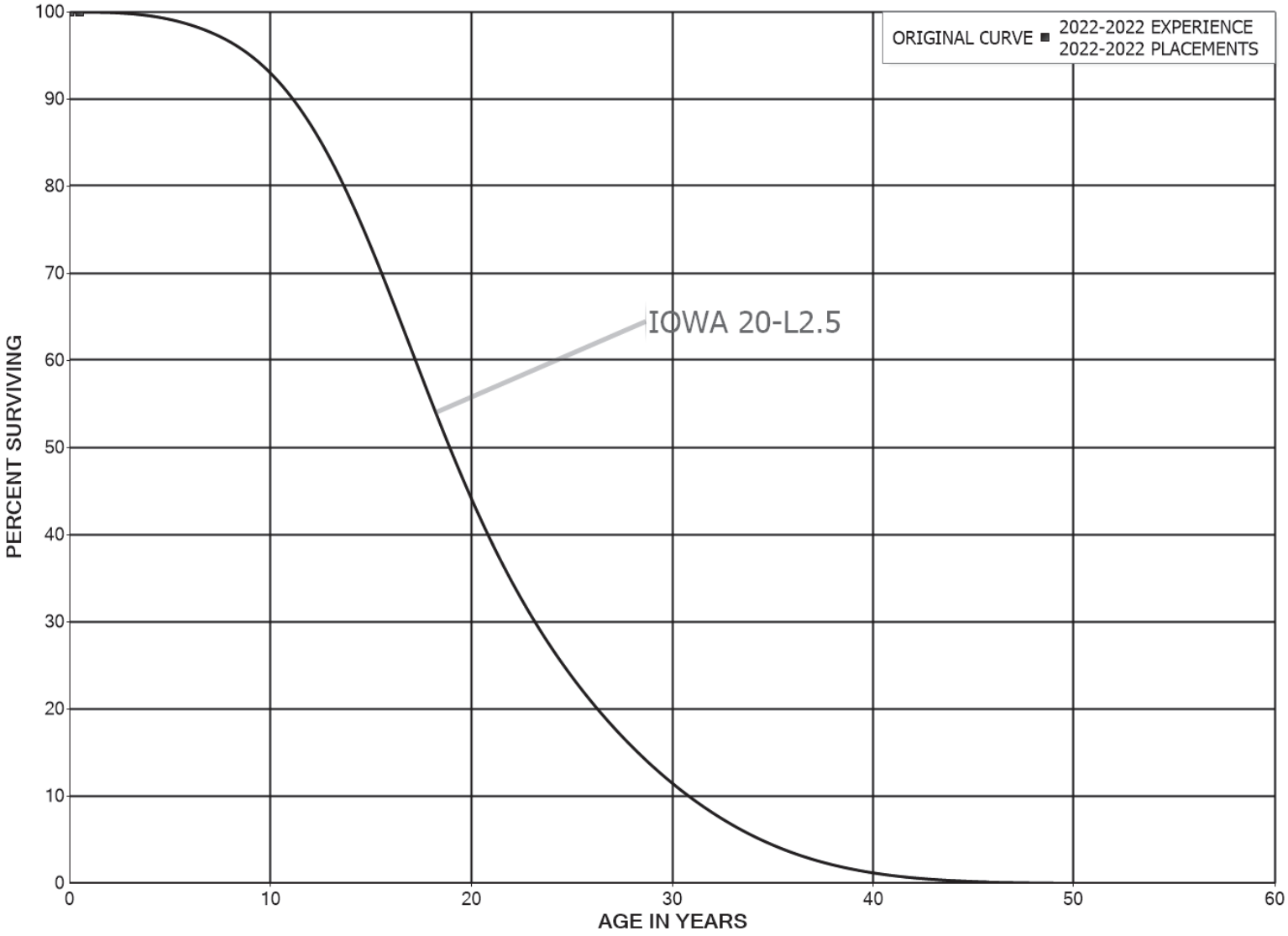
ACCOUNT 373.00 STREET LIGHTING AND SIGNAL SYSTEMS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1937-2022 EXPERIENCE BAND 1990-2022

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	908,487	35,445	0.0390	0.9610	66.63
40.5	698,542	29,249	0.0419	0.9581	64.03
41.5	467,082	24,687	0.0529	0.9471	61.35
42.5	253,110	17,517	0.0692	0.9308	58.11
43.5	126,549	11,900	0.0940	0.9060	54.09
44.5	33,023	6,356	0.1925	0.8075	49.00
45.5	2,693	2,693	1.0000		39.57
46.5					
47.5					
48.5					
49.5					
50.5					
51.5					
52.5	12,830		0.0000		
53.5	12,830		0.0000		
54.5	12,830	12,830	1.0000		
55.5					

NORTHWESTERN ENERGY
ELECTRIC PLANT
ACCOUNT 373.50 LED STREET LIGHTS
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
ELECTRIC PLANT

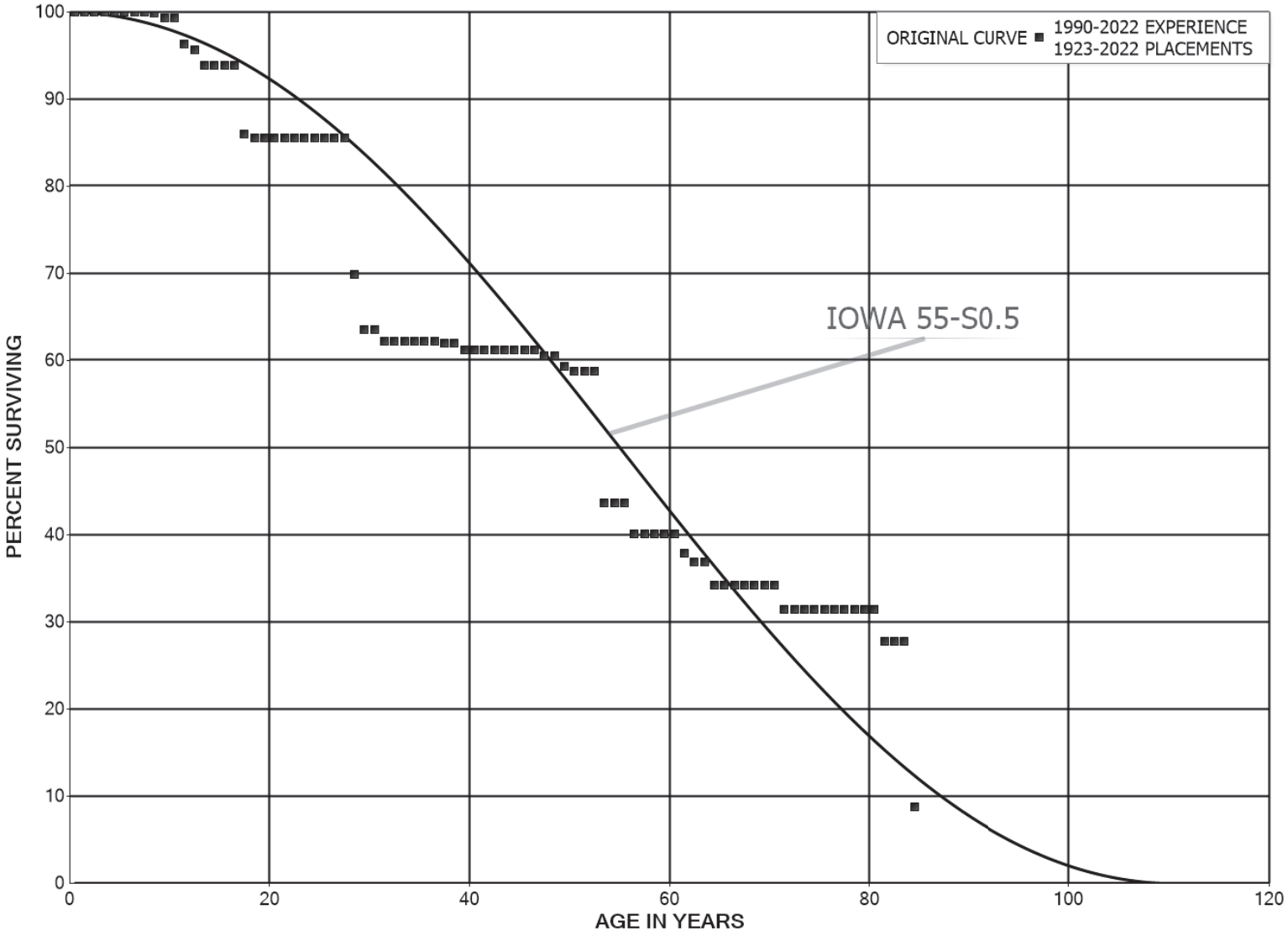
ACCOUNT 373.50 LED STREET LIGHTS

ORIGINAL LIFE TABLE

PLACEMENT BAND 2022-2022 EXPERIENCE BAND 2022-2022

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	77,489		0.0000	1.0000	100.00
0.5					100.00

NORTHWESTERN ENERGY
ELECTRIC PLANT
ACCOUNT 390.10 STRUCTURES AND IMPROVEMENTS
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 390.10 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1923-2022 EXPERIENCE BAND 1990-2022

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	1,425,837		0.0000	1.0000	100.00
0.5	1,342,552		0.0000	1.0000	100.00
1.5	1,332,193		0.0000	1.0000	100.00
2.5	1,915,919	760	0.0004	0.9996	100.00
3.5	1,896,165		0.0000	1.0000	99.96
4.5	1,795,728		0.0000	1.0000	99.96
5.5	1,529,471		0.0000	1.0000	99.96
6.5	1,807,377		0.0000	1.0000	99.96
7.5	1,780,539	1,735	0.0010	0.9990	99.96
8.5	1,709,248	10,508	0.0061	0.9939	99.86
9.5	775,780		0.0000	1.0000	99.25
10.5	740,916	21,862	0.0295	0.9705	99.25
11.5	710,107	5,386	0.0076	0.9924	96.32
12.5	474,477	8,485	0.0179	0.9821	95.59
13.5	465,992		0.0000	1.0000	93.88
14.5	474,100		0.0000	1.0000	93.88
15.5	438,182		0.0000	1.0000	93.88
16.5	477,796	40,100	0.0839	0.9161	93.88
17.5	437,695	2,552	0.0058	0.9942	86.00
18.5	435,143		0.0000	1.0000	85.50
19.5	435,143		0.0000	1.0000	85.50
20.5	406,082		0.0000	1.0000	85.50
21.5	406,082		0.0000	1.0000	85.50
22.5	514,794		0.0000	1.0000	85.50
23.5	585,522		0.0000	1.0000	85.50
24.5	610,167		0.0000	1.0000	85.50
25.5	610,167		0.0000	1.0000	85.50
26.5	605,767		0.0000	1.0000	85.50
27.5	648,268	118,486	0.1828	0.8172	85.50
28.5	729,398	66,760	0.0915	0.9085	69.87
29.5	671,349		0.0000	1.0000	63.48
30.5	633,797	13,354	0.0211	0.9789	63.48
31.5	591,296		0.0000	1.0000	62.14
32.5	589,631		0.0000	1.0000	62.14
33.5	589,631		0.0000	1.0000	62.14
34.5	589,631		0.0000	1.0000	62.14
35.5	589,631		0.0000	1.0000	62.14
36.5	589,631	1,585	0.0027	0.9973	62.14
37.5	640,533		0.0000	1.0000	61.97
38.5	640,533	8,711	0.0136	0.9864	61.97

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 390.10 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1923-2022 EXPERIENCE BAND 1990-2022

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	366,398		0.0000	1.0000	61.13
40.5	366,398		0.0000	1.0000	61.13
41.5	375,373		0.0000	1.0000	61.13
42.5	375,373		0.0000	1.0000	61.13
43.5	369,817		0.0000	1.0000	61.13
44.5	369,817		0.0000	1.0000	61.13
45.5	369,817		0.0000	1.0000	61.13
46.5	369,817	4,003	0.0108	0.9892	61.13
47.5	365,814		0.0000	1.0000	60.47
48.5	365,814	7,351	0.0201	0.9799	60.47
49.5	345,097	2,826	0.0082	0.9918	59.25
50.5	342,271		0.0000	1.0000	58.77
51.5	342,271		0.0000	1.0000	58.77
52.5	342,271	88,020	0.2572	0.7428	58.77
53.5	254,251		0.0000	1.0000	43.66
54.5	254,251		0.0000	1.0000	43.66
55.5	254,251	20,642	0.0812	0.9188	43.66
56.5	165,707		0.0000	1.0000	40.11
57.5	165,707		0.0000	1.0000	40.11
58.5	165,707		0.0000	1.0000	40.11
59.5	165,707		0.0000	1.0000	40.11
60.5	165,707	9,625	0.0581	0.9419	40.11
61.5	61,462	1,563	0.0254	0.9746	37.78
62.5	59,899		0.0000	1.0000	36.82
63.5	59,899	4,317	0.0721	0.9279	36.82
64.5	55,582		0.0000	1.0000	34.17
65.5	19,981		0.0000	1.0000	34.17
66.5	36,924		0.0000	1.0000	34.17
67.5	36,924		0.0000	1.0000	34.17
68.5	36,924		0.0000	1.0000	34.17
69.5	36,924		0.0000	1.0000	34.17
70.5	36,924	3,000	0.0812	0.9188	34.17
71.5	33,924		0.0000	1.0000	31.39
72.5	33,924		0.0000	1.0000	31.39
73.5	33,924		0.0000	1.0000	31.39
74.5	27,948		0.0000	1.0000	31.39
75.5	27,948		0.0000	1.0000	31.39
76.5	27,948		0.0000	1.0000	31.39
77.5	27,948		0.0000	1.0000	31.39
78.5	27,948		0.0000	1.0000	31.39

NORTHWESTERN ENERGY
ELECTRIC PLANT

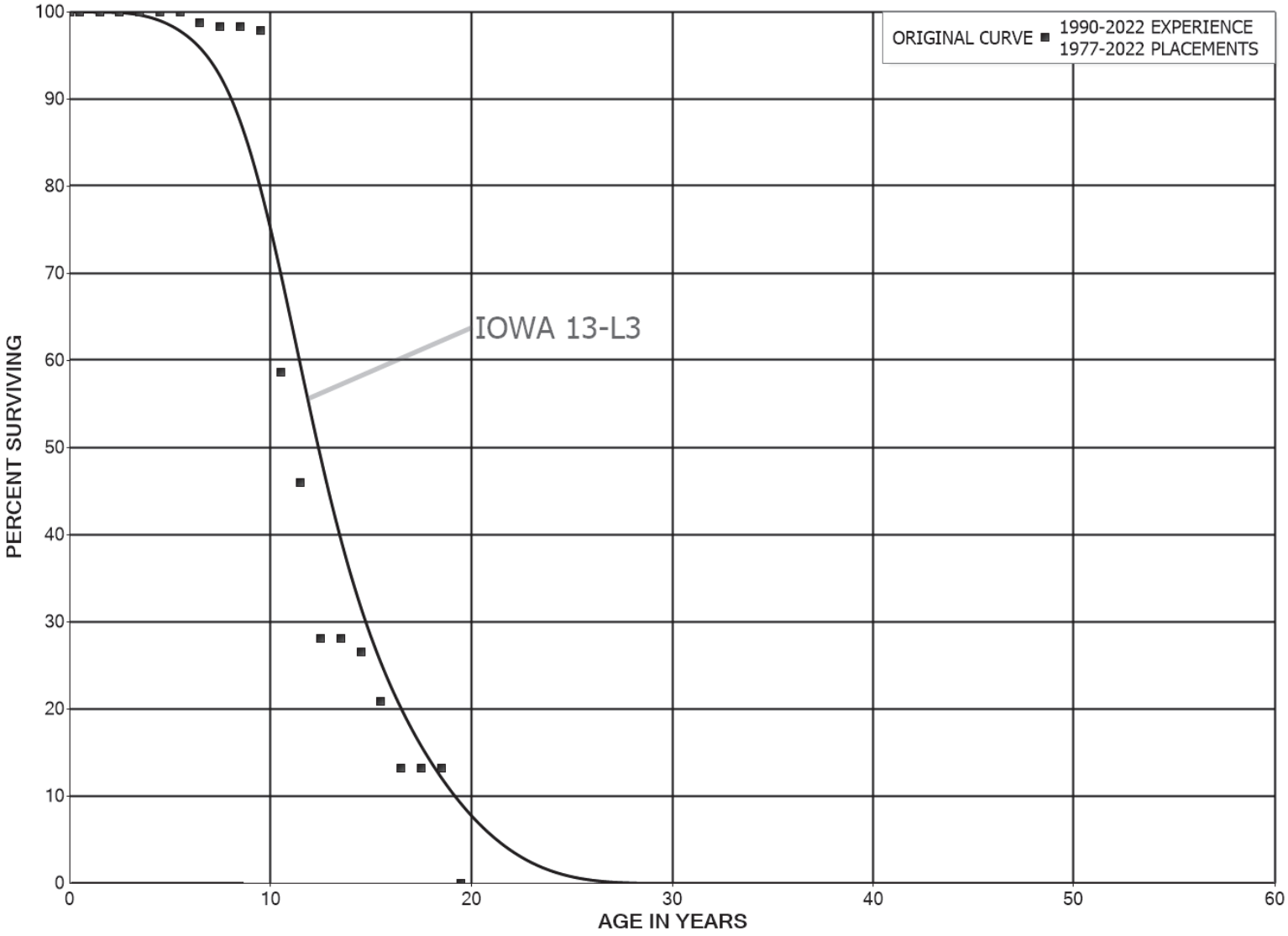
ACCOUNT 390.10 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1923-2022 EXPERIENCE BAND 1990-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	27,948		0.0000	1.0000	31.39
80.5	27,948	3,237	0.1158	0.8842	31.39
81.5	24,711		0.0000	1.0000	27.75
82.5	24,711		0.0000	1.0000	27.75
83.5	24,711	16,943	0.6856	0.3144	27.75
84.5	7,768		0.0000	1.0000	8.72
85.5	7,768		0.0000	1.0000	8.72
86.5	7,768		0.0000	1.0000	8.72
87.5	7,768		0.0000	1.0000	8.72
88.5	7,768	775	0.0998	0.9002	8.72
89.5	6,993		0.0000	1.0000	7.85
90.5	6,993		0.0000	1.0000	7.85
91.5	6,993	6,993	1.0000		7.85
92.5					

NORTHWESTERN ENERGY
ELECTRIC PLANT
ACCOUNT 397.20 COMMUNICATION EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 397.20 COMMUNICATION EQUIPMENT

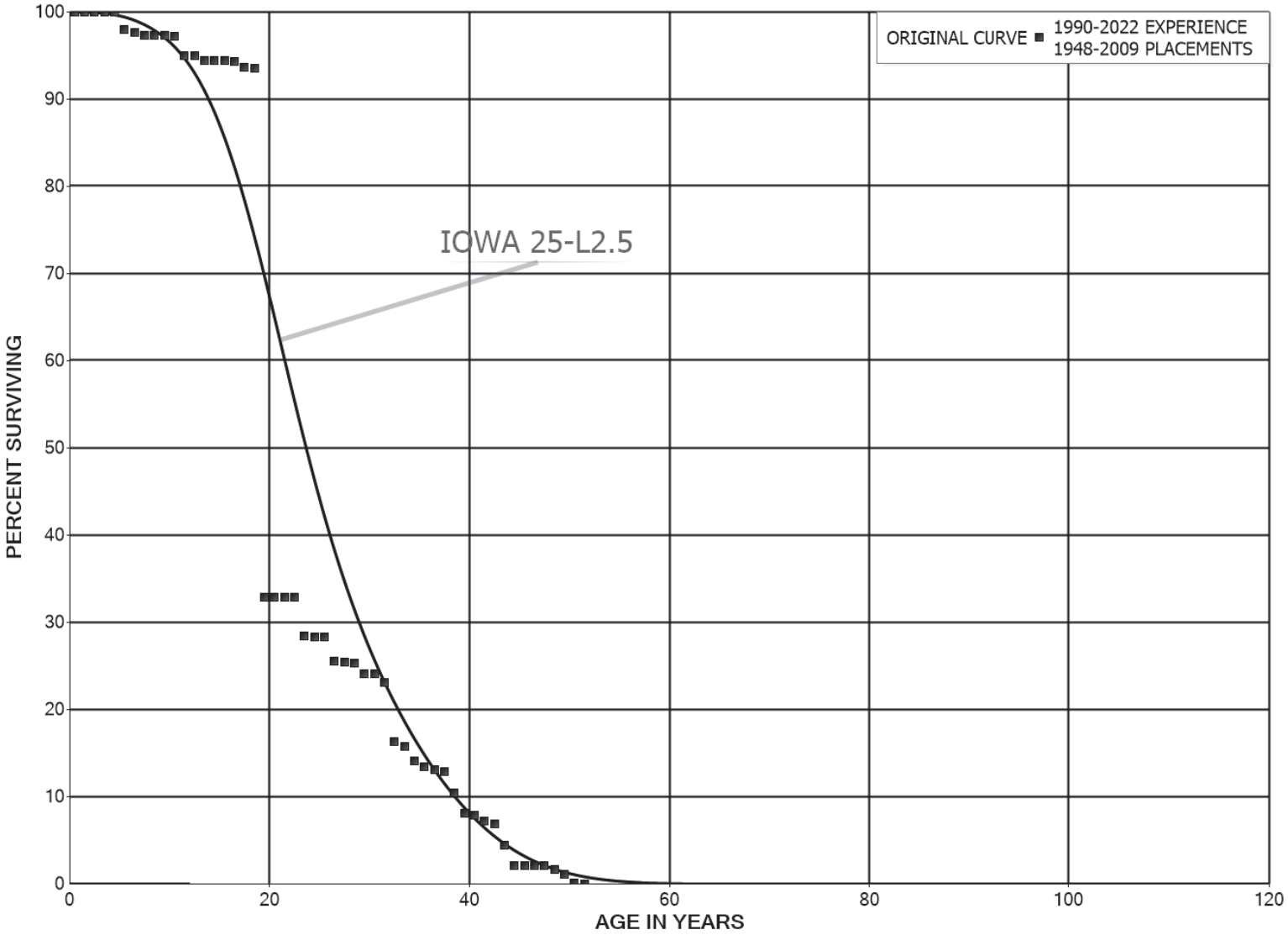
ORIGINAL LIFE TABLE

PLACEMENT BAND 1977-2022 EXPERIENCE BAND 1990-2022

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	3,452,529		0.0000	1.0000	100.00
0.5	3,364,940		0.0000	1.0000	100.00
1.5	3,384,701		0.0000	1.0000	100.00
2.5	3,222,854		0.0000	1.0000	100.00
3.5	2,656,476		0.0000	1.0000	100.00
4.5	2,154,144	1,014	0.0005	0.9995	100.00
5.5	2,068,742	24,475	0.0118	0.9882	99.95
6.5	1,979,160	9,339	0.0047	0.9953	98.77
7.5	1,320,358		0.0000	1.0000	98.30
8.5	1,213,297	6,129	0.0051	0.9949	98.30
9.5	601,965	241,252	0.4008	0.5992	97.81
10.5	360,713	78,025	0.2163	0.7837	58.61
11.5	282,688	109,826	0.3885	0.6115	45.93
12.5	358,439	366	0.0010	0.9990	28.09
13.5	358,073	19,414	0.0542	0.9458	28.06
14.5	338,659	72,741	0.2148	0.7852	26.54
15.5	265,918	97,567	0.3669	0.6331	20.84
16.5	168,352		0.0000	1.0000	13.19
17.5	168,352		0.0000	1.0000	13.19
18.5	168,352	168,352	1.0000		13.19
19.5					

GAS PLANT

NORTHWESTERN ENERGY
GAS PLANT
ACCOUNT 311.00 LIQUEFIED PETROLEUM GAS EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 311.00 LIQUEFIED PETROLEUM GAS EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1948-2009 EXPERIENCE BAND 1990-2022

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	1,043,897		0.0000	1.0000	100.00
0.5	1,043,897		0.0000	1.0000	100.00
1.5	1,043,897		0.0000	1.0000	100.00
2.5	1,049,045		0.0000	1.0000	100.00
3.5	1,049,045		0.0000	1.0000	100.00
4.5	1,055,470	21,378	0.0203	0.9797	100.00
5.5	1,034,092	4,249	0.0041	0.9959	97.97
6.5	1,029,843	2,894	0.0028	0.9972	97.57
7.5	1,032,942		0.0000	1.0000	97.30
8.5	1,036,484		0.0000	1.0000	97.30
9.5	1,042,900	1,366	0.0013	0.9987	97.30
10.5	1,041,534	23,674	0.0227	0.9773	97.17
11.5	1,037,290		0.0000	1.0000	94.96
12.5	1,037,290	6,654	0.0064	0.9936	94.96
13.5	1,033,258		0.0000	1.0000	94.35
14.5	1,033,406		0.0000	1.0000	94.35
15.5	1,375,495	355	0.0003	0.9997	94.35
16.5	1,377,522	10,044	0.0073	0.9927	94.33
17.5	1,367,478	1,845	0.0013	0.9987	93.64
18.5	1,499,972	972,585	0.6484	0.3516	93.51
19.5	586,571		0.0000	1.0000	32.88
20.5	622,532		0.0000	1.0000	32.88
21.5	808,192		0.0000	1.0000	32.88
22.5	822,702	112,893	0.1372	0.8628	32.88
23.5	744,337	758	0.0010	0.9990	28.37
24.5	920,247		0.0000	1.0000	28.34
25.5	929,166	92,788	0.0999	0.9001	28.34
26.5	1,145,405	6,425	0.0056	0.9944	25.51
27.5	1,139,543	2,376	0.0021	0.9979	25.37
28.5	1,277,679	64,729	0.0507	0.9493	25.31
29.5	1,212,950		0.0000	1.0000	24.03
30.5	1,246,449	47,514	0.0381	0.9619	24.03
31.5	1,198,935	354,671	0.2958	0.7042	23.11
32.5	844,263	30,405	0.0360	0.9640	16.28
33.5	813,858	82,763	0.1017	0.8983	15.69
34.5	749,844	36,550	0.0487	0.9513	14.09
35.5	722,794	15,558	0.0215	0.9785	13.41
36.5	707,836	14,638	0.0207	0.9793	13.12
37.5	693,198	134,525	0.1941	0.8059	12.85
38.5	558,672	124,255	0.2224	0.7776	10.35

NORTHWESTERN ENERGY
GAS PLANT

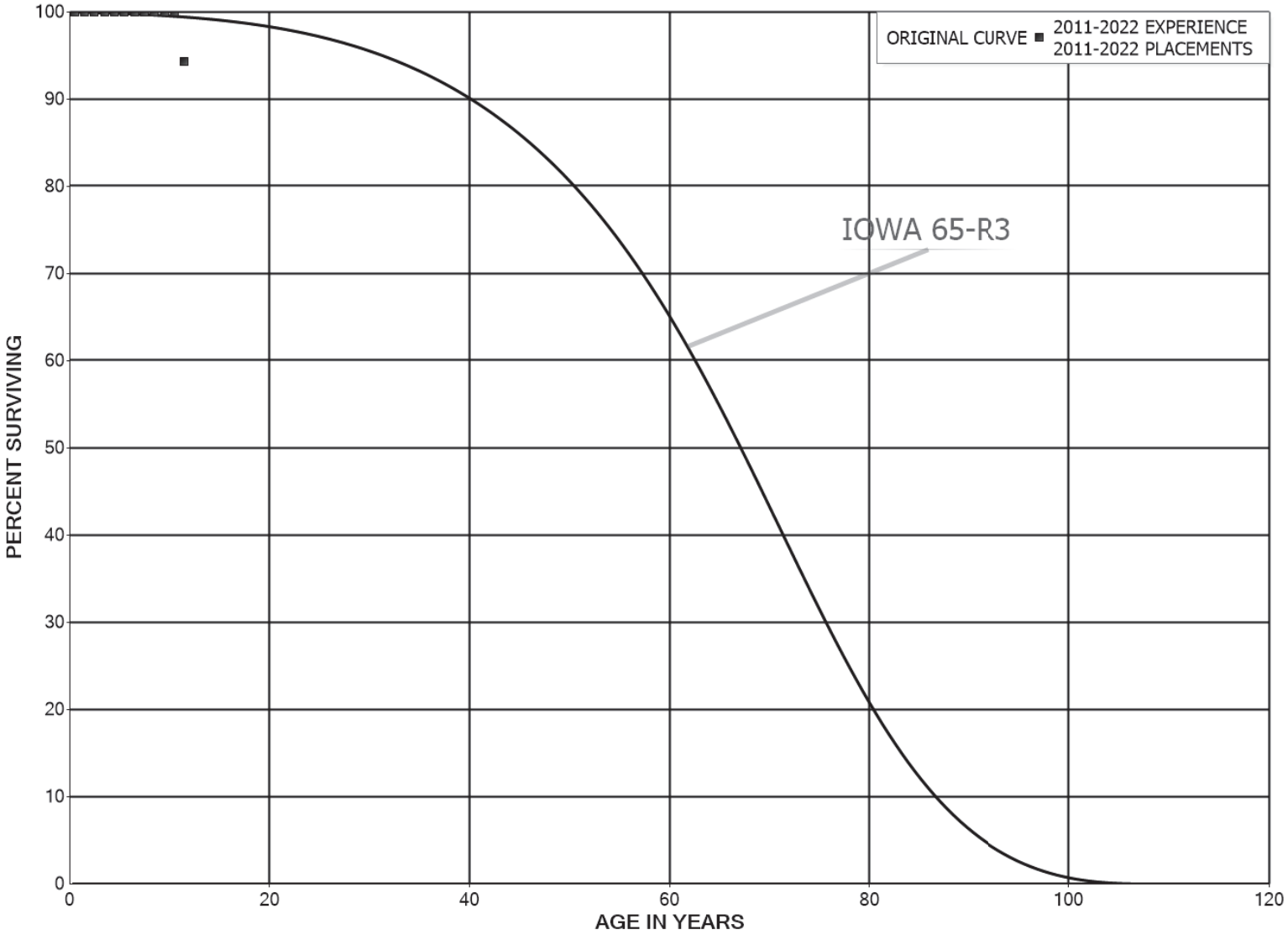
ACCOUNT 311.00 LIQUEFIED PETROLEUM GAS EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1948-2009 EXPERIENCE BAND 1990-2022

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	434,417	14,484	0.0333	0.9667	8.05
40.5	446,883	32,774	0.0733	0.9267	7.78
41.5	446,017	20,300	0.0455	0.9545	7.21
42.5	425,717	155,902	0.3662	0.6338	6.88
43.5	269,814	139,856	0.5183	0.4817	4.36
44.5	129,958	14	0.0001	0.9999	2.10
45.5	129,944	10	0.0001	0.9999	2.10
46.5	129,934	689	0.0053	0.9947	2.10
47.5	129,245	26,950	0.2085	0.7915	2.09
48.5	102,295	38,796	0.3793	0.6207	1.65
49.5	63,498	62,839	0.9896	0.0104	1.03
50.5	659	659	1.0000		0.01
51.5					

NORTHWESTERN ENERGY
GAS PLANT
ACCOUNT 367.00 MAINS
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
GAS PLANT

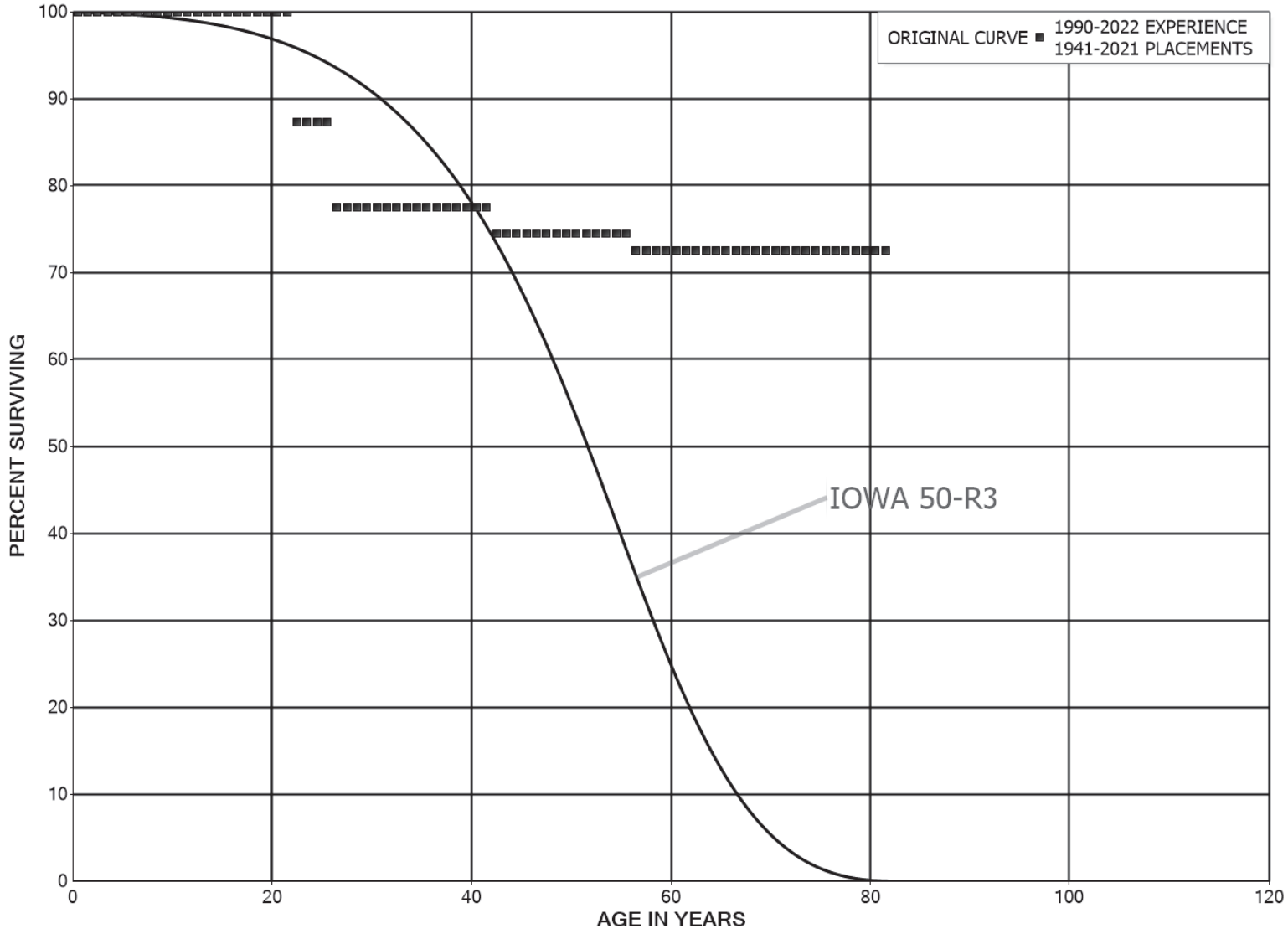
ACCOUNT 367.00 MAINS

ORIGINAL LIFE TABLE

PLACEMENT BAND 2011-2022 EXPERIENCE BAND 2011-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	9,116,092	6,765	0.0007	0.9993	100.00
0.5	4,200,344		0.0000	1.0000	99.93
1.5	4,200,344		0.0000	1.0000	99.93
2.5	4,200,344		0.0000	1.0000	99.93
3.5	4,200,344		0.0000	1.0000	99.93
4.5	4,200,344		0.0000	1.0000	99.93
5.5	4,200,344		0.0000	1.0000	99.93
6.5	4,200,344		0.0000	1.0000	99.93
7.5	4,200,344		0.0000	1.0000	99.93
8.5	4,200,344		0.0000	1.0000	99.93
9.5	4,200,344		0.0000	1.0000	99.93
10.5	4,200,344	239,257	0.0570	0.9430	99.93
11.5					94.23

NORTHWESTERN ENERGY
GAS PLANT
ACCOUNT 375.00 STRUCTURES AND IMPROVEMENTS
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 375.00 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1941-2021 EXPERIENCE BAND 1990-2022

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	349,225		0.0000	1.0000	100.00
0.5	386,656		0.0000	1.0000	100.00
1.5	384,156		0.0000	1.0000	100.00
2.5	385,883		0.0000	1.0000	100.00
3.5	380,880		0.0000	1.0000	100.00
4.5	380,880		0.0000	1.0000	100.00
5.5	392,214		0.0000	1.0000	100.00
6.5	392,214		0.0000	1.0000	100.00
7.5	386,403		0.0000	1.0000	100.00
8.5	386,403		0.0000	1.0000	100.00
9.5	306,306		0.0000	1.0000	100.00
10.5	286,215		0.0000	1.0000	100.00
11.5	62,863		0.0000	1.0000	100.00
12.5	48,431		0.0000	1.0000	100.00
13.5	48,431		0.0000	1.0000	100.00
14.5	12,628		0.0000	1.0000	100.00
15.5	12,628		0.0000	1.0000	100.00
16.5	12,628		0.0000	1.0000	100.00
17.5	12,628		0.0000	1.0000	100.00
18.5	12,628		0.0000	1.0000	100.00
19.5	14,255		0.0000	1.0000	100.00
20.5	14,255		0.0000	1.0000	100.00
21.5	14,255	1,814	0.1273	0.8727	100.00
22.5	29,151		0.0000	1.0000	87.27
23.5	27,772		0.0000	1.0000	87.27
24.5	27,772		0.0000	1.0000	87.27
25.5	26,333	2,951	0.1121	0.8879	87.27
26.5	25,130		0.0000	1.0000	77.49
27.5	25,130		0.0000	1.0000	77.49
28.5	44,122		0.0000	1.0000	77.49
29.5	44,122		0.0000	1.0000	77.49
30.5	47,728		0.0000	1.0000	77.49
31.5	59,181		0.0000	1.0000	77.49
32.5	74,478		0.0000	1.0000	77.49
33.5	72,850		0.0000	1.0000	77.49
34.5	72,850		0.0000	1.0000	77.49
35.5	71,123		0.0000	1.0000	77.49
36.5	73,962		0.0000	1.0000	77.49
37.5	73,962		0.0000	1.0000	77.49
38.5	73,962		0.0000	1.0000	77.49

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 375.00 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1941-2021 EXPERIENCE BAND 1990-2022

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	73,962		0.0000	1.0000	77.49
40.5	73,900		0.0000	1.0000	77.49
41.5	73,900	2,839	0.0384	0.9616	77.49
42.5	71,061		0.0000	1.0000	74.51
43.5	71,061		0.0000	1.0000	74.51
44.5	71,061		0.0000	1.0000	74.51
45.5	71,061		0.0000	1.0000	74.51
46.5	71,061		0.0000	1.0000	74.51
47.5	71,061		0.0000	1.0000	74.51
48.5	75,877		0.0000	1.0000	74.51
49.5	75,877		0.0000	1.0000	74.51
50.5	75,877		0.0000	1.0000	74.51
51.5	75,877		0.0000	1.0000	74.51
52.5	74,249		0.0000	1.0000	74.51
53.5	74,249		0.0000	1.0000	74.51
54.5	74,249		0.0000	1.0000	74.51
55.5	57,538	1,546	0.0269	0.9731	74.51
56.5	55,992		0.0000	1.0000	72.51
57.5	55,992		0.0000	1.0000	72.51
58.5	55,992		0.0000	1.0000	72.51
59.5	54,244		0.0000	1.0000	72.51
60.5	54,244		0.0000	1.0000	72.51
61.5	35,253		0.0000	1.0000	72.51
62.5	35,253		0.0000	1.0000	72.51
63.5	31,647		0.0000	1.0000	72.51
64.5	20,194		0.0000	1.0000	72.51
65.5	6,443		0.0000	1.0000	72.51
66.5	6,443		0.0000	1.0000	72.51
67.5	6,443		0.0000	1.0000	72.51
68.5	6,443		0.0000	1.0000	72.51
69.5	6,443		0.0000	1.0000	72.51
70.5	6,443		0.0000	1.0000	72.51
71.5	6,443		0.0000	1.0000	72.51
72.5	6,443		0.0000	1.0000	72.51
73.5	4,815		0.0000	1.0000	72.51
74.5	4,815		0.0000	1.0000	72.51
75.5	4,815		0.0000	1.0000	72.51
76.5	4,815		0.0000	1.0000	72.51
77.5	4,815		0.0000	1.0000	72.51
78.5	4,815		0.0000	1.0000	72.51

NORTHWESTERN ENERGY
GAS PLANT

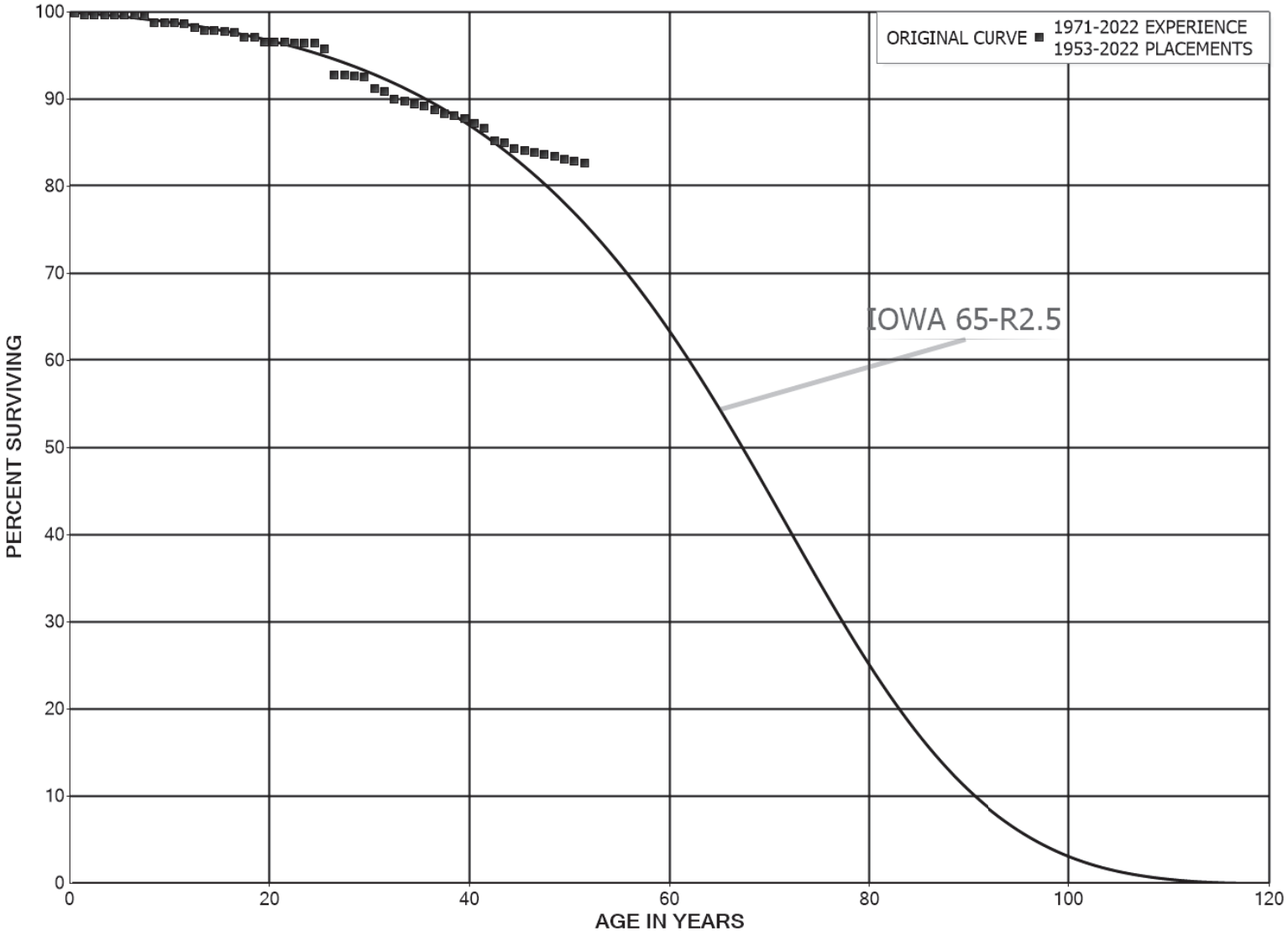
ACCOUNT 375.00 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1941-2021 EXPERIENCE BAND 1990-2022

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	4,815		0.0000	1.0000	72.51
80.5	4,815		0.0000	1.0000	72.51
81.5					72.51

NORTHWESTERN ENERGY
GAS PLANT
ACCOUNT 376.11 MAINS - STEEL
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 376.11 MAINS - STEEL

ORIGINAL LIFE TABLE

PLACEMENT BAND 1953-2022 EXPERIENCE BAND 1971-2022

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	52,985,962	70,019	0.0013	0.9987	100.00
0.5	60,992,577	132,483	0.0022	0.9978	99.87
1.5	56,717,720	20,709	0.0004	0.9996	99.65
2.5	55,482,349	1,034	0.0000	1.0000	99.61
3.5	54,763,418	715	0.0000	1.0000	99.61
4.5	53,772,930	11,979	0.0002	0.9998	99.61
5.5	52,741,154	9,732	0.0002	0.9998	99.59
6.5	52,318,469	28,362	0.0005	0.9995	99.57
7.5	51,931,735	397,894	0.0077	0.9923	99.52
8.5	50,818,104	6,892	0.0001	0.9999	98.75
9.5	50,082,159	866	0.0000	1.0000	98.74
10.5	46,888,989	49,291	0.0011	0.9989	98.74
11.5	45,990,941	211,549	0.0046	0.9954	98.64
12.5	44,374,621	174,955	0.0039	0.9961	98.18
13.5	44,005,205	5,530	0.0001	0.9999	97.79
14.5	36,445,910	35,270	0.0010	0.9990	97.78
15.5	26,238,462	5,214	0.0002	0.9998	97.69
16.5	24,506,574	143,654	0.0059	0.9941	97.67
17.5	24,398,454	10,153	0.0004	0.9996	97.10
18.5	23,796,810	121,733	0.0051	0.9949	97.06
19.5	22,253,924	15,826	0.0007	0.9993	96.56
20.5	21,564,415	7,361	0.0003	0.9997	96.49
21.5	21,502,283	5,059	0.0002	0.9998	96.46
22.5	21,491,297	14,117	0.0007	0.9993	96.43
23.5	21,477,180	2,022	0.0001	0.9999	96.37
24.5	21,475,158	142,019	0.0066	0.9934	96.36
25.5	21,333,139	656,741	0.0308	0.9692	95.72
26.5	15,568,119	13,096	0.0008	0.9992	92.78
27.5	15,549,189	17,372	0.0011	0.9989	92.70
28.5	15,531,817	7,855	0.0005	0.9995	92.60
29.5	15,523,962	233,764	0.0151	0.9849	92.55
30.5	15,303,112	57,772	0.0038	0.9962	91.16
31.5	11,509,906	103,199	0.0090	0.9910	90.81
32.5	11,490,024	29,622	0.0026	0.9974	90.00
33.5	11,460,402	43,496	0.0038	0.9962	89.77
34.5	11,416,905	35,512	0.0031	0.9969	89.42
35.5	11,394,307	59,440	0.0052	0.9948	89.15
36.5	10,251,141	42,427	0.0041	0.9959	88.68
37.5	10,216,013	32,682	0.0032	0.9968	88.31
38.5	10,183,331	38,865	0.0038	0.9962	88.03

NORTHWESTERN ENERGY
GAS PLANT

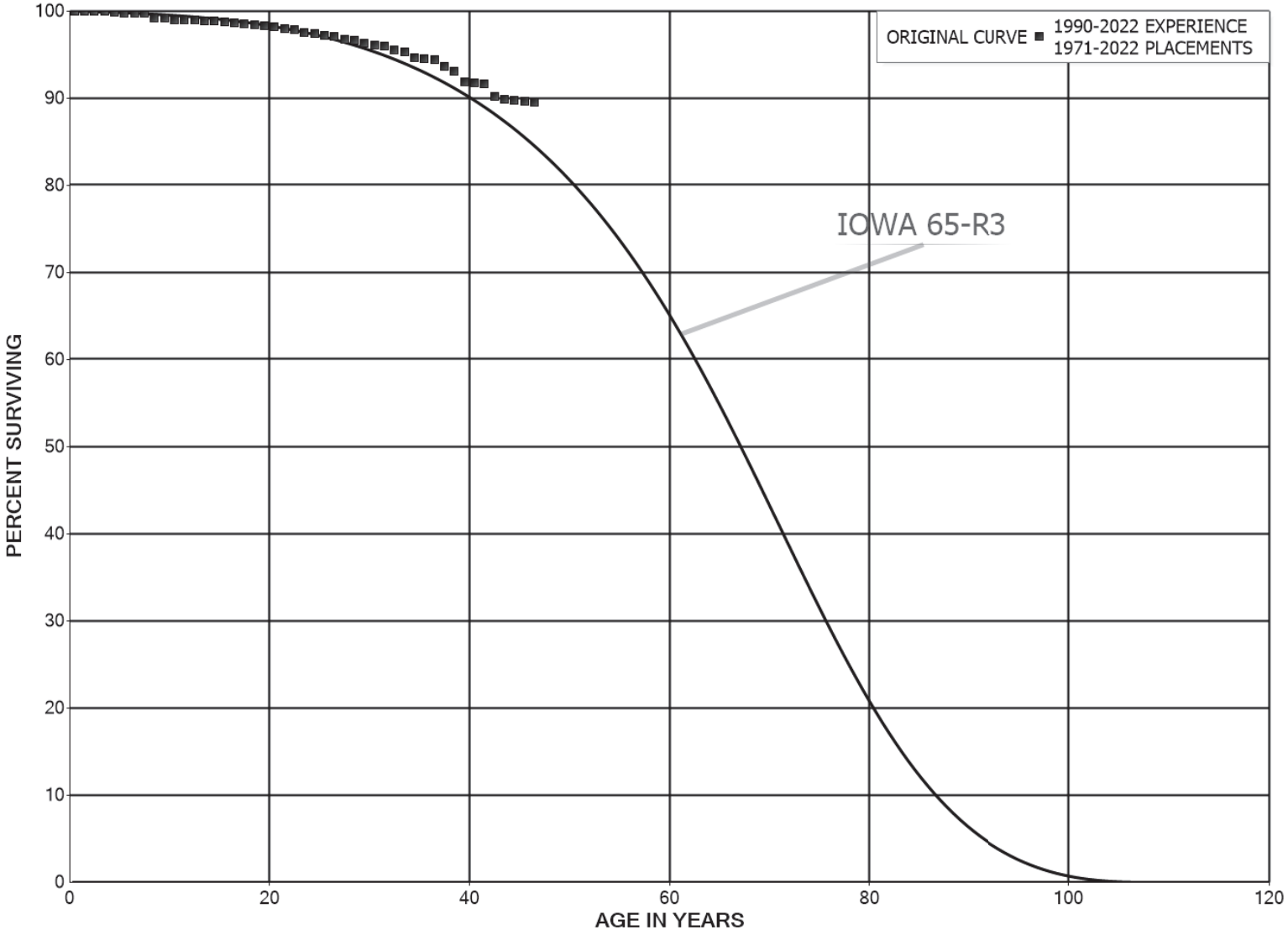
ACCOUNT 376.11 MAINS - STEEL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1953-2022 EXPERIENCE BAND 1971-2022

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	10,144,466	56,305	0.0056	0.9944	87.70
40.5	10,101,076	69,761	0.0069	0.9931	87.21
41.5	6,102,781	103,854	0.0170	0.9830	86.61
42.5	6,497,283	17,014	0.0026	0.9974	85.13
43.5	6,480,269	45,443	0.0070	0.9930	84.91
44.5	6,434,929	17,629	0.0027	0.9973	84.31
45.5	6,417,300	16,627	0.0026	0.9974	84.08
46.5	4,504,420	11,448	0.0025	0.9975	83.87
47.5	4,492,972	12,346	0.0027	0.9973	83.65
48.5	4,480,626	21,952	0.0049	0.9951	83.42
49.5	4,458,674	8,963	0.0020	0.9980	83.01
50.5	4,449,711	10,658	0.0024	0.9976	82.85
51.5					82.65

NORTHWESTERN ENERGY
GAS PLANT
ACCOUNT 376.30 MAINS - PLASTIC
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 376.30 MAINS - PLASTIC

ORIGINAL LIFE TABLE

PLACEMENT BAND 1971-2022 EXPERIENCE BAND 1990-2022

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	49,956,898	2,647	0.0001	0.9999	100.00
0.5	47,024,390	19,016	0.0004	0.9996	99.99
1.5	44,646,737	16,465	0.0004	0.9996	99.95
2.5	40,912,292	5,425	0.0001	0.9999	99.92
3.5	38,997,165	39,390	0.0010	0.9990	99.90
4.5	36,243,456	16,742	0.0005	0.9995	99.80
5.5	34,003,184	16,454	0.0005	0.9995	99.76
6.5	32,964,486	5,482	0.0002	0.9998	99.71
7.5	30,458,731	144,008	0.0047	0.9953	99.69
8.5	30,194,718	29,103	0.0010	0.9990	99.22
9.5	28,688,690	35,827	0.0012	0.9988	99.13
10.5	27,028,793	6,222	0.0002	0.9998	99.00
11.5	26,375,801	6,008	0.0002	0.9998	98.98
12.5	24,790,163	37,268	0.0015	0.9985	98.96
13.5	24,907,646	5,303	0.0002	0.9998	98.81
14.5	23,252,588	24,508	0.0011	0.9989	98.79
15.5	22,260,925	17,243	0.0008	0.9992	98.68
16.5	21,485,332	27,744	0.0013	0.9987	98.61
17.5	20,598,851	17,298	0.0008	0.9992	98.48
18.5	19,970,282	15,381	0.0008	0.9992	98.40
19.5	18,081,805	36,076	0.0020	0.9980	98.32
20.5	16,024,012	36,844	0.0023	0.9977	98.12
21.5	15,444,391	18,496	0.0012	0.9988	97.90
22.5	15,585,468	39,805	0.0026	0.9974	97.78
23.5	15,545,663	28,407	0.0018	0.9982	97.53
24.5	15,517,255	29,571	0.0019	0.9981	97.35
25.5	15,491,336	15,169	0.0010	0.9990	97.17
26.5	10,221,262	36,638	0.0036	0.9964	97.07
27.5	10,231,241	13,024	0.0013	0.9987	96.72
28.5	10,218,217	35,783	0.0035	0.9965	96.60
29.5	10,182,434	18,685	0.0018	0.9982	96.26
30.5	10,167,401	8,167	0.0008	0.9992	96.09
31.5	3,108,245	17,643	0.0057	0.9943	96.01
32.5	3,105,402	7,208	0.0023	0.9977	95.46
33.5	3,068,474	19,889	0.0065	0.9935	95.24
34.5	3,048,586	4,995	0.0016	0.9984	94.63
35.5	3,047,242	3,791	0.0012	0.9988	94.47
36.5	1,580,824	11,909	0.0075	0.9925	94.35
37.5	1,552,972	9,787	0.0063	0.9937	93.64
38.5	1,543,185	20,342	0.0132	0.9868	93.05

NORTHWESTERN ENERGY
GAS PLANT

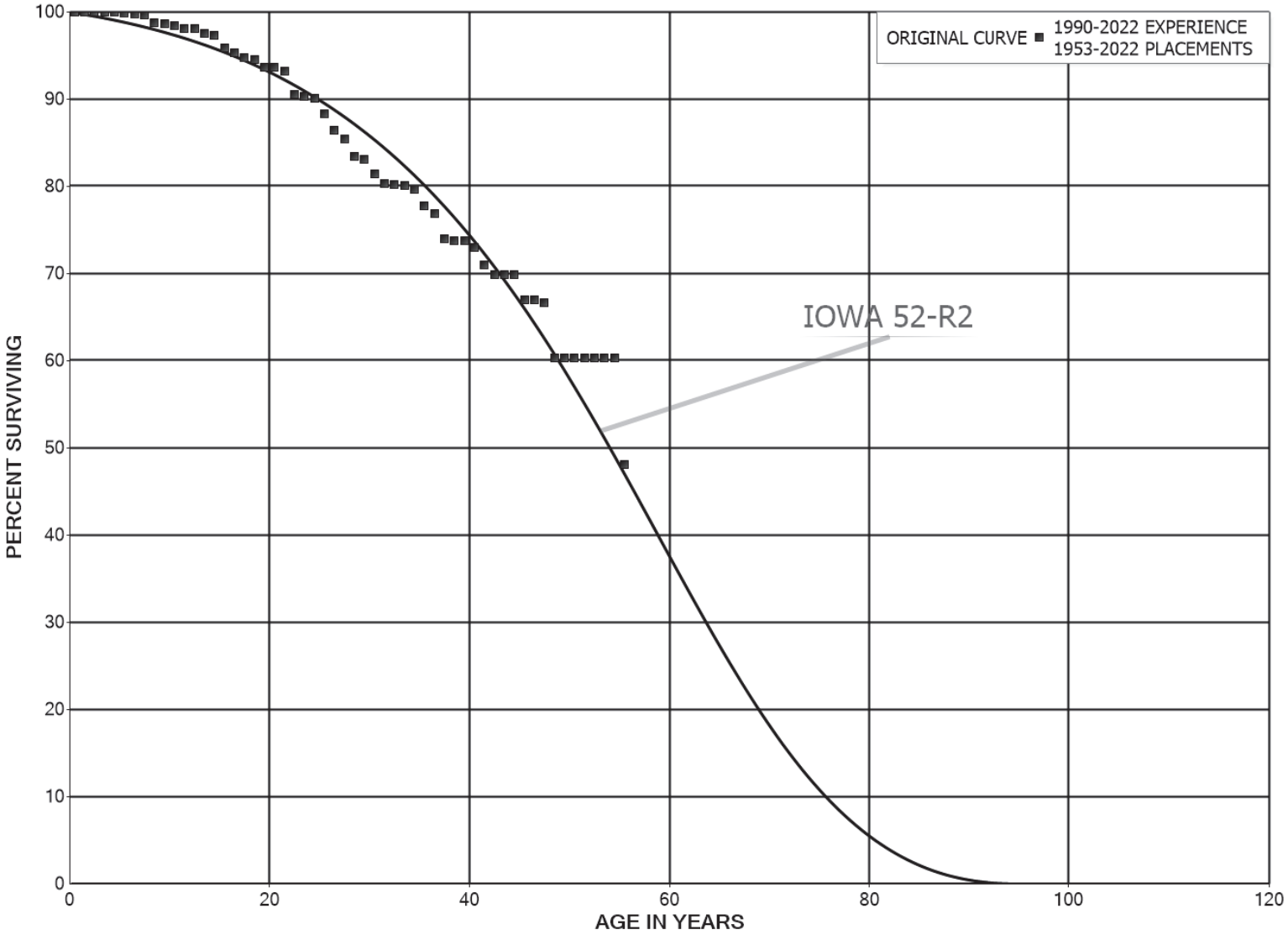
ACCOUNT 376.30 MAINS - PLASTIC

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1971-2022 EXPERIENCE BAND 1990-2022

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	1,522,843	965	0.0006	0.9994	91.83
40.5	1,521,878	2,166	0.0014	0.9986	91.77
41.5	700,402	11,436	0.0163	0.9837	91.64
42.5	688,975	2,714	0.0039	0.9961	90.14
43.5	686,261	414	0.0006	0.9994	89.79
44.5	685,848	757	0.0011	0.9989	89.73
45.5	685,090	963	0.0014	0.9986	89.63
46.5	14,427		0.0000	1.0000	89.51
47.5	14,427		0.0000	1.0000	89.51
48.5	14,427	2	0.0002	0.9998	89.51
49.5	14,425	1	0.0001	0.9999	89.49
50.5	14,423		0.0000	1.0000	89.49
51.5					89.49

NORTHWESTERN ENERGY
GAS PLANT
ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1953-2022 EXPERIENCE BAND 1990-2022

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	7,958,942		0.0000	1.0000	100.00
0.5	8,611,893	6,184	0.0007	0.9993	100.00
1.5	7,974,995		0.0000	1.0000	99.93
2.5	7,762,756	1,838	0.0002	0.9998	99.93
3.5	7,471,664	3	0.0000	1.0000	99.90
4.5	6,791,404	2,046	0.0003	0.9997	99.90
5.5	6,573,433	7,025	0.0011	0.9989	99.87
6.5	6,239,267	8,042	0.0013	0.9987	99.77
7.5	5,848,712	54,507	0.0093	0.9907	99.64
8.5	5,748,621	5,810	0.0010	0.9990	98.71
9.5	5,635,196	9,942	0.0018	0.9982	98.61
10.5	5,023,833	17,660	0.0035	0.9965	98.44
11.5	5,024,395	3,559	0.0007	0.9993	98.09
12.5	4,724,381	26,371	0.0056	0.9944	98.02
13.5	4,712,617	10,755	0.0023	0.9977	97.47
14.5	3,819,426	54,669	0.0143	0.9857	97.25
15.5	2,351,856	13,739	0.0058	0.9942	95.86
16.5	1,896,904	11,477	0.0061	0.9939	95.30
17.5	1,854,369	4,428	0.0024	0.9976	94.72
18.5	1,748,557	16,836	0.0096	0.9904	94.50
19.5	1,654,376	425	0.0003	0.9997	93.59
20.5	1,564,752	6,824	0.0044	0.9956	93.56
21.5	1,385,184	38,596	0.0279	0.9721	93.15
22.5	1,292,898	3,750	0.0029	0.9971	90.56
23.5	1,229,199	2,697	0.0022	0.9978	90.30
24.5	1,068,796	21,032	0.0197	0.9803	90.10
25.5	1,032,067	22,062	0.0214	0.9786	88.33
26.5	1,017,579	12,625	0.0124	0.9876	86.44
27.5	975,525	22,844	0.0234	0.9766	85.37
28.5	942,871	2,983	0.0032	0.9968	83.37
29.5	924,506	18,737	0.0203	0.9797	83.10
30.5	882,077	12,564	0.0142	0.9858	81.42
31.5	869,514	421	0.0005	0.9995	80.26
32.5	839,015	1,468	0.0017	0.9983	80.22
33.5	840,637	4,715	0.0056	0.9944	80.08
34.5	215,627	5,024	0.0233	0.9767	79.63
35.5	152,345	1,883	0.0124	0.9876	77.77
36.5	142,926	5,410	0.0379	0.9621	76.81
37.5	133,569	256	0.0019	0.9981	73.91
38.5	111,080		0.0000	1.0000	73.76

NORTHWESTERN ENERGY
GAS PLANT

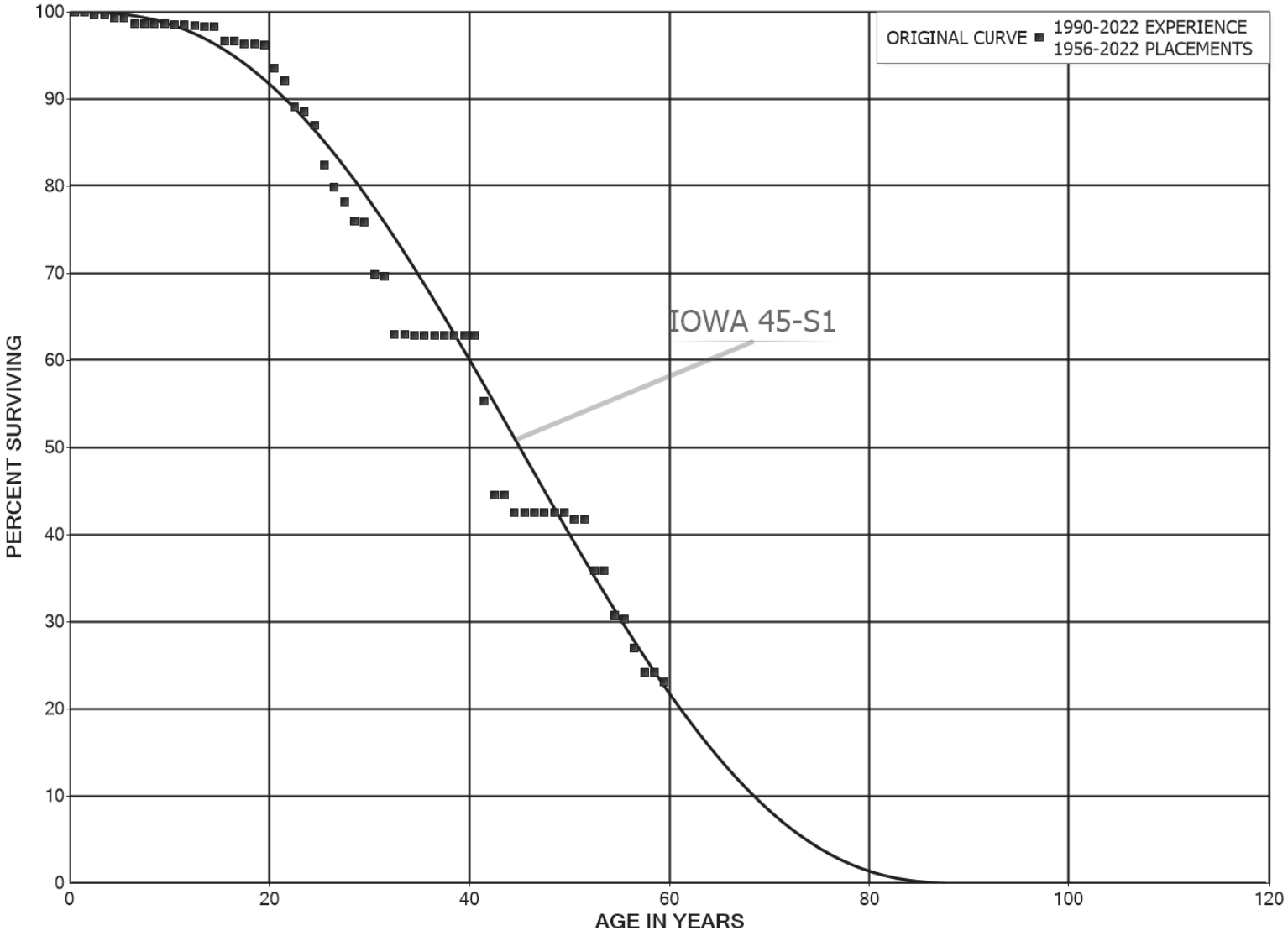
ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1953-2022 EXPERIENCE BAND 1990-2022

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	105,743	1,200	0.0114	0.9886	73.76
40.5	96,465	2,683	0.0278	0.9722	72.93
41.5	89,611	1,405	0.0157	0.9843	70.90
42.5	56,095		0.0000	1.0000	69.79
43.5	48,020		0.0000	1.0000	69.79
44.5	43,921	1,756	0.0400	0.9600	69.79
45.5	40,522		0.0000	1.0000	67.00
46.5	30,416	154	0.0051	0.9949	67.00
47.5	19,229	1,844	0.0959	0.9041	66.66
48.5	13,059		0.0000	1.0000	60.26
49.5	6,028		0.0000	1.0000	60.26
50.5	3,462		0.0000	1.0000	60.26
51.5	3,462		0.0000	1.0000	60.26
52.5	2,670		0.0000	1.0000	60.26
53.5	2,670		0.0000	1.0000	60.26
54.5	2,670	538	0.2015	0.7985	60.26
55.5	2,132		0.0000	1.0000	48.12
56.5	2,132		0.0000	1.0000	48.12
57.5	2,132		0.0000	1.0000	48.12
58.5	2,132		0.0000	1.0000	48.12
59.5	2,132		0.0000	1.0000	48.12
60.5	2,132		0.0000	1.0000	48.12
61.5	2,132		0.0000	1.0000	48.12
62.5	2,132		0.0000	1.0000	48.12
63.5	2,132		0.0000	1.0000	48.12
64.5	2,132		0.0000	1.0000	48.12
65.5	2,132		0.0000	1.0000	48.12
66.5					48.12

NORTHWESTERN ENERGY
GAS PLANT
ACCOUNT 379.00 MEASURING AND REGULATING STATION EQUIPMENT - CITY GATE
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 379.00 MEASURING AND REGULATING STATION EQUIPMENT - CITY GATE

ORIGINAL LIFE TABLE

PLACEMENT BAND 1956-2022 EXPERIENCE BAND 1990-2022

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	5,128,081		0.0000	1.0000	100.00
0.5	5,190,086	4,782	0.0009	0.9991	100.00
1.5	3,918,761	11,351	0.0029	0.9971	99.91
2.5	3,708,306		0.0000	1.0000	99.62
3.5	3,528,474	11,525	0.0033	0.9967	99.62
4.5	3,509,041		0.0000	1.0000	99.29
5.5	3,429,072	21,526	0.0063	0.9937	99.29
6.5	3,272,052		0.0000	1.0000	98.67
7.5	3,130,889		0.0000	1.0000	98.67
8.5	3,146,224	1,553	0.0005	0.9995	98.67
9.5	3,004,118	4,000	0.0013	0.9987	98.62
10.5	3,166,580	945	0.0003	0.9997	98.49
11.5	2,749,992	3,100	0.0011	0.9989	98.46
12.5	2,509,249	809	0.0003	0.9997	98.35
13.5	2,424,087		0.0000	1.0000	98.32
14.5	1,898,554	32,667	0.0172	0.9828	98.32
15.5	1,731,111	126	0.0001	0.9999	96.63
16.5	1,713,474	6,629	0.0039	0.9961	96.62
17.5	1,702,540		0.0000	1.0000	96.25
18.5	1,748,743	716	0.0004	0.9996	96.25
19.5	1,371,530	39,263	0.0286	0.9714	96.21
20.5	1,329,404	20,033	0.0151	0.9849	93.45
21.5	1,274,497	41,033	0.0322	0.9678	92.04
22.5	1,191,565	8,156	0.0068	0.9932	89.08
23.5	871,018	14,899	0.0171	0.9829	88.47
24.5	634,160	33,433	0.0527	0.9473	86.96
25.5	597,756	18,377	0.0307	0.9693	82.37
26.5	566,838	11,683	0.0206	0.9794	79.84
27.5	548,731	15,854	0.0289	0.9711	78.19
28.5	351,829	684	0.0019	0.9981	75.94
29.5	288,408	22,627	0.0785	0.9215	75.79
30.5	197,750	500	0.0025	0.9975	69.84
31.5	159,745	15,335	0.0960	0.9040	69.67
32.5	157,785		0.0000	1.0000	62.98
33.5	153,452	413	0.0027	0.9973	62.98
34.5	139,022		0.0000	1.0000	62.81
35.5	122,889		0.0000	1.0000	62.81
36.5	122,889		0.0000	1.0000	62.81
37.5	122,889		0.0000	1.0000	62.81
38.5	112,303		0.0000	1.0000	62.81

NORTHWESTERN ENERGY
GAS PLANT

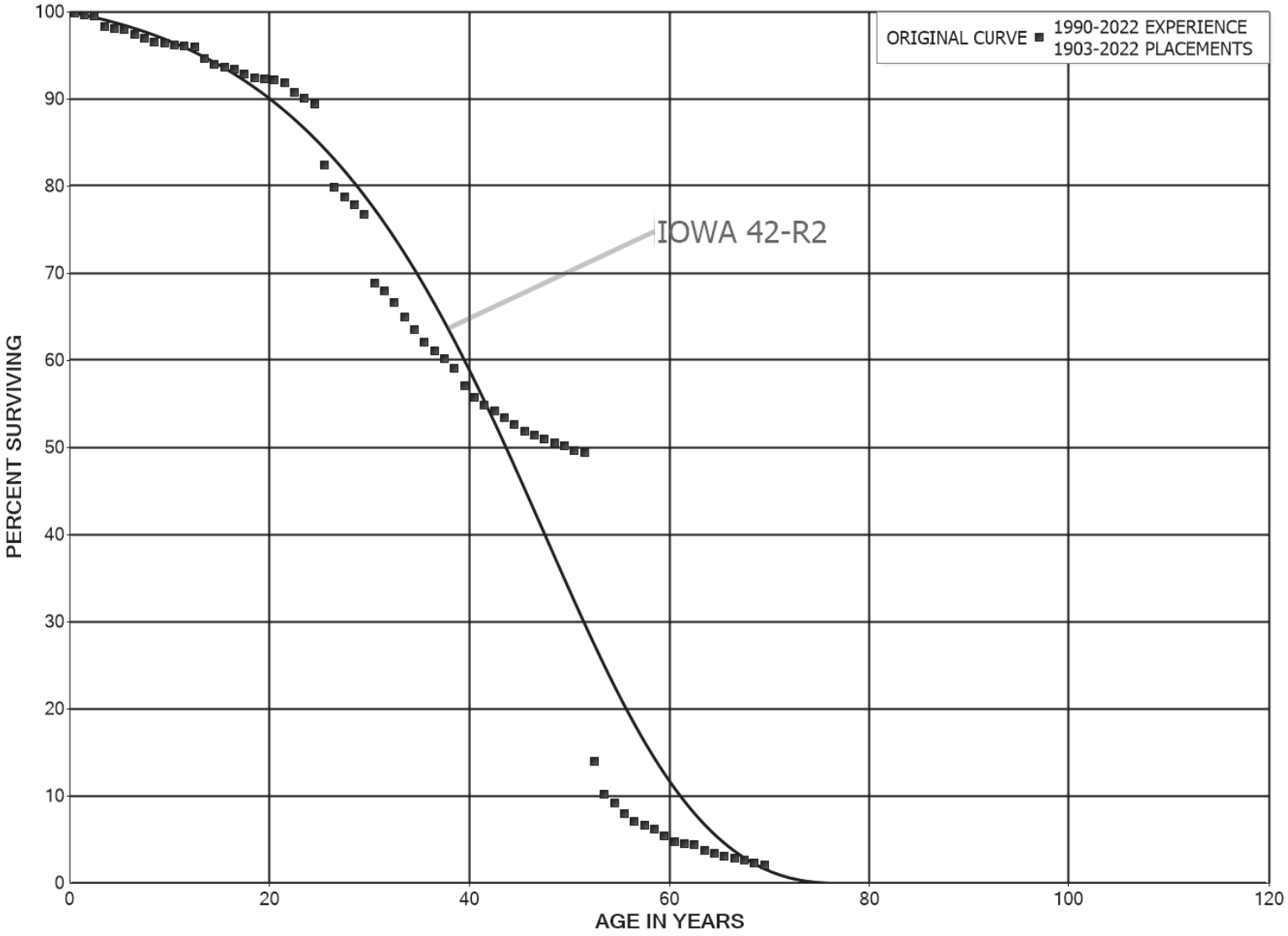
ACCOUNT 379.00 MEASURING AND REGULATING STATION EQUIPMENT - CITY GATE

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1956-2022 EXPERIENCE BAND 1990-2022

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	90,042		0.0000	1.0000	62.81
40.5	87,547	10,457	0.1194	0.8806	62.81
41.5	77,089	15,056	0.1953	0.8047	55.31
42.5	62,723		0.0000	1.0000	44.50
43.5	62,723	2,865	0.0457	0.9543	44.50
44.5	59,857		0.0000	1.0000	42.47
45.5	59,857		0.0000	1.0000	42.47
46.5	59,857		0.0000	1.0000	42.47
47.5	59,857		0.0000	1.0000	42.47
48.5	59,857		0.0000	1.0000	42.47
49.5	59,857	994	0.0166	0.9834	42.47
50.5	58,863		0.0000	1.0000	41.77
51.5	33,134	4,672	0.1410	0.8590	41.77
52.5	22,890		0.0000	1.0000	35.88
53.5	22,890	3,277	0.1431	0.8569	35.88
54.5	19,614	308	0.0157	0.9843	30.74
55.5	19,306	2,076	0.1075	0.8925	30.26
56.5	16,988	1,785	0.1051	0.8949	27.01
57.5	15,203		0.0000	1.0000	24.17
58.5	15,203	720	0.0474	0.9526	24.17
59.5	14,483		0.0000	1.0000	23.02
60.5	13,993		0.0000	1.0000	23.02
61.5	10,484		0.0000	1.0000	23.02
62.5	10,484		0.0000	1.0000	23.02
63.5	9,745		0.0000	1.0000	23.02
64.5	9,615		0.0000	1.0000	23.02
65.5	2,458		0.0000	1.0000	23.02
66.5					23.02

NORTHWESTERN ENERGY
GAS PLANT
ACCOUNT 380.00 SERVICES - STEEL
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 380.00 SERVICES - STEEL

ORIGINAL LIFE TABLE

PLACEMENT BAND 1903-2022 EXPERIENCE BAND 1990-2022

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	2,260,408	2,503	0.0011	0.9989	100.00
0.5	2,846,960	8,413	0.0030	0.9970	99.89
1.5	2,830,154	3,334	0.0012	0.9988	99.59
2.5	2,825,939	32,965	0.0117	0.9883	99.48
3.5	3,073,359	6,736	0.0022	0.9978	98.32
4.5	3,064,120	4,367	0.0014	0.9986	98.10
5.5	3,061,192	16,782	0.0055	0.9945	97.96
6.5	3,038,963	15,067	0.0050	0.9950	97.42
7.5	3,012,001	14,095	0.0047	0.9953	96.94
8.5	3,696,577	3,599	0.0010	0.9990	96.49
9.5	3,682,523	7,301	0.0020	0.9980	96.39
10.5	3,634,943	4,217	0.0012	0.9988	96.20
11.5	3,573,679	4,328	0.0012	0.9988	96.09
12.5	3,010,814	42,054	0.0140	0.9860	95.97
13.5	3,733,625	27,431	0.0073	0.9927	94.63
14.5	4,027,065	13,066	0.0032	0.9968	93.94
15.5	4,116,528	12,318	0.0030	0.9970	93.63
16.5	4,111,815	20,810	0.0051	0.9949	93.35
17.5	4,114,953	22,825	0.0055	0.9945	92.88
18.5	4,951,357	4,825	0.0010	0.9990	92.37
19.5	4,948,555	6,754	0.0014	0.9986	92.28
20.5	4,931,828	17,403	0.0035	0.9965	92.15
21.5	4,967,587	57,164	0.0115	0.9885	91.82
22.5	4,911,609	35,668	0.0073	0.9927	90.77
23.5	4,879,967	39,455	0.0081	0.9919	90.11
24.5	4,876,966	378,731	0.0777	0.9223	89.38
25.5	4,499,871	139,949	0.0311	0.9689	82.44
26.5	3,152,217	43,303	0.0137	0.9863	79.88
27.5	3,127,619	38,697	0.0124	0.9876	78.78
28.5	3,140,496	42,791	0.0136	0.9864	77.80
29.5	3,110,219	320,290	0.1030	0.8970	76.74
30.5	2,790,500	37,867	0.0136	0.9864	68.84
31.5	2,297,909	42,039	0.0183	0.9817	67.91
32.5	2,263,635	57,219	0.0253	0.9747	66.66
33.5	2,232,546	50,065	0.0224	0.9776	64.98
34.5	2,182,725	48,690	0.0223	0.9777	63.52
35.5	2,134,162	37,428	0.0175	0.9825	62.10
36.5	1,804,523	24,366	0.0135	0.9865	61.02
37.5	1,777,269	34,623	0.0195	0.9805	60.19
38.5	1,742,995	56,953	0.0327	0.9673	59.02

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 380.00 SERVICES - STEEL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1903-2022 EXPERIENCE BAND 1990-2022

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	1,686,395	40,246	0.0239	0.9761	57.09
40.5	1,646,330	26,443	0.0161	0.9839	55.73
41.5	1,125,089	12,965	0.0115	0.9885	54.83
42.5	1,117,178	17,718	0.0159	0.9841	54.20
43.5	1,099,877	15,867	0.0144	0.9856	53.34
44.5	1,084,184	15,811	0.0146	0.9854	52.57
45.5	1,068,449	8,800	0.0082	0.9918	51.81
46.5	453,261	3,482	0.0077	0.9923	51.38
47.5	449,831	3,756	0.0083	0.9917	50.98
48.5	446,157	3,752	0.0084	0.9916	50.56
49.5	442,490	4,698	0.0106	0.9894	50.13
50.5	437,826	2,166	0.0049	0.9951	49.60
51.5	2,783	1,998	0.7181	0.2819	49.36
52.5	893	239	0.2678	0.7322	13.91
53.5	723	73	0.1016	0.8984	10.19
54.5	710	92	0.1290	0.8710	9.15
55.5	670	76	0.1137	0.8863	7.97
56.5	634	39	0.0611	0.9389	7.07
57.5	665	48	0.0729	0.9271	6.63
58.5	674	82	0.1212	0.8788	6.15
59.5	719	85	0.1185	0.8815	5.40
60.5	710	33	0.0462	0.9538	4.76
61.5	699	17	0.0248	0.9752	4.54
62.5	730	108	0.1484	0.8516	4.43
63.5	664	69	0.1039	0.8961	3.77
64.5	663	60	0.0912	0.9088	3.38
65.5	649	52	0.0801	0.9199	3.07
66.5	614	40	0.0647	0.9353	2.83
67.5	574	70	0.1218	0.8782	2.64
68.5	504	57	0.1138	0.8862	2.32
69.5	447	127	0.2835	0.7165	2.06
70.5	320	76	0.2386	0.7614	1.47
71.5	254	22	0.0856	0.9144	1.12
72.5	232	48	0.2066	0.7934	1.03
73.5	203	42	0.2091	0.7909	0.81
74.5	161	69	0.4266	0.5734	0.64
75.5	92	46	0.5018	0.4982	0.37
76.5	46	17	0.3701	0.6299	0.18
77.5	29		0.0000	1.0000	0.12
78.5	34		0.0000	1.0000	0.12

NORTHWESTERN ENERGY
GAS PLANT

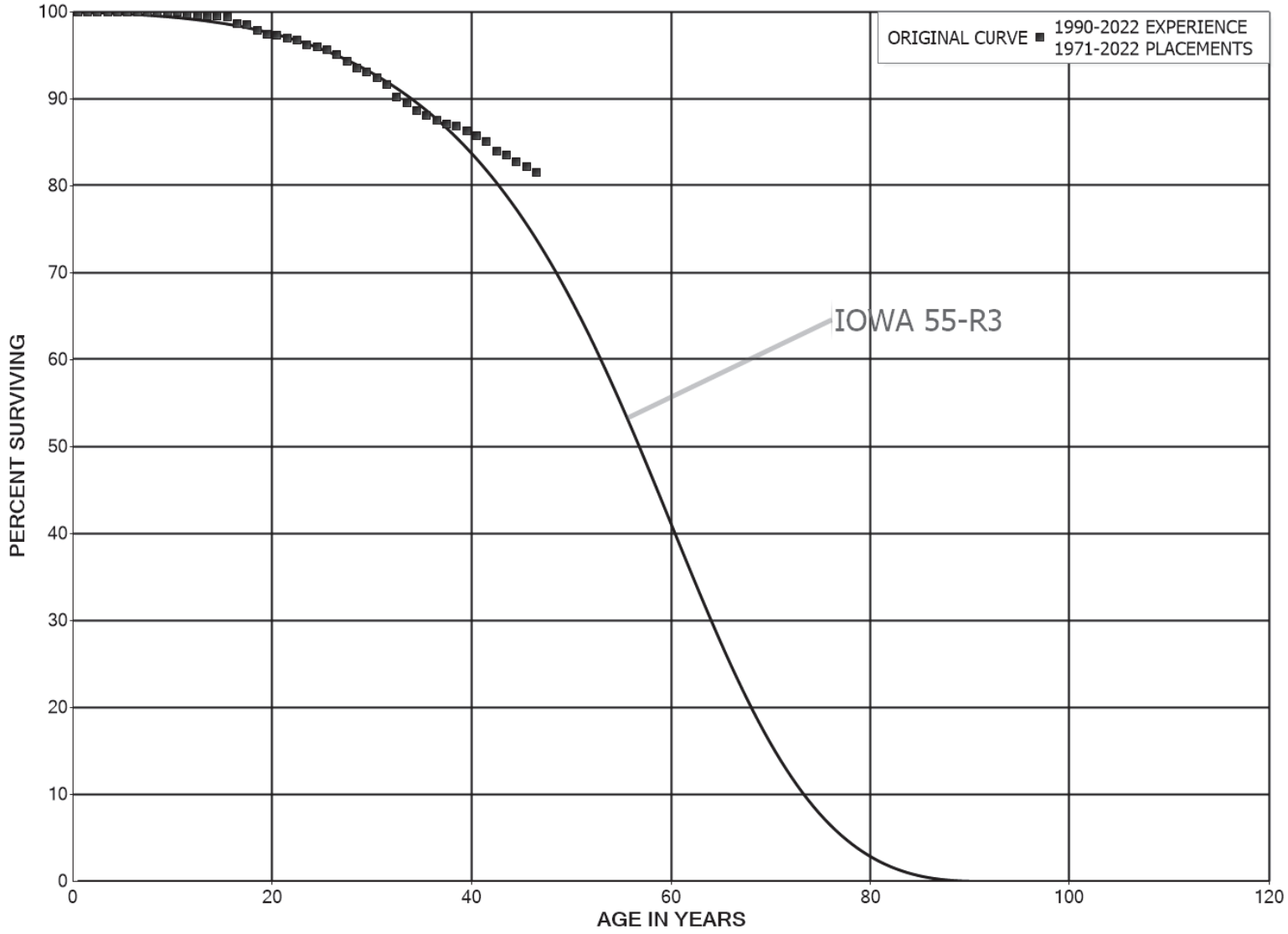
ACCOUNT 380.00 SERVICES - STEEL

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1903-2022 EXPERIENCE BAND 1990-2022

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	34		0.0000	1.0000	0.12
80.5	34		0.0000	1.0000	0.12
81.5	34	10	0.2960	0.7040	0.12
82.5	24		0.0000	1.0000	0.08
83.5	24	19	0.7898	0.2102	0.08
84.5	5		0.0000	1.0000	0.02
85.5	5		0.0000	1.0000	0.02
86.5	10		0.0000	1.0000	0.02
87.5	10		0.0000	1.0000	0.02
88.5	10	5	0.5273	0.4727	0.02
89.5	5		0.0000	1.0000	0.01
90.5	5		0.0000	1.0000	0.01
91.5	5		0.0000	1.0000	0.01
92.5	5		0.0000	1.0000	0.01
93.5	5		0.0000	1.0000	0.01
94.5	5		0.0000	1.0000	0.01
95.5	5		0.0000	1.0000	0.01
96.5	5	5	1.0000		0.01
97.5					

NORTHWESTERN ENERGY
GAS PLANT
ACCOUNT 380.10 SERVICES - PLASTIC
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 380.10 SERVICES - PLASTIC

ORIGINAL LIFE TABLE

PLACEMENT BAND 1971-2022 EXPERIENCE BAND 1990-2022

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	56,478,487		0.0000	1.0000	100.00
0.5	52,317,910	13,772	0.0003	0.9997	100.00
1.5	47,796,465	3,750	0.0001	0.9999	99.97
2.5	43,494,039	2,773	0.0001	0.9999	99.97
3.5	41,123,540	2,755	0.0001	0.9999	99.96
4.5	38,802,475	469	0.0000	1.0000	99.95
5.5	35,524,391	1,396	0.0000	1.0000	99.95
6.5	33,350,510	1,642	0.0000	1.0000	99.95
7.5	31,103,214	5,012	0.0002	0.9998	99.94
8.5	30,316,227	6,180	0.0002	0.9998	99.93
9.5	28,654,674	446	0.0000	1.0000	99.91
10.5	27,522,709	59,936	0.0022	0.9978	99.90
11.5	26,627,064	17,725	0.0007	0.9993	99.69
12.5	26,057,689	18,525	0.0007	0.9993	99.62
13.5	26,526,179	26,184	0.0010	0.9990	99.55
14.5	25,655,617	20,867	0.0008	0.9992	99.45
15.5	24,768,498	190,490	0.0077	0.9923	99.37
16.5	23,917,711	26,061	0.0011	0.9989	98.61
17.5	22,642,740	164,441	0.0073	0.9927	98.50
18.5	21,665,989	92,437	0.0043	0.9957	97.78
19.5	18,934,942	21,528	0.0011	0.9989	97.37
20.5	16,076,035	54,805	0.0034	0.9966	97.26
21.5	14,365,146	37,590	0.0026	0.9974	96.92
22.5	14,334,168	75,705	0.0053	0.9947	96.67
23.5	14,258,463	32,589	0.0023	0.9977	96.16
24.5	14,225,874	41,450	0.0029	0.9971	95.94
25.5	14,186,591	86,846	0.0061	0.9939	95.66
26.5	7,245,041	64,237	0.0089	0.9911	95.08
27.5	7,181,098	52,513	0.0073	0.9927	94.23
28.5	7,128,585	39,776	0.0056	0.9944	93.54
29.5	7,066,557	45,880	0.0065	0.9935	93.02
30.5	7,022,843	61,179	0.0087	0.9913	92.42
31.5	3,246,960	49,554	0.0153	0.9847	91.61
32.5	3,201,365	25,952	0.0081	0.9919	90.21
33.5	3,175,413	30,445	0.0096	0.9904	89.48
34.5	3,015,474	20,204	0.0067	0.9933	88.62
35.5	2,997,436	18,066	0.0060	0.9940	88.03
36.5	2,183,386	10,724	0.0049	0.9951	87.50
37.5	2,173,454	6,951	0.0032	0.9968	87.07
38.5	2,166,503	12,963	0.0060	0.9940	86.79

NORTHWESTERN ENERGY
GAS PLANT

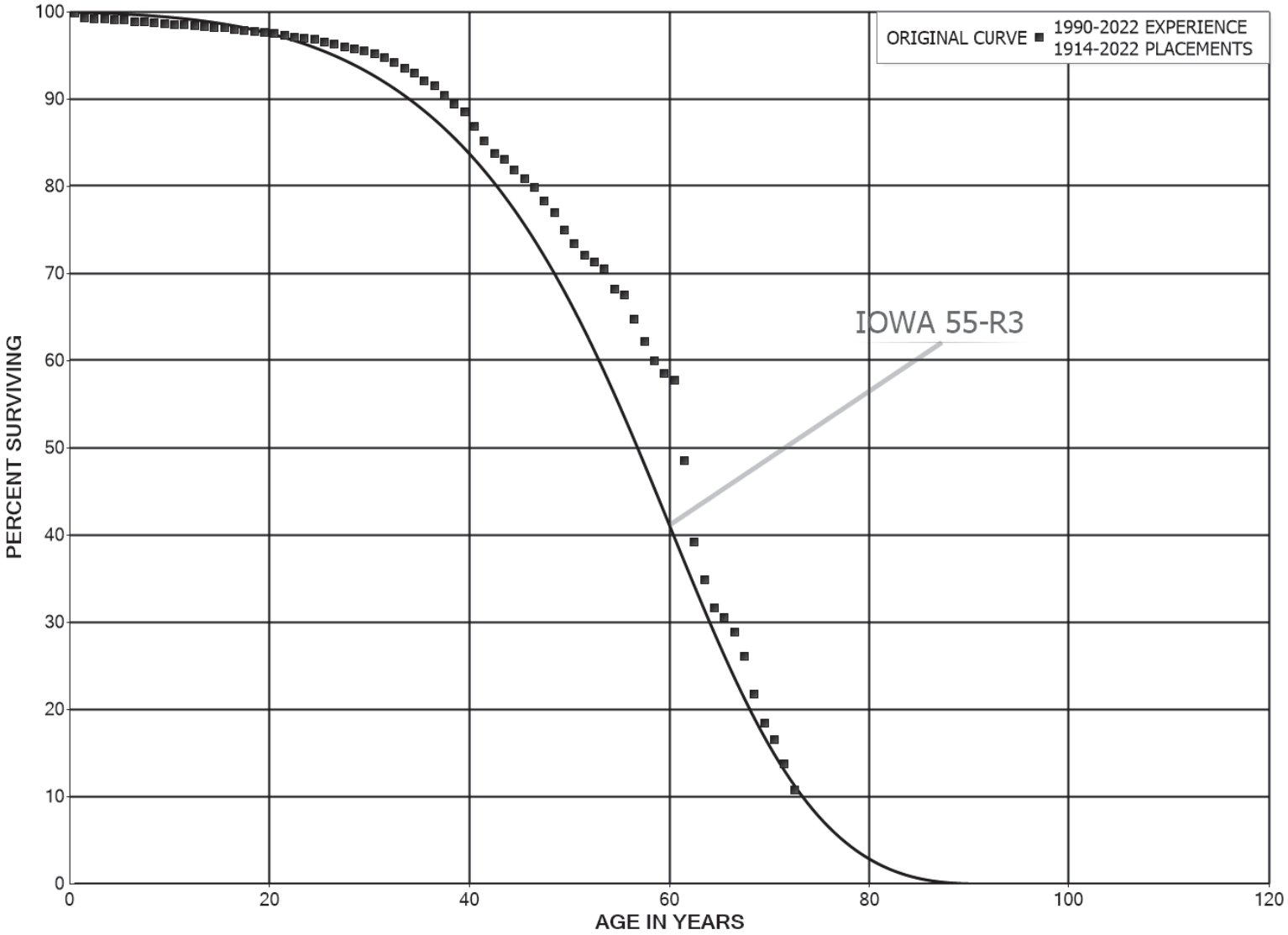
ACCOUNT 380.10 SERVICES - PLASTIC

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1971-2022 EXPERIENCE BAND 1990-2022

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	1,711,867	9,997	0.0058	0.9942	86.27
40.5	1,701,870	14,705	0.0086	0.9914	85.77
41.5	898,601	11,137	0.0124	0.9876	85.03
42.5	887,464	4,743	0.0053	0.9947	83.97
43.5	882,721	8,149	0.0092	0.9908	83.53
44.5	874,572	6,329	0.0072	0.9928	82.75
45.5	868,243	7,003	0.0081	0.9919	82.16
46.5	5,951		0.0000	1.0000	81.49
47.5	5,951	49	0.0082	0.9918	81.49
48.5	5,902	172	0.0292	0.9708	80.82
49.5	5,730		0.0000	1.0000	78.46
50.5	5,730	74	0.0129	0.9871	78.46
51.5					77.45

NORTHWESTERN ENERGY
GAS PLANT
ACCOUNT 381.00 METERS AND REGULATORS
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 381.00 METERS AND REGULATORS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1914-2022 EXPERIENCE BAND 1990-2022

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	15,386,045	28,844	0.0019	0.9981	100.00
0.5	15,013,809	77,295	0.0051	0.9949	99.81
1.5	15,206,368	11,001	0.0007	0.9993	99.30
2.5	15,338,813	12,216	0.0008	0.9992	99.23
3.5	15,620,760	14,465	0.0009	0.9991	99.15
4.5	15,153,405	4,871	0.0003	0.9997	99.06
5.5	15,016,114	21,399	0.0014	0.9986	99.02
6.5	14,811,058	5,845	0.0004	0.9996	98.88
7.5	14,609,128	18,490	0.0013	0.9987	98.84
8.5	14,427,331	8,043	0.0006	0.9994	98.72
9.5	14,536,976	16,095	0.0011	0.9989	98.66
10.5	14,134,385	14,001	0.0010	0.9990	98.55
11.5	13,965,600	10,488	0.0008	0.9992	98.46
12.5	13,465,651	9,758	0.0007	0.9993	98.38
13.5	12,991,346	12,394	0.0010	0.9990	98.31
14.5	12,584,491	10,617	0.0008	0.9992	98.22
15.5	12,188,082	15,889	0.0013	0.9987	98.14
16.5	11,810,722	16,265	0.0014	0.9986	98.01
17.5	11,394,881	12,288	0.0011	0.9989	97.87
18.5	10,929,670	18,942	0.0017	0.9983	97.77
19.5	10,824,852	14,559	0.0013	0.9987	97.60
20.5	9,822,765	20,476	0.0021	0.9979	97.47
21.5	9,746,893	16,361	0.0017	0.9983	97.26
22.5	9,695,459	10,078	0.0010	0.9990	97.10
23.5	9,340,793	17,002	0.0018	0.9982	97.00
24.5	8,994,687	24,499	0.0027	0.9973	96.82
25.5	8,251,172	23,994	0.0029	0.9971	96.56
26.5	7,778,612	22,673	0.0029	0.9971	96.28
27.5	7,862,165	22,554	0.0029	0.9971	96.00
28.5	7,064,193	18,704	0.0026	0.9974	95.72
29.5	6,323,835	21,010	0.0033	0.9967	95.47
30.5	5,206,828	25,174	0.0048	0.9952	95.15
31.5	4,460,141	23,976	0.0054	0.9946	94.69
32.5	4,275,193	28,248	0.0066	0.9934	94.18
33.5	3,835,849	27,163	0.0071	0.9929	93.56
34.5	3,680,817	30,920	0.0084	0.9916	92.90
35.5	3,546,418	23,884	0.0067	0.9933	92.12
36.5	3,463,676	40,665	0.0117	0.9883	91.50
37.5	4,288,877	47,300	0.0110	0.9890	90.42
38.5	4,162,807	43,406	0.0104	0.9896	89.42

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 381.00 METERS AND REGULATORS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1914-2022 EXPERIENCE BAND 1990-2022

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	4,081,796	74,261	0.0182	0.9818	88.49
40.5	3,922,269	75,405	0.0192	0.9808	86.88
41.5	3,569,460	61,008	0.0171	0.9829	85.21
42.5	3,193,903	27,282	0.0085	0.9915	83.76
43.5	2,923,949	41,247	0.0141	0.9859	83.04
44.5	2,728,151	36,258	0.0133	0.9867	81.87
45.5	2,590,622	30,925	0.0119	0.9881	80.78
46.5	2,472,250	48,051	0.0194	0.9806	79.82
47.5	2,373,290	38,907	0.0164	0.9836	78.27
48.5	2,250,608	58,066	0.0258	0.9742	76.98
49.5	2,036,342	44,910	0.0221	0.9779	75.00
50.5	1,832,327	32,129	0.0175	0.9825	73.34
51.5	931,507	9,381	0.0101	0.9899	72.06
52.5	870,838	9,749	0.0112	0.9888	71.33
53.5	790,395	26,350	0.0333	0.9667	70.53
54.5	715,508	7,491	0.0105	0.9895	68.18
55.5	656,004	26,662	0.0406	0.9594	67.47
56.5	583,572	22,716	0.0389	0.9611	64.72
57.5	509,845	18,938	0.0371	0.9629	62.21
58.5	449,063	10,061	0.0224	0.9776	59.89
59.5	408,751	6,156	0.0151	0.9849	58.55
60.5	2,198	349	0.1587	0.8413	57.67
61.5	2,058	398	0.1931	0.8069	48.52
62.5	1,917	210	0.1093	0.8907	39.15
63.5	1,996	183	0.0919	0.9081	34.87
64.5	2,068	78	0.0379	0.9621	31.66
65.5	2,213	120	0.0543	0.9457	30.46
66.5	2,169	209	0.0962	0.9038	28.81
67.5	2,022	333	0.1647	0.8353	26.04
68.5	1,706	260	0.1526	0.8474	21.75
69.5	1,480	152	0.1026	0.8974	18.43
70.5	1,354	234	0.1730	0.8270	16.54
71.5	1,160	247	0.2134	0.7866	13.68
72.5	912	255	0.2792	0.7208	10.76
73.5	832	270	0.3243	0.6757	7.75
74.5	562	140	0.2484	0.7516	5.24
75.5	428	113	0.2640	0.7360	3.94
76.5	315	18	0.0569	0.9431	2.90
77.5	297	25	0.0858	0.9142	2.73
78.5	271	35	0.1286	0.8714	2.50

NORTHWESTERN ENERGY
GAS PLANT

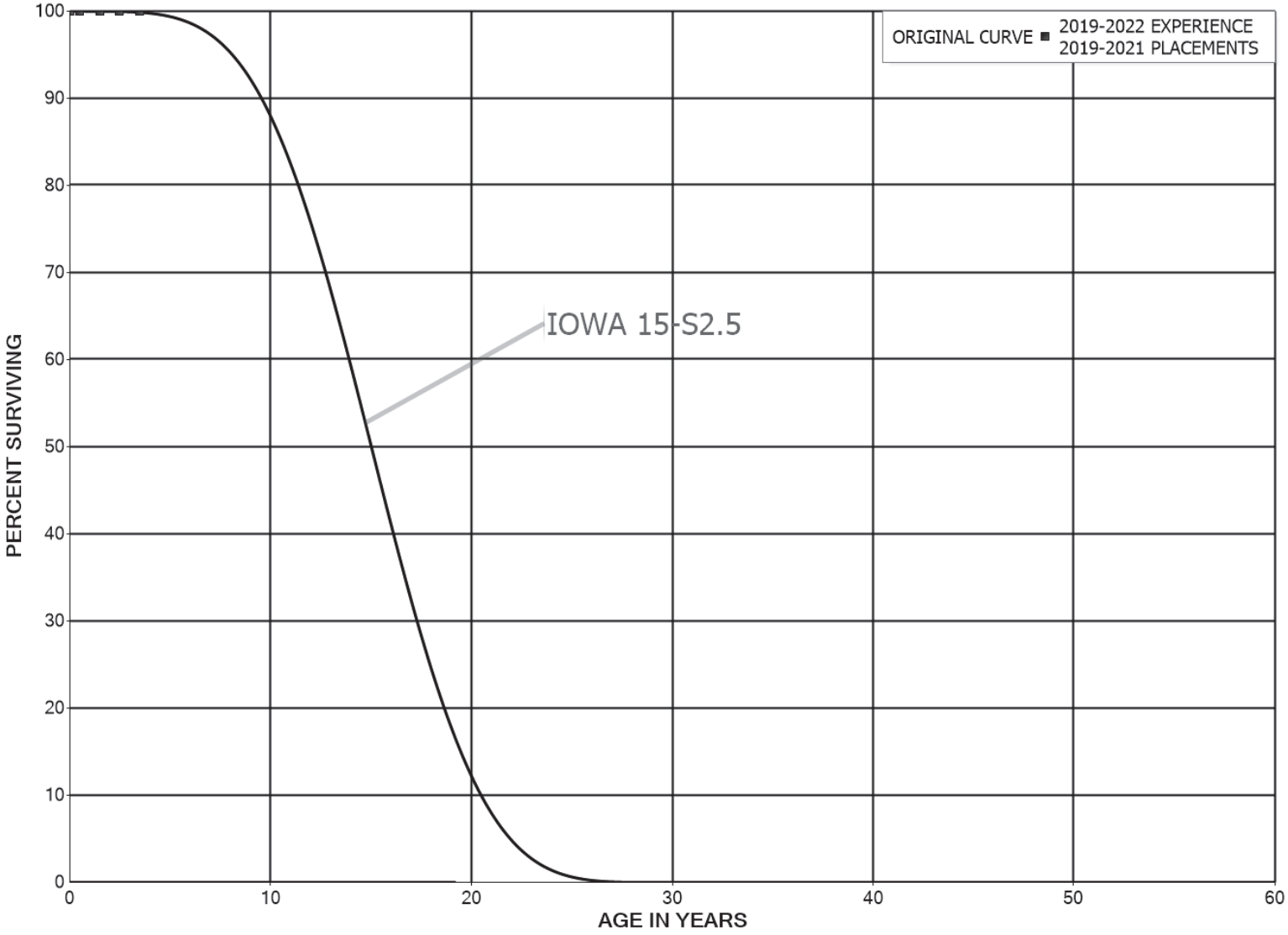
ACCOUNT 381.00 METERS AND REGULATORS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1914-2022 EXPERIENCE BAND 1990-2022

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	236	29	0.1209	0.8791	2.18
80.5	208	15	0.0725	0.9275	1.91
81.5	193	145	0.7522	0.2478	1.78
82.5	48	33	0.6974	0.3026	0.44
83.5	14		0.0000	1.0000	0.13
84.5	14	9	0.6526	0.3474	0.13
85.5	5		0.0000	1.0000	0.05
86.5	5	5	1.0000		0.05
87.5					

NORTHWESTERN ENERGY
GAS PLANT
ACCOUNT 381.10 METERS - AMI
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
GAS PLANT

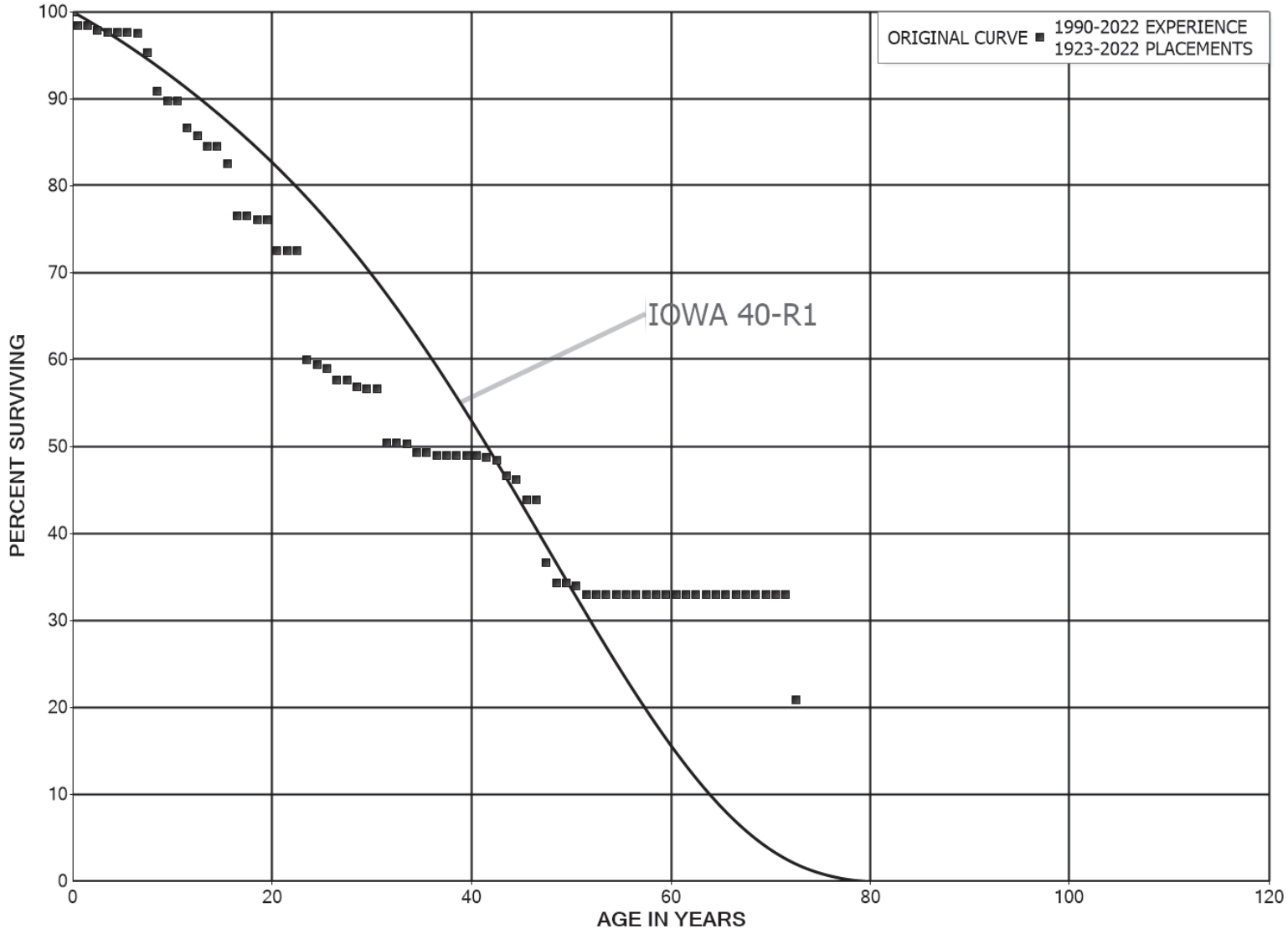
ACCOUNT 381.10 METERS - AMI

ORIGINAL LIFE TABLE

PLACEMENT BAND 2019-2021 EXPERIENCE BAND 2019-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	9,216,166		0.0000	1.0000	100.00
0.5	9,216,166		0.0000	1.0000	100.00
1.5	9,209,085		0.0000	1.0000	100.00
2.5	9,209,085		0.0000	1.0000	100.00
3.5					100.00

NORTHWESTERN ENERGY
GAS PLANT
ACCOUNT 390.10 STRUCTURES AND IMPROVEMENTS
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 390.10 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1923-2022 EXPERIENCE BAND 1990-2022

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	4,162,530	66,446	0.0160	0.9840	100.00
0.5	4,045,849		0.0000	1.0000	98.40
1.5	4,109,525	22,983	0.0056	0.9944	98.40
2.5	3,945,481	11,770	0.0030	0.9970	97.85
3.5	2,986,762		0.0000	1.0000	97.56
4.5	2,933,323		0.0000	1.0000	97.56
5.5	2,829,977	1,200	0.0004	0.9996	97.56
6.5	2,747,679	62,354	0.0227	0.9773	97.52
7.5	2,309,547	108,975	0.0472	0.9528	95.31
8.5	2,200,572	25,865	0.0118	0.9882	90.81
9.5	2,064,863		0.0000	1.0000	89.74
10.5	2,061,077	71,127	0.0345	0.9655	89.74
11.5	1,756,408	19,418	0.0111	0.9889	86.65
12.5	1,710,544	24,690	0.0144	0.9856	85.69
13.5	1,136,636		0.0000	1.0000	84.45
14.5	982,406	22,500	0.0229	0.9771	84.45
15.5	467,483	33,958	0.0726	0.9274	82.52
16.5	428,489		0.0000	1.0000	76.52
17.5	571,356	3,370	0.0059	0.9941	76.52
18.5	710,076		0.0000	1.0000	76.07
19.5	705,352	32,730	0.0464	0.9536	76.07
20.5	689,216		0.0000	1.0000	72.54
21.5	694,367		0.0000	1.0000	72.54
22.5	817,268	141,602	0.1733	0.8267	72.54
23.5	675,666	6,474	0.0096	0.9904	59.97
24.5	669,192	5,150	0.0077	0.9923	59.40
25.5	664,042	15,327	0.0231	0.9769	58.94
26.5	648,715		0.0000	1.0000	57.58
27.5	648,715	8,149	0.0126	0.9874	57.58
28.5	642,666	3,302	0.0051	0.9949	56.86
29.5	582,316		0.0000	1.0000	56.57
30.5	582,316	63,400	0.1089	0.8911	56.57
31.5	518,916		0.0000	1.0000	50.41
32.5	518,916	1,500	0.0029	0.9971	50.41
33.5	517,416	10,386	0.0201	0.9799	50.26
34.5	507,030		0.0000	1.0000	49.25
35.5	507,030	3,341	0.0066	0.9934	49.25
36.5	460,527		0.0000	1.0000	48.93
37.5	509,502		0.0000	1.0000	48.93
38.5	454,252		0.0000	1.0000	48.93

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 390.10 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1923-2022 EXPERIENCE BAND 1990-2022

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	454,352		0.0000	1.0000	48.93
40.5	454,352	1,682	0.0037	0.9963	48.93
41.5	452,670	3,617	0.0080	0.9920	48.75
42.5	449,053	16,315	0.0363	0.9637	48.36
43.5	432,738	3,449	0.0080	0.9920	46.60
44.5	429,288	21,723	0.0506	0.9494	46.23
45.5	407,565		0.0000	1.0000	43.89
46.5	407,565	67,421	0.1654	0.8346	43.89
47.5	340,144	21,465	0.0631	0.9369	36.63
48.5	385,547	952	0.0025	0.9975	34.32
49.5	384,595	3,262	0.0085	0.9915	34.23
50.5	273,650	8,288	0.0303	0.9697	33.94
51.5	234,812		0.0000	1.0000	32.91
52.5	234,812		0.0000	1.0000	32.91
53.5	222,430		0.0000	1.0000	32.91
54.5	222,430		0.0000	1.0000	32.91
55.5	115,844		0.0000	1.0000	32.91
56.5	115,844		0.0000	1.0000	32.91
57.5	115,844		0.0000	1.0000	32.91
58.5	115,844		0.0000	1.0000	32.91
59.5	115,844		0.0000	1.0000	32.91
60.5	115,844		0.0000	1.0000	32.91
61.5	115,844		0.0000	1.0000	32.91
62.5	115,844		0.0000	1.0000	32.91
63.5	115,844		0.0000	1.0000	32.91
64.5	115,844		0.0000	1.0000	32.91
65.5	66,868		0.0000	1.0000	32.91
66.5	92,982		0.0000	1.0000	32.91
67.5	92,982		0.0000	1.0000	32.91
68.5	92,982		0.0000	1.0000	32.91
69.5	92,982		0.0000	1.0000	32.91
70.5	92,982		0.0000	1.0000	32.91
71.5	92,982	34,061	0.3663	0.6337	32.91
72.5	58,921		0.0000	1.0000	20.86
73.5	58,921		0.0000	1.0000	20.86
74.5	58,921		0.0000	1.0000	20.86
75.5	58,921		0.0000	1.0000	20.86
76.5	58,921		0.0000	1.0000	20.86
77.5	58,921		0.0000	1.0000	20.86
78.5	58,921		0.0000	1.0000	20.86

NORTHWESTERN ENERGY
GAS PLANT

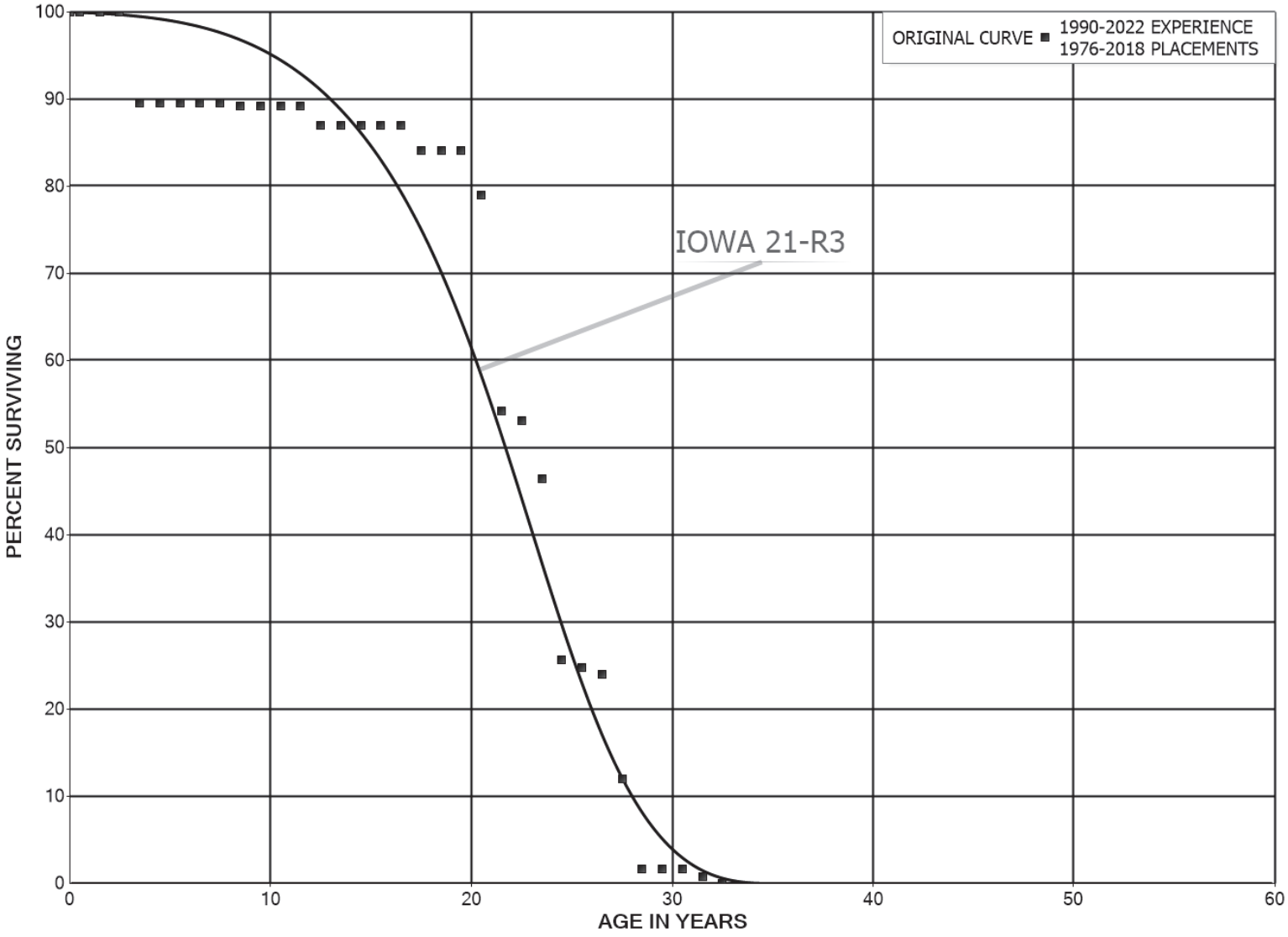
ACCOUNT 390.10 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1923-2022 EXPERIENCE BAND 1990-2022

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	58,921		0.0000	1.0000	20.86
80.5	58,921		0.0000	1.0000	20.86
81.5	26,114		0.0000	1.0000	20.86
82.5	26,114		0.0000	1.0000	20.86
83.5	26,114		0.0000	1.0000	20.86
84.5	26,114		0.0000	1.0000	20.86
85.5	26,114	5,176	0.1982	0.8018	20.86
86.5	20,938		0.0000	1.0000	16.72
87.5	20,938		0.0000	1.0000	16.72
88.5	20,938		0.0000	1.0000	16.72
89.5	20,938		0.0000	1.0000	16.72
90.5	20,938		0.0000	1.0000	16.72
91.5	20,938	3,306	0.1579	0.8421	16.72
92.5	17,632	1,140	0.0647	0.9353	14.08
93.5	16,492		0.0000	1.0000	13.17
94.5	16,492		0.0000	1.0000	13.17
95.5	16,492	1,901	0.1153	0.8847	13.17
96.5	14,591		0.0000	1.0000	11.65
97.5	14,591		0.0000	1.0000	11.65
98.5	14,591		0.0000	1.0000	11.65
99.5					11.65

NORTHWESTERN ENERGY
GAS PLANT
ACCOUNT 397.20 COMMUNICATION EQUIPMENT - NEBRASKA
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 397.20 COMMUNICATION EQUIPMENT - NEBRASKA

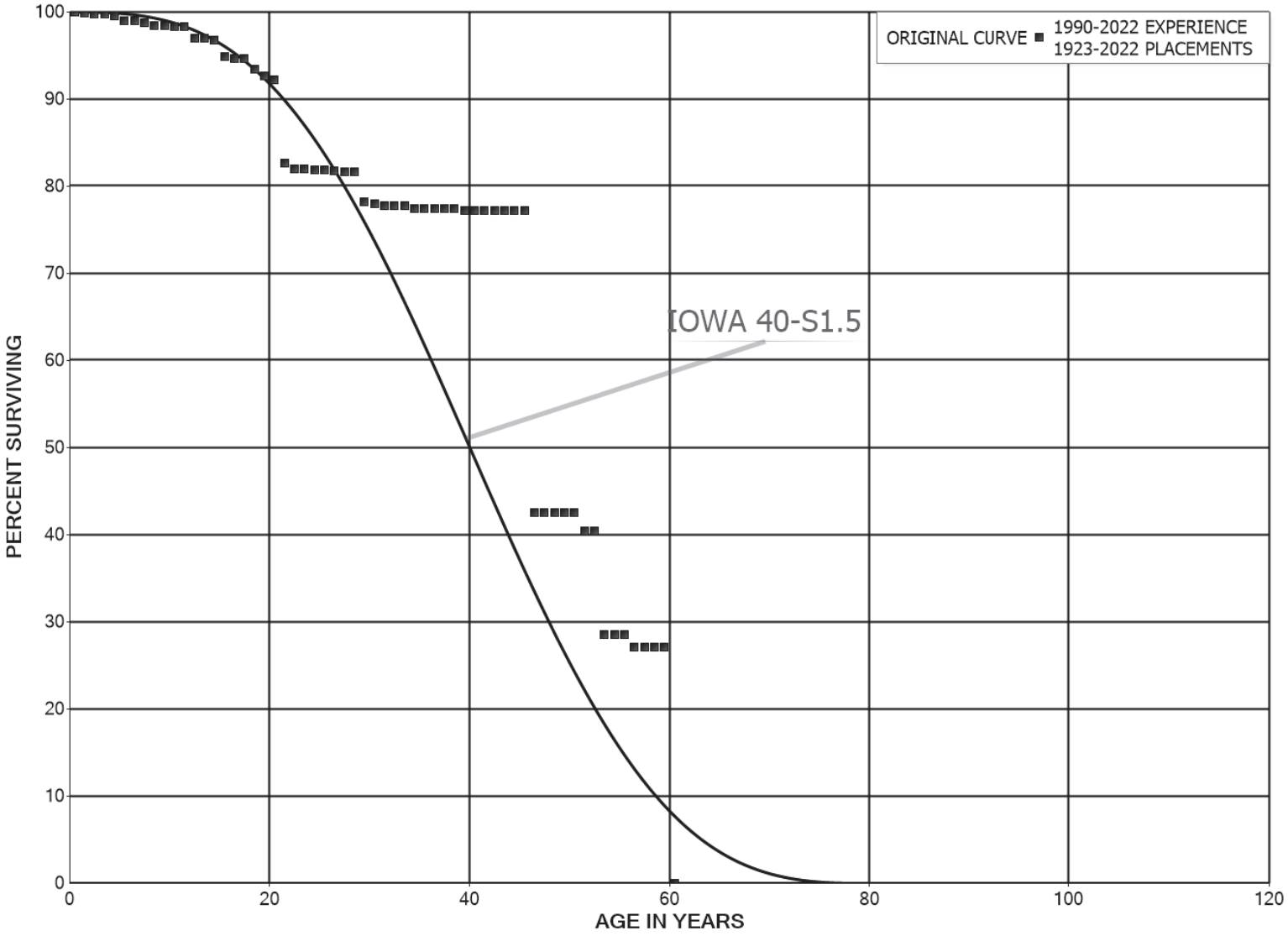
ORIGINAL LIFE TABLE

PLACEMENT BAND 1976-2018 EXPERIENCE BAND 1990-2022

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	162,523		0.0000	1.0000	100.00
0.5	162,523		0.0000	1.0000	100.00
1.5	148,741		0.0000	1.0000	100.00
2.5	145,072	15,253	0.1051	0.8949	100.00
3.5	129,819		0.0000	1.0000	89.49
4.5	129,819		0.0000	1.0000	89.49
5.5	146,094		0.0000	1.0000	89.49
6.5	154,571		0.0000	1.0000	89.49
7.5	154,571	477	0.0031	0.9969	89.49
8.5	154,094		0.0000	1.0000	89.21
9.5	156,804		0.0000	1.0000	89.21
10.5	152,736		0.0000	1.0000	89.21
11.5	153,945	3,902	0.0253	0.9747	89.21
12.5	151,010		0.0000	1.0000	86.95
13.5	157,673		0.0000	1.0000	86.95
14.5	148,216		0.0000	1.0000	86.95
15.5	148,216		0.0000	1.0000	86.95
16.5	145,694	4,844	0.0332	0.9668	86.95
17.5	140,850		0.0000	1.0000	84.06
18.5	140,850		0.0000	1.0000	84.06
19.5	140,850	8,477	0.0602	0.9398	84.06
20.5	107,444	33,732	0.3140	0.6860	79.00
21.5	73,712	1,576	0.0214	0.9786	54.20
22.5	72,136	8,972	0.1244	0.8756	53.04
23.5	63,164	28,398	0.4496	0.5504	46.44
24.5	34,766	1,209	0.0348	0.9652	25.56
25.5	33,557	967	0.0288	0.9712	24.67
26.5	32,590	16,399	0.5032	0.4968	23.96
27.5	16,191	13,925	0.8600	0.1400	11.90
28.5	2,266		0.0000	1.0000	1.67
29.5	2,266		0.0000	1.0000	1.67
30.5	2,266	1,289	0.5686	0.4314	1.67
31.5	977	977	1.0000		0.72
32.5					

COMMON PLANT

NORTHWESTERN ENERGY
COMMON PLANT
ACCOUNT 390.10 STRUCTURES AND IMPROVEMENTS
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
COMMON PLANT

ACCOUNT 390.10 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1923-2022 EXPERIENCE BAND 1990-2022

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	39,197,136	25,427	0.0006	0.9994	100.00
0.5	39,112,384	35,000	0.0009	0.9991	99.94
1.5	33,962,027	52,401	0.0015	0.9985	99.85
2.5	33,623,559	6,662	0.0002	0.9998	99.69
3.5	33,391,802	72,888	0.0022	0.9978	99.67
4.5	31,270,214	143,713	0.0046	0.9954	99.45
5.5	28,286,208	5,847	0.0002	0.9998	99.00
6.5	29,625,850	73,717	0.0025	0.9975	98.98
7.5	24,901,153	77,465	0.0031	0.9969	98.73
8.5	24,162,166	8,376	0.0003	0.9997	98.42
9.5	23,710,841	15,438	0.0007	0.9993	98.39
10.5	23,961,258	20,256	0.0008	0.9992	98.33
11.5	19,919,742	250,624	0.0126	0.9874	98.24
12.5	19,721,035	8,675	0.0004	0.9996	97.01
13.5	19,603,311	53,052	0.0027	0.9973	96.96
14.5	19,514,927	375,058	0.0192	0.9808	96.70
15.5	18,977,736	38,534	0.0020	0.9980	94.84
16.5	18,891,488	14,158	0.0007	0.9993	94.65
17.5	18,877,331	238,861	0.0127	0.9873	94.58
18.5	18,638,470	148,215	0.0080	0.9920	93.38
19.5	18,490,254	90,904	0.0049	0.9951	92.64
20.5	18,275,573	1,898,140	0.1039	0.8961	92.18
21.5	16,377,433	126,745	0.0077	0.9923	82.61
22.5	16,208,736	13,176	0.0008	0.9992	81.97
23.5	16,195,561	16,054	0.0010	0.9990	81.90
24.5	16,200,422	5,367	0.0003	0.9997	81.82
25.5	16,195,055	13,305	0.0008	0.9992	81.80
26.5	16,141,316	14,159	0.0009	0.9991	81.73
27.5	1,413,817		0.0000	1.0000	81.66
28.5	1,413,817	59,984	0.0424	0.9576	81.66
29.5	1,350,775	4,057	0.0030	0.9970	78.19
30.5	1,346,718	4,787	0.0036	0.9964	77.96
31.5	1,393,243		0.0000	1.0000	77.68
32.5	1,172,685		0.0000	1.0000	77.68
33.5	440,132	1,584	0.0036	0.9964	77.68
34.5	438,548		0.0000	1.0000	77.40
35.5	175,729		0.0000	1.0000	77.40
36.5	176,229		0.0000	1.0000	77.40
37.5	176,229		0.0000	1.0000	77.40
38.5	176,229	500	0.0028	0.9972	77.40

NORTHWESTERN ENERGY
COMMON PLANT

ACCOUNT 390.10 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1923-2022 EXPERIENCE BAND 1990-2022

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	175,729		0.0000	1.0000	77.18
40.5	175,729		0.0000	1.0000	77.18
41.5	175,729		0.0000	1.0000	77.18
42.5	175,729		0.0000	1.0000	77.18
43.5	175,729		0.0000	1.0000	77.18
44.5	175,729		0.0000	1.0000	77.18
45.5	133,470	59,871	0.4486	0.5514	77.18
46.5	73,599		0.0000	1.0000	42.56
47.5	73,599		0.0000	1.0000	42.56
48.5	72,228		0.0000	1.0000	42.56
49.5	72,228		0.0000	1.0000	42.56
50.5	74,686	3,824	0.0512	0.9488	42.56
51.5	70,862		0.0000	1.0000	40.38
52.5	70,862	20,915	0.2952	0.7048	40.38
53.5	49,947		0.0000	1.0000	28.46
54.5	49,947		0.0000	1.0000	28.46
55.5	49,947	2,459	0.0492	0.9508	28.46
56.5	47,488		0.0000	1.0000	27.06
57.5	47,488		0.0000	1.0000	27.06
58.5	47,488		0.0000	1.0000	27.06
59.5	47,488	47,488	1.0000		27.06
60.5	65,971		0.0000	1.0000	
61.5	65,971		0.0000		
62.5	65,971		0.0000		
63.5	65,971		0.0000		
64.5	65,971		0.0000		
65.5	161,553		0.0000		
66.5	309,677	17,133	0.0553		
67.5	292,544	1,375	0.0047		
68.5	291,169		0.0000		
69.5	291,169	4,495	0.0154		
70.5	214,094	137,724	0.6433		
71.5	76,370		0.0000		
72.5	76,370		0.0000		
73.5	76,370		0.0000		
74.5	76,370		0.0000		
75.5	76,370		0.0000		
76.5	76,370		0.0000		
77.5	76,370		0.0000		
78.5	76,370		0.0000		

NORTHWESTERN ENERGY
COMMON PLANT

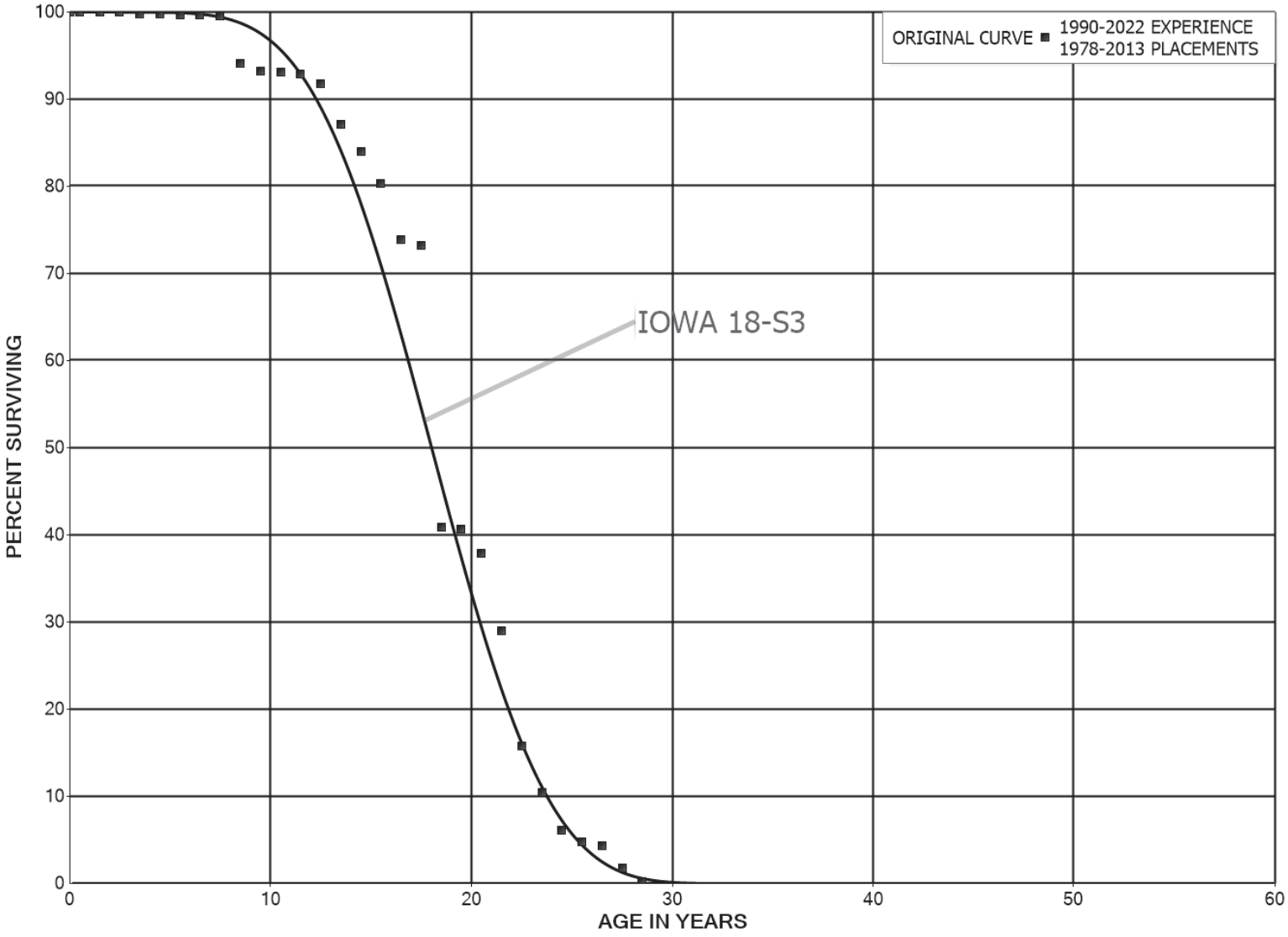
ACCOUNT 390.10 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1923-2022 EXPERIENCE BAND 1990-2022

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	76,370	9,924	0.1299		
80.5	66,446	6,884	0.1036		
81.5	59,562		0.0000		
82.5	59,562		0.0000		
83.5	59,562	3,743	0.0628		
84.5	55,819		0.0000		
85.5	55,819	10,399	0.1863		
86.5	45,420		0.0000		
87.5	45,420		0.0000		
88.5	45,420		0.0000		
89.5	45,420		0.0000		
90.5	45,420		0.0000		
91.5	45,420		0.0000		
92.5	45,420		0.0000		
93.5					

NORTHWESTERN ENERGY
COMMON PLANT
ACCOUNT 397.10 COMMUNICATION EQUIPMENT - MICROWAVE AND FIBER OPTIC
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
COMMON PLANT

ACCOUNT 397.10 COMMUNICATION EQUIPMENT - MICROWAVE AND FIBER OPTIC

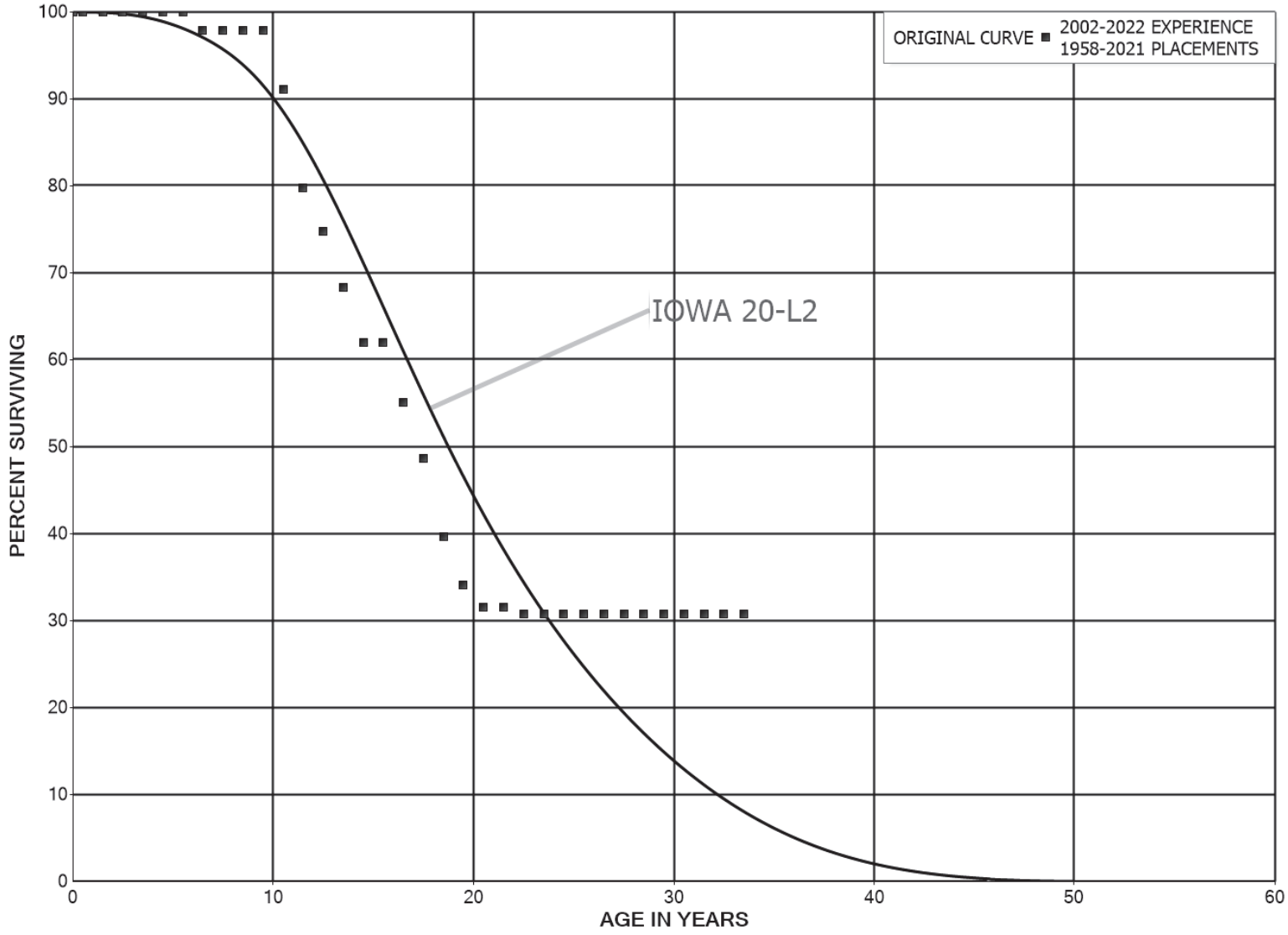
ORIGINAL LIFE TABLE

PLACEMENT BAND 1978-2013 EXPERIENCE BAND 1990-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	9,254,745		0.0000	1.0000	100.00
0.5	8,259,156	13	0.0000	1.0000	100.00
1.5	7,754,690		0.0000	1.0000	100.00
2.5	7,772,559	19,300	0.0025	0.9975	100.00
3.5	7,759,381	164	0.0000	1.0000	99.75
4.5	7,750,854	8,224	0.0011	0.9989	99.75
5.5	7,714,908	3,246	0.0004	0.9996	99.64
6.5	7,708,206	11,699	0.0015	0.9985	99.60
7.5	7,687,972	415,001	0.0540	0.9460	99.45
8.5	6,995,690	70,937	0.0101	0.9899	94.08
9.5	6,351,408	4,402	0.0007	0.9993	93.13
10.5	4,304,753	10,301	0.0024	0.9976	93.06
11.5	4,290,617	49,179	0.0115	0.9885	92.84
12.5	4,241,438	217,898	0.0514	0.9486	91.78
13.5	3,116,729	110,142	0.0353	0.9647	87.06
14.5	2,501,602	108,889	0.0435	0.9565	83.99
15.5	2,377,526	191,844	0.0807	0.9193	80.33
16.5	2,185,682	20,664	0.0095	0.9905	73.85
17.5	2,146,972	947,835	0.4415	0.5585	73.15
18.5	1,187,340	6,385	0.0054	0.9946	40.86
19.5	1,180,955	81,743	0.0692	0.9308	40.64
20.5	782,616	183,900	0.2350	0.7650	37.82
21.5	598,716	273,705	0.4572	0.5428	28.94
22.5	325,011	110,325	0.3394	0.6606	15.71
23.5	214,686	89,029	0.4147	0.5853	10.38
24.5	125,658	28,024	0.2230	0.7770	6.07
25.5	97,633	9,319	0.0955	0.9045	4.72
26.5	88,314	53,752	0.6086	0.3914	4.27
27.5	34,562	31,894	0.9228	0.0772	1.67
28.5	2,668	915	0.3430	0.6570	0.13
29.5	1,753		0.0000	1.0000	0.08
30.5	1,753		0.0000	1.0000	0.08
31.5	1,753	1,753	1.0000		0.08
32.5					

ELECTRIC, GAS AND COMMON PLANT

NORTHWESTERN ENERGY
ELECTRIC, GAS AND COMMON PLANT
ACCOUNT 392.10 TRANSPORTATION EQUIPMENT - TRAILERS
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
ELECTRIC, GAS AND COMMON PLANT

ACCOUNT 392.10 TRANSPORTATION EQUIPMENT - TRAILERS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1958-2021 EXPERIENCE BAND 2002-2022

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	6,380,518		0.0000	1.0000	100.00
0.5	6,380,518		0.0000	1.0000	100.00
1.5	6,456,582		0.0000	1.0000	100.00
2.5	6,555,868		0.0000	1.0000	100.00
3.5	5,189,455		0.0000	1.0000	100.00
4.5	4,665,019		0.0000	1.0000	100.00
5.5	4,196,753	89,126	0.0212	0.9788	100.00
6.5	2,959,298		0.0000	1.0000	97.88
7.5	2,851,022		0.0000	1.0000	97.88
8.5	2,094,563		0.0000	1.0000	97.88
9.5	1,906,620	131,821	0.0691	0.9309	97.88
10.5	2,024,999	252,144	0.1245	0.8755	91.11
11.5	2,060,300	129,249	0.0627	0.9373	79.76
12.5	2,236,665	194,451	0.0869	0.9131	74.76
13.5	2,312,509	213,874	0.0925	0.9075	68.26
14.5	2,192,784	625	0.0003	0.9997	61.95
15.5	2,196,931	242,366	0.1103	0.8897	61.93
16.5	1,954,565	229,943	0.1176	0.8824	55.10
17.5	1,724,623	319,454	0.1852	0.8148	48.62
18.5	1,405,169	197,609	0.1406	0.8594	39.61
19.5	1,207,559	88,179	0.0730	0.9270	34.04
20.5	1,097,462		0.0000	1.0000	31.55
21.5	957,936	23,911	0.0250	0.9750	31.55
22.5	923,974		0.0000	1.0000	30.77
23.5	708,050		0.0000	1.0000	30.77
24.5	486,377		0.0000	1.0000	30.77
25.5	485,652		0.0000	1.0000	30.77
26.5	463,704		0.0000	1.0000	30.77
27.5	357,985		0.0000	1.0000	30.77
28.5	329,626		0.0000	1.0000	30.77
29.5	307,438		0.0000	1.0000	30.77
30.5	265,049		0.0000	1.0000	30.77
31.5	197,379		0.0000	1.0000	30.77
32.5	188,178		0.0000	1.0000	30.77
33.5	71,644		0.0000	1.0000	30.77
34.5	5,086		0.0000	1.0000	30.77
35.5	5,086		0.0000	1.0000	30.77
36.5	1,876		0.0000	1.0000	30.77
37.5	1,876		0.0000	1.0000	30.77
38.5	1,876		0.0000	1.0000	30.77

NORTHWESTERN ENERGY
ELECTRIC, GAS AND COMMON PLANT

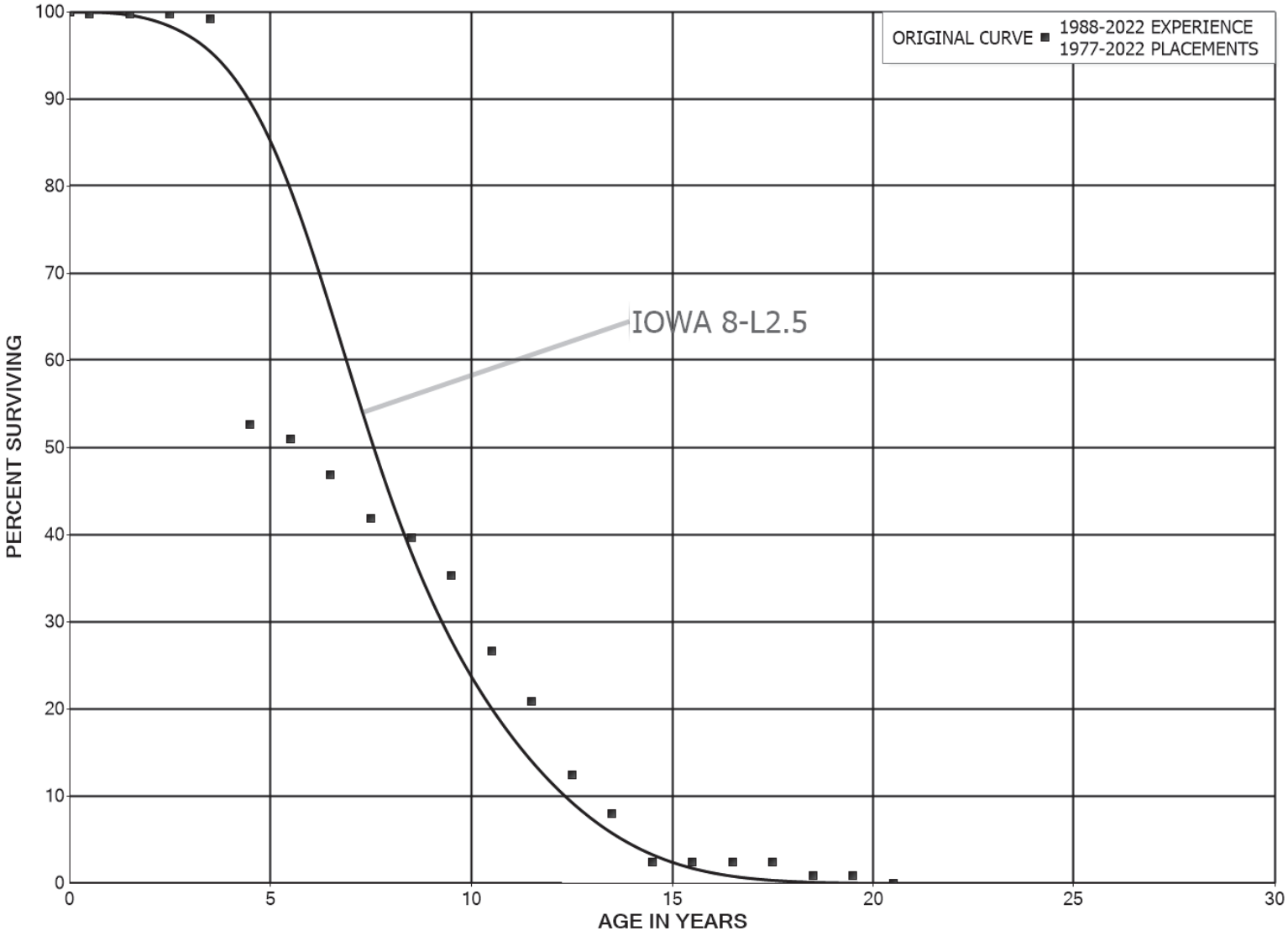
ACCOUNT 392.10 TRANSPORTATION EQUIPMENT - TRAILERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1958-2021 EXPERIENCE BAND 2002-2022

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	1,876		0.0000	1.0000	30.77
40.5					30.77
41.5					
42.5	3,078		0.0000		
43.5	3,078		0.0000		
44.5	3,078		0.0000		
45.5	3,078		0.0000		
46.5	5,896		0.0000		
47.5	5,896		0.0000		
48.5	5,896		0.0000		
49.5	5,896		0.0000		
50.5	2,818		0.0000		
51.5	2,818		0.0000		
52.5	2,818		0.0000		
53.5	2,818		0.0000		
54.5					
55.5					
56.5	525	525	1.0000		
57.5					

NORTHWESTERN ENERGY
ELECTRIC, GAS AND COMMON PLANT
ACCOUNT 392.20 TRANSPORTATION EQUIPMENT - AUTOMOBILES
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
ELECTRIC, GAS AND COMMON PLANT

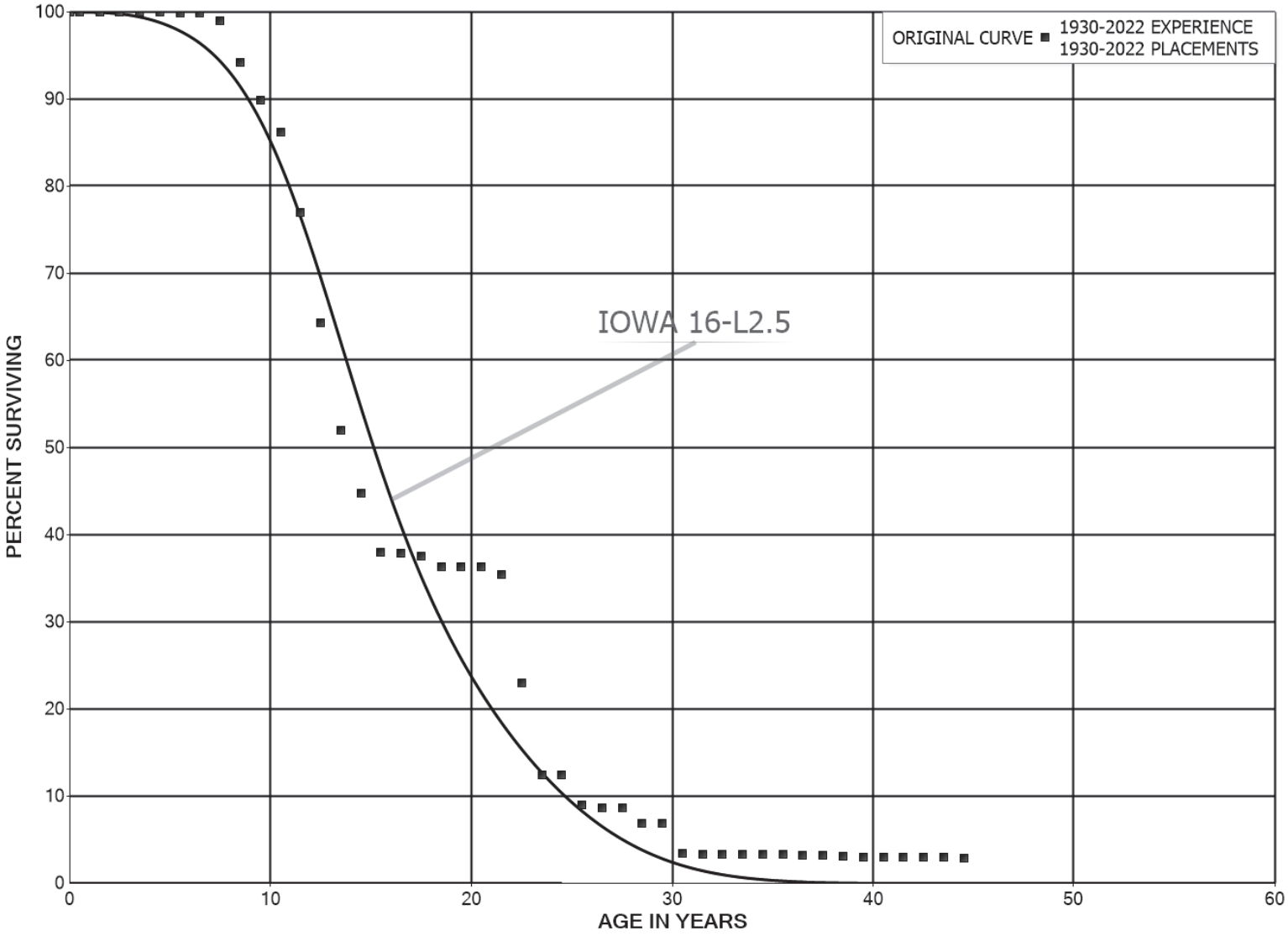
ACCOUNT 392.20 TRANSPORTATION EQUIPMENT - AUTOMOBILES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1977-2022 EXPERIENCE BAND 1988-2022

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	2,838,911	7,346	0.0026	0.9974	100.00
0.5	2,845,794		0.0000	1.0000	99.74
1.5	2,875,284		0.0000	1.0000	99.74
2.5	2,882,063	17,340	0.0060	0.9940	99.74
3.5	2,862,733	1,342,358	0.4689	0.5311	99.14
4.5	1,482,809	46,997	0.0317	0.9683	52.65
5.5	1,365,147	111,350	0.0816	0.9184	50.98
6.5	1,250,804	132,510	0.1059	0.8941	46.83
7.5	1,111,099	59,302	0.0534	0.9466	41.87
8.5	1,037,902	114,869	0.1107	0.8893	39.63
9.5	859,685	209,183	0.2433	0.7567	35.24
10.5	582,509	128,295	0.2202	0.7798	26.67
11.5	431,628	174,348	0.4039	0.5961	20.79
12.5	202,615	73,397	0.3623	0.6377	12.40
13.5	109,000	76,123	0.6984	0.3016	7.91
14.5	32,876		0.0000	1.0000	2.38
15.5	46,351		0.0000	1.0000	2.38
16.5	46,351		0.0000	1.0000	2.38
17.5	46,351	30,567	0.6595	0.3405	2.38
18.5	15,785		0.0000	1.0000	0.81
19.5	15,785	15,785	1.0000		0.81
20.5					

NORTHWESTERN ENERGY
ELECTRIC, GAS AND COMMON PLANT
ACCOUNT 392.30 TRANSPORTATION EQUIPMENT - HEAVY TRUCKS
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
ELECTRIC, GAS AND COMMON PLANT

ACCOUNT 392.30 TRANSPORTATION EQUIPMENT - HEAVY TRUCKS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1930-2022 EXPERIENCE BAND 1930-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	12,495,044		0.0000	1.0000	100.00
0.5	12,203,550		0.0000	1.0000	100.00
1.5	11,123,434	10,459	0.0009	0.9991	100.00
2.5	9,825,486		0.0000	1.0000	99.91
3.5	10,225,802		0.0000	1.0000	99.91
4.5	9,354,302	11,145	0.0012	0.9988	99.91
5.5	8,795,443		0.0000	1.0000	99.79
6.5	8,471,581	75,652	0.0089	0.9911	99.79
7.5	7,290,298	346,620	0.0475	0.9525	98.90
8.5	7,690,466	356,503	0.0464	0.9536	94.19
9.5	6,683,138	268,823	0.0402	0.9598	89.83
10.5	6,011,615	641,847	0.1068	0.8932	86.21
11.5	4,094,732	678,016	0.1656	0.8344	77.01
12.5	3,022,082	580,619	0.1921	0.8079	64.26
13.5	2,071,261	285,562	0.1379	0.8621	51.91
14.5	1,557,210	237,822	0.1527	0.8473	44.76
15.5	1,141,433	2,075	0.0018	0.9982	37.92
16.5	754,683	6,161	0.0082	0.9918	37.85
17.5	402,164	13,347	0.0332	0.9668	37.54
18.5	236,578		0.0000	1.0000	36.30
19.5	236,578		0.0000	1.0000	36.30
20.5	258,497	6,345	0.0245	0.9755	36.30
21.5	378,925	132,685	0.3502	0.6498	35.41
22.5	256,291	117,747	0.4594	0.5406	23.01
23.5	354,467	2,434	0.0069	0.9931	12.44
24.5	558,080	156,158	0.2798	0.7202	12.35
25.5	401,047	10,324	0.0257	0.9743	8.90
26.5	383,802	2,199	0.0057	0.9943	8.67
27.5	460,799	94,955	0.2061	0.7939	8.62
28.5	338,819		0.0000	1.0000	6.84
29.5	337,325	170,163	0.5044	0.4956	6.84
30.5	150,232	4,911	0.0327	0.9673	3.39
31.5	137,353		0.0000	1.0000	3.28
32.5	123,320		0.0000	1.0000	3.28
33.5	122,595		0.0000	1.0000	3.28
34.5	122,595		0.0000	1.0000	3.28
35.5	122,595	2,368	0.0193	0.9807	3.28
36.5	120,227	3,059	0.0254	0.9746	3.22
37.5	111,985	864	0.0077	0.9923	3.13
38.5	103,594	3,393	0.0328	0.9672	3.11

NORTHWESTERN ENERGY
ELECTRIC, GAS AND COMMON PLANT

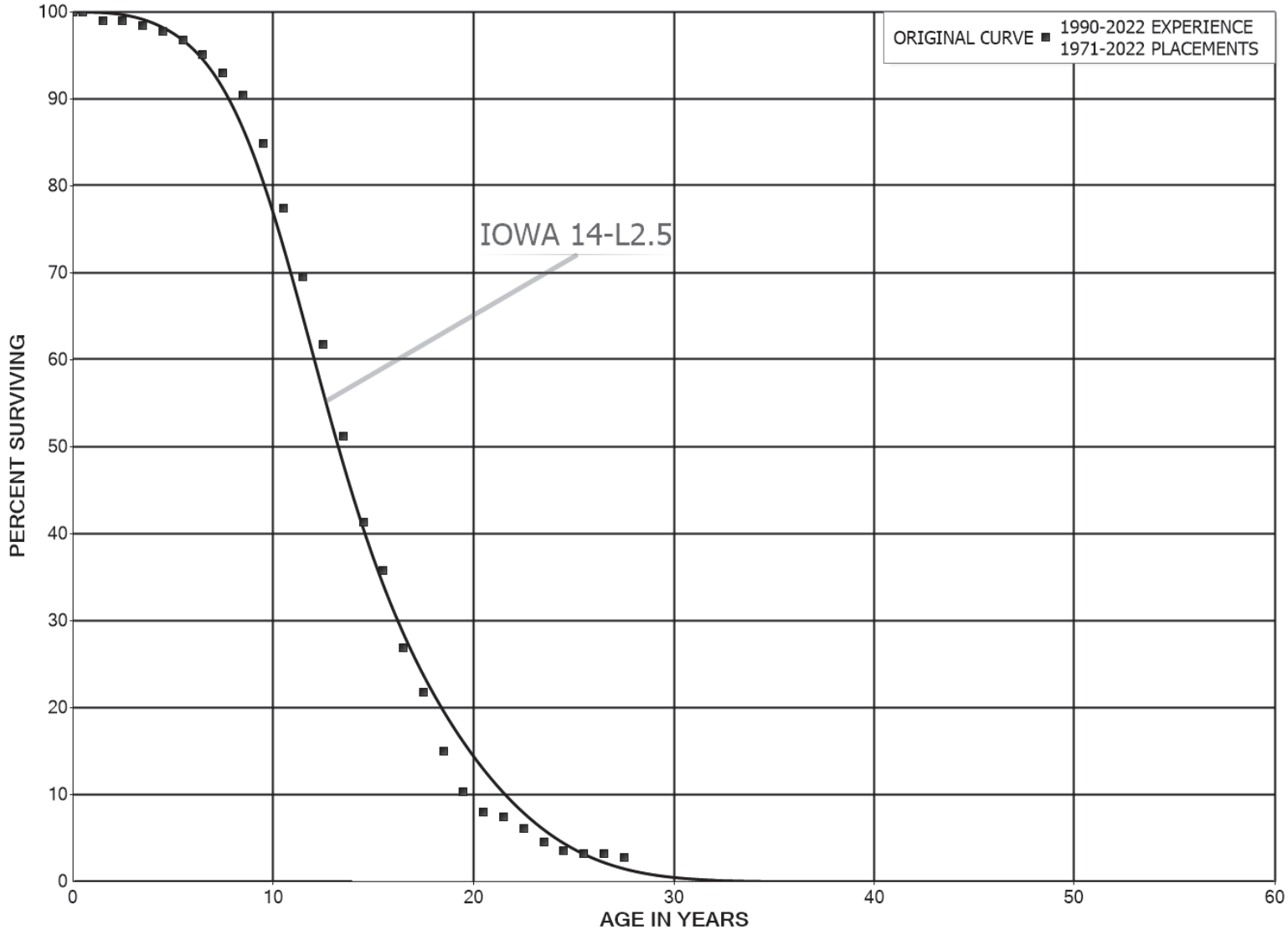
ACCOUNT 392.30 TRANSPORTATION EQUIPMENT - HEAVY TRUCKS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1930-2022 EXPERIENCE BAND 1930-2022

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	100,201	248	0.0025	0.9975	3.01
40.5	91,866	1,491	0.0162	0.9838	3.00
41.5	86,838		0.0000	1.0000	2.95
42.5	81,794		0.0000	1.0000	2.95
43.5	71,832	2,182	0.0304	0.9696	2.95
44.5	69,650	2,181	0.0313	0.9687	2.86
45.5	67,469		0.0000	1.0000	2.77
46.5	64,651	223	0.0034	0.9966	2.77
47.5	64,428	808	0.0125	0.9875	2.76
48.5	56,762	648	0.0114	0.9886	2.73
49.5	54,011	2,882	0.0534	0.9466	2.70
50.5	45,503	7,090	0.1558	0.8442	2.55
51.5	34,190	2,376	0.0695	0.9305	2.16
52.5	16,778	537	0.0320	0.9680	2.01
53.5	16,241	34	0.0021	0.9979	1.94
54.5	16,207		0.0000	1.0000	1.94
55.5	12,901	3,063	0.2374	0.7626	1.94
56.5	9,313	780	0.0838	0.9162	1.48
57.5	8,532		0.0000	1.0000	1.35
58.5	8,222		0.0000	1.0000	1.35
59.5	7,034		0.0000	1.0000	1.35
60.5	7,034		0.0000	1.0000	1.35
61.5	7,034		0.0000	1.0000	1.35
62.5	6,186		0.0000	1.0000	1.35
63.5	6,186	3,380	0.5464	0.4536	1.35
64.5	640		0.0000	1.0000	0.61
65.5	640		0.0000	1.0000	0.61
66.5	640	77	0.1197	0.8803	0.61
67.5	563		0.0000	1.0000	0.54
68.5	248		0.0000	1.0000	0.54
69.5	248		0.0000	1.0000	0.54
70.5	248		0.0000	1.0000	0.54
71.5	248		0.0000	1.0000	0.54
72.5	248		0.0000	1.0000	0.54
73.5	248	248	1.0000		0.54
74.5					

NORTHWESTERN ENERGY
ELECTRIC, GAS AND COMMON PLANT
ACCOUNT 392.40 TRANSPORTATION EQUIPMENT - LIGHT TRUCKS
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
ELECTRIC, GAS AND COMMON PLANT

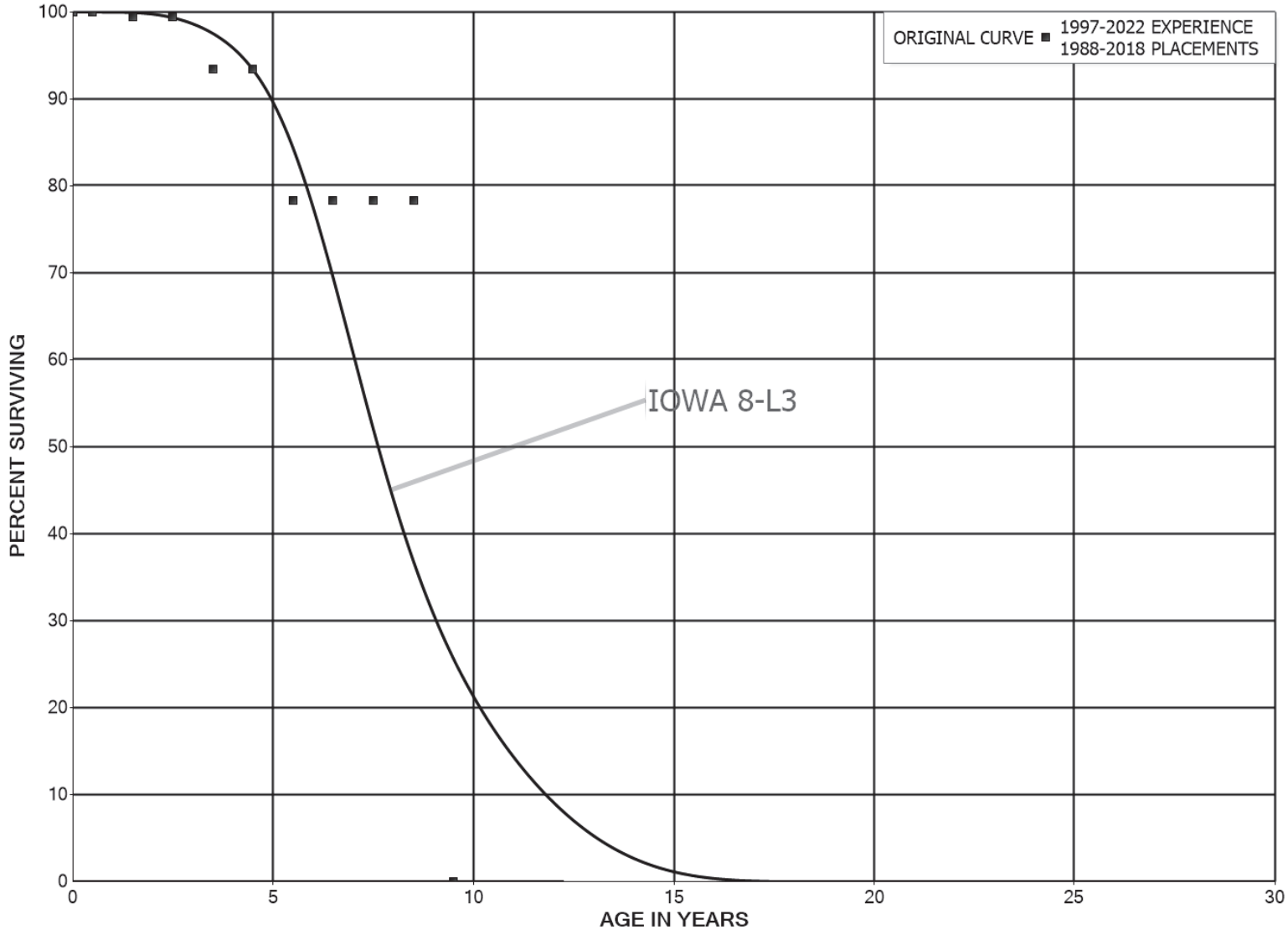
ACCOUNT 392.40 TRANSPORTATION EQUIPMENT - LIGHT TRUCKS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1971-2022 EXPERIENCE BAND 1990-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	12,701,809		0.0000	1.0000	100.00
0.5	13,374,128	135,098	0.0101	0.9899	100.00
1.5	12,661,404		0.0000	1.0000	98.99
2.5	11,605,236	70,575	0.0061	0.9939	98.99
3.5	10,989,143	78,932	0.0072	0.9928	98.39
4.5	10,368,149	96,934	0.0093	0.9907	97.68
5.5	9,985,212	177,807	0.0178	0.9822	96.77
6.5	9,243,868	201,617	0.0218	0.9782	95.04
7.5	9,008,784	253,851	0.0282	0.9718	92.97
8.5	8,217,626	503,100	0.0612	0.9388	90.35
9.5	7,033,371	618,284	0.0879	0.9121	84.82
10.5	6,191,449	628,116	0.1014	0.8986	77.36
11.5	5,232,786	584,600	0.1117	0.8883	69.52
12.5	4,326,812	739,468	0.1709	0.8291	61.75
13.5	3,327,448	647,274	0.1945	0.8055	51.20
14.5	2,417,201	320,382	0.1325	0.8675	41.24
15.5	1,981,317	494,985	0.2498	0.7502	35.77
16.5	1,225,673	234,543	0.1914	0.8086	26.83
17.5	991,130	310,899	0.3137	0.6863	21.70
18.5	632,886	194,147	0.3068	0.6932	14.89
19.5	422,599	99,549	0.2356	0.7644	10.32
20.5	335,404	19,280	0.0575	0.9425	7.89
21.5	303,770	55,112	0.1814	0.8186	7.44
22.5	248,658	66,413	0.2671	0.7329	6.09
23.5	182,245	40,857	0.2242	0.7758	4.46
24.5	141,388	11,437	0.0809	0.9191	3.46
25.5	104,984		0.0000	1.0000	3.18
26.5	126,932	19,596	0.1544	0.8456	3.18
27.5	82,727		0.0000	1.0000	2.69
28.5	82,727		0.0000	1.0000	2.69
29.5	82,727	7,581	0.0916	0.9084	2.69
30.5	75,146	27,641	0.3678	0.6322	2.44
31.5	47,505	19,737	0.4155	0.5845	1.55
32.5	27,768		0.0000	1.0000	0.90
33.5	27,768		0.0000	1.0000	0.90
34.5	5,820		0.0000	1.0000	0.90
35.5	5,820		0.0000	1.0000	0.90
36.5	5,820		0.0000	1.0000	0.90
37.5	5,820	5,820	1.0000		0.90
38.5					

NORTHWESTERN ENERGY
ELECTRIC, GAS AND COMMON PLANT
ACCOUNT 392.60 TRANSPORTATION EQUIPMENT - AIRCRAFT
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
ELECTRIC, GAS AND COMMON PLANT

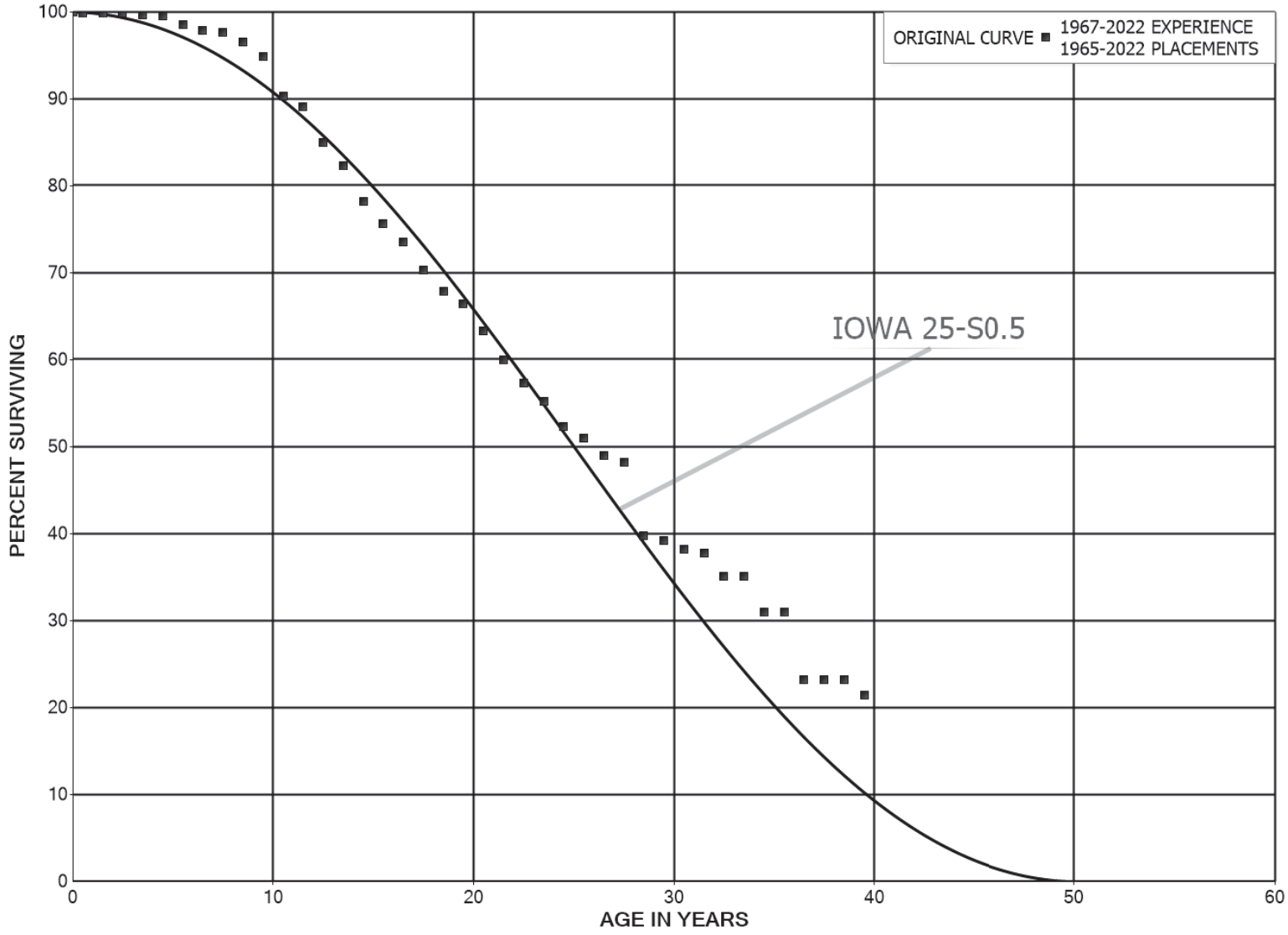
ACCOUNT 392.60 TRANSPORTATION EQUIPMENT - AIRCRAFT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1988-2018 EXPERIENCE BAND 1997-2022

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	5,656,119		0.0000	1.0000	100.00
0.5	5,656,119	35,777	0.0063	0.9937	100.00
1.5	5,620,342		0.0000	1.0000	99.37
2.5	5,620,342	337,504	0.0601	0.9399	99.37
3.5	5,282,838		0.0000	1.0000	93.40
4.5	3,771,049	608,743	0.1614	0.8386	93.40
5.5	3,162,306		0.0000	1.0000	78.32
6.5	3,162,306		0.0000	1.0000	78.32
7.5	3,162,306		0.0000	1.0000	78.32
8.5	5,217,417	5,217,417	1.0000		78.32
9.5					
10.5	949,094	949,094	1.0000		
11.5					

NORTHWESTERN ENERGY
ELECTRIC, GAS AND COMMON PLANT
ACCOUNT 396.00 POWER OPERATED EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



NORTHWESTERN ENERGY
ELECTRIC, GAS AND COMMON PLANT

ACCOUNT 396.00 POWER OPERATED EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1965-2022 EXPERIENCE BAND 1967-2022

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	7,891,379	9,492	0.0012	0.9988	100.00
0.5	7,428,048	651	0.0001	0.9999	99.88
1.5	7,213,839	5,588	0.0008	0.9992	99.87
2.5	6,845,460	13,414	0.0020	0.9980	99.79
3.5	6,279,878	5,489	0.0009	0.9991	99.60
4.5	6,076,977	63,957	0.0105	0.9895	99.51
5.5	5,567,068	36,354	0.0065	0.9935	98.46
6.5	5,189,558	8,600	0.0017	0.9983	97.82
7.5	5,018,058	60,934	0.0121	0.9879	97.66
8.5	4,735,808	81,993	0.0173	0.9827	96.47
9.5	4,461,023	214,636	0.0481	0.9519	94.80
10.5	3,846,787	48,072	0.0125	0.9875	90.24
11.5	3,765,505	174,771	0.0464	0.9536	89.11
12.5	3,203,439	101,042	0.0315	0.9685	84.98
13.5	2,856,960	141,978	0.0497	0.9503	82.30
14.5	2,409,920	80,340	0.0333	0.9667	78.21
15.5	2,227,174	60,729	0.0273	0.9727	75.60
16.5	1,990,544	88,595	0.0445	0.9555	73.54
17.5	1,762,807	62,031	0.0352	0.9648	70.27
18.5	1,583,831	31,444	0.0199	0.9801	67.79
19.5	1,552,387	74,978	0.0483	0.9517	66.45
20.5	1,477,410	75,589	0.0512	0.9488	63.24
21.5	1,412,728	64,897	0.0459	0.9541	60.00
22.5	1,347,831	49,837	0.0370	0.9630	57.25
23.5	1,224,503	62,165	0.0508	0.9492	55.13
24.5	1,128,911	30,370	0.0269	0.9731	52.33
25.5	938,831	35,665	0.0380	0.9620	50.92
26.5	811,438	12,678	0.0156	0.9844	48.99
27.5	771,880	136,089	0.1763	0.8237	48.22
28.5	551,190	7,512	0.0136	0.9864	39.72
29.5	514,209	12,795	0.0249	0.9751	39.18
30.5	482,374	6,743	0.0140	0.9860	38.20
31.5	390,308	26,793	0.0686	0.9314	37.67
32.5	271,752		0.0000	1.0000	35.08
33.5	175,046	20,504	0.1171	0.8829	35.08
34.5	154,542		0.0000	1.0000	30.97
35.5	90,216	22,585	0.2503	0.7497	30.97
36.5	55,057		0.0000	1.0000	23.22
37.5	55,057		0.0000	1.0000	23.22
38.5	31,450	2,518	0.0800	0.9200	23.22

NORTHWESTERN ENERGY
ELECTRIC, GAS AND COMMON PLANT

ACCOUNT 396.00 POWER OPERATED EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1965-2022 EXPERIENCE BAND 1967-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	5,956	1,379	0.2315	0.7685	21.36
40.5	4,577	1,733	0.3785	0.6215	16.42
41.5	2,845		0.0000	1.0000	10.20
42.5	2,845		0.0000	1.0000	10.20
43.5	2,845		0.0000	1.0000	10.20
44.5	2,845	1,934	0.6797	0.3203	10.20
45.5	911	911	1.0000		3.27
46.5					

PART VIII. NET SALVAGE STATISTICS

NORTHWESTERN ENERGY

TABLE 1. CALCULATION OF TERMINAL AND INTERIM RETIREMENTS AS A PERCENT OF TOTAL RETIREMENTS

LOCATION	TERMINAL RETIREMENTS	INTERIM RETIREMENTS	TOTAL RETIREMENTS	TERMINAL RETIREMENT %	INTERIM RETIREMENT %
(1)	(2)	(3)	(4)=(2)+(3)	(5)=(2)/(4)	(6)=(3)/(4)
STEAM PRODUCTION					
BIG STONE	(112,296,248)	(43,108,123)	(155,404,371)	72.26	27.74
NEAL 4	(48,474,528)	(14,557,147)	(63,031,675)	76.91	23.09
COYOTE	(35,152,579)	(16,439,432)	(51,592,011)	68.14	31.86
TOTAL STEAM PRODUCTION	**(195,923,355)**	**(74,104,702)**	**(270,028,057)**		
OTHER PRODUCTION					
BOB GLANZER	(68,253,310)	(17,376,415)	(85,629,725)	79.71	20.29
TOTAL OTHER PRODUCTION	**(68,253,310)**	**(17,376,415)**	**(85,629,725)**		
WIND PRODUCTION					
BEETHOVEN	(83,019,456)	(31,576,727)	(114,596,183)	72.45	27.55

NORTHWESTERN ENERGY

TABLE 2. CALCULATION OF WEIGHTED NET SALVAGE PERCENT

LOCATION	TERMINAL RETIREMENTS RETIREMENT (%)	TERMINAL RETIREMENTS NET SALVAGE (%)	INTERIM RETIREMENTS RETIREMENT (%)	INTERIM RETIREMENTS NET SALVAGE (%)	WEIGHTED AVERAGE NET SALVAGE %
(1)	(2)	(3)	(4)	(5)	(6)=(2)*(3)+(4)*(5)
STEAM PRODUCTION					
BIG STONE	72.26	(2)	27.74	(11)	(4)
NEAL 4	76.91	(2)	23.09	(11)	(4)
COYOTE	68.14	(2)	31.86	(11)	(5)
OTHER PRODUCTION					
BOB GLANZER	79.71	(1)	20.29	(17)	(4)
WIND PRODUCTION					
BEETHOVEN	72.45	0	27.55	(4)	(1)

ELECTRIC PLANT

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 311.00 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
1990	5,468		0		0		0
1991	46,006		0		0		0
1992	1,162		0		0		0
1993	8,156-		0		0		0
1994	53,835	3,299	6		0	3,299-	6-
1995	570	90	16		0	90-	16-
1996	4,751		0		0		0
1997	62,019	3,907	6	12	0	3,895-	6-
1998	2,675	34	1		0	34-	1-
1999							
2000	39,215	600	2		0	600-	2-
2001	19,694	34-	0	30	0	64	0
2002	9,196	87	1		0	87-	1-
2003	6,926		0		0		0
2004	5,591		0		0		0
2005	17,508		0		0		0
2006	27,022	2,927	11		0	2,927-	11-
2007	40,431	43,700	108		0	43,700-	108-
2008	4,841	532	11		0	532-	11-
2009	9,195	1,521	17		0	1,521-	17-
2010	13,201	270	2		0	270-	2-
2011	21,986	847	4		0	847-	4-
2012	35,123	7,301	21		0	7,301-	21-
2013	17,646	23,584	134		0	23,584-	134-
2014	162,208	6,594	4		0	6,594-	4-
2015	179,808	21,318	12		0	21,318-	12-
2016	60,198	2,655	4		0	2,655-	4-
2017	66,041	15,828	24		0	15,828-	24-
2018	18,285	208	1		0	208-	1-
2019	21,924	8,629	39		0	8,629-	39-
2020	74,018	10,521	14		0	10,521-	14-
2021	101,959	13,327	13		0	13,327-	13-
2022	6,730	8,412	125		0	8,412-	125-
TOTAL	1,127,077	176,157	16	42	0	176,115-	16-
THREE-YEAR MOVING AVERAGES							
90-92	17,545		0		0		0
91-93	13,004		0		0		0
92-94	15,614	1,100	7		0	1,100-	7-
93-95	15,417	1,130	7		0	1,130-	7-

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 311.00 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							
94-96	19,719	1,130	6		0	1,130-	6-
95-97	22,447	1,332	6	4	0	1,328-	6-
96-98	23,148	1,314	6	4	0	1,310-	6-
97-99	21,565	1,314	6	4	0	1,310-	6-
98-00	13,963	211	2		0	211-	2-
99-01	19,636	189	1	10	0	179-	1-
00-02	22,702	218	1	10	0	208-	1-
01-03	11,938	18	0	10	0	8-	0
02-04	7,238	29	0		0	29-	0
03-05	10,008		0		0		0
04-06	16,707	976	6		0	976-	6-
05-07	28,321	15,542	55		0	15,542-	55-
06-08	24,098	15,720	65		0	15,720-	65-
07-09	18,156	15,251	84		0	15,251-	84-
08-10	9,079	774	9		0	774-	9-
09-11	14,794	879	6		0	879-	6-
10-12	23,436	2,806	12		0	2,806-	12-
11-13	24,918	10,577	42		0	10,577-	42-
12-14	71,659	12,493	17		0	12,493-	17-
13-15	119,887	17,165	14		0	17,165-	14-
14-16	134,071	10,189	8		0	10,189-	8-
15-17	102,016	13,267	13		0	13,267-	13-
16-18	48,175	6,230	13		0	6,230-	13-
17-19	35,417	8,222	23		0	8,222-	23-
18-20	38,076	6,453	17		0	6,453-	17-
19-21	65,967	10,826	16		0	10,826-	16-
20-22	60,903	10,753	18		0	10,753-	18-
FIVE-YEAR AVERAGE							
18-22	44,583	8,219	18		0	8,219-	18-

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 312.00 BOILER PLANT EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
1990	30,832	313	1		0	313-	1-
1991	361,384	47,319	13	68,984	19	21,665	6
1992	184,099	25,429	14	3,720	2	21,709-	12-
1993	743,467	13,326	2	1,827	0	11,499-	2-
1994	250,947	32,944	13	16,087	6	16,857-	7-
1995	315,915	11,795	4	750	0	11,045-	3-
1996	3,027,743	14,972	0	773,542	26	758,571	25
1997	1,717,167	129,975	8	15,123	1	114,852-	7-
1998	1,665,276	3,286	0	717,124	43	713,838	43
1999	459,283	126,107	27	5,975	1	120,132-	26-
2000	139,225	19,661	14		0	19,661-	14-
2001	78,690	11,895	15	34	0	11,861-	15-
2002	118,575	2,384	2	1,298-	1-	3,681-	3-
2003	1,344,498		0		0		0
2004	161,505		0		0		0
2005	509,441		0		0		0
2006	421,136	21,884	5	2,323	1	19,562-	5-
2007	1,224,193	463,083	38	200	0	462,883-	38-
2008	1,090,778	689,769	63	27,468	3	662,301-	61-
2009	36,574	16,570	45	1,569	4	15,001-	41-
2010	526,675	105,759	20	17,299	3	88,460-	17-
2011	169,810	10,653	6	309	0	10,344-	6-
2012	2,877,918	476,601	17	22,616	1	453,985-	16-
2013	532,035	87,933	17	16,225	3	71,708-	13-
2014	765,934	77,104	10		0	77,104-	10-
2015	9,940,332	660,004	7	1,101,844	11	441,840	4
2016	744,363	294,011	39		0	294,011-	39-
2017	578,204	100	0		0	100-	0
2018	416,636	41,642	10	3,709	1	37,933-	9-
2019	1,337,850	185,153	14	26,195	2	158,958-	12-
2020	2,938,291	390,993	13	1,492	0	389,500-	13-
2021	452,481	549,563	121	2,793	1	546,769-	121-
2022	719,952	451,724	63	1,404	0	450,320-	63-
TOTAL	35,881,207	4,961,949	14	2,827,313	8	2,134,636-	6-
THREE-YEAR MOVING AVERAGES							
90-92	192,105	24,354	13	24,235	13	119-	0
91-93	429,650	28,691	7	24,844	6	3,848-	1-
92-94	392,837	23,899	6	7,211	2	16,688-	4-
93-95	436,776	19,355	4	6,221	1	13,133-	3-

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 312.00 BOILER PLANT EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
94-96	1,198,202	19,903	2	263,460	22	243,556	20
95-97	1,686,942	52,247	3	263,138	16	210,891	13
96-98	2,136,729	49,411	2	501,930	23	452,519	21
97-99	1,280,575	86,456	7	246,074	19	159,618	12
98-00	754,594	49,684	7	241,033	32	191,349	25
99-01	225,732	52,554	23	2,003	1	50,551-	22-
00-02	112,163	11,313	10	421-	0	11,734-	10-
01-03	513,921	4,759	1	421-	0	5,181-	1-
02-04	541,526	795	0	433-	0	1,227-	0
03-05	671,815		0		0		0
04-06	364,027	7,295	2	774	0	6,521-	2-
05-07	718,257	161,656	23	841	0	160,815-	22-
06-08	912,036	391,579	43	9,997	1	381,582-	42-
07-09	783,849	389,808	50	9,746	1	380,062-	48-
08-10	551,342	270,700	49	15,446	3	255,254-	46-
09-11	244,353	44,327	18	6,392	3	37,935-	16-
10-12	1,191,468	197,671	17	13,408	1	184,263-	15-
11-13	1,193,254	191,729	16	13,050	1	178,679-	15-
12-14	1,391,962	213,879	15	12,947	1	200,932-	14-
13-15	3,746,100	275,014	7	372,690	10	97,676	3
14-16	3,816,877	343,706	9	367,281	10	23,575	1
15-17	3,754,300	318,038	8	367,281	10	49,243	1
16-18	579,734	111,918	19	1,236	0	110,682-	19-
17-19	777,563	75,632	10	9,968	1	65,664-	8-
18-20	1,564,259	205,929	13	10,466	1	195,464-	12-
19-21	1,576,207	375,236	24	10,160	1	365,076-	23-
20-22	1,370,241	464,093	34	1,896	0	462,197-	34-
FIVE-YEAR AVERAGE							
18-22	1,173,042	323,815	28	7,119	1	316,696-	27-

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 314.00 TURBOGENERATOR UNITS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
1990	4,425		0	3,305	75	3,305	75
1991	105,736	2,269	2	32,946	31	30,677	29
1992	23,776	1,354	6		0	1,354-	6-
1993	9,498	336	4		0	336-	4-
1994	56,050	2,219	4		0	2,219-	4-
1995	5,689		0		0		0
1996	12,017		0		0		0
1997	522,005	9,630	2	817-	0	10,447-	2-
1998	21,608	1,889	9	289	1	1,600-	7-
1999	81,061	11,592	14	19,868	25	8,277	10
2000							
2001	33,387		0	33,387	100	33,387	100
2002	25,353		0		0		0
2003	306,355		0		0		0
2004	25,905		0		0		0
2005	382,139		0		0		0
2006	134,075	607	0		0	607-	0
2007	28,070	442	2		0	442-	2-
2008	241,361	101,768	42	7,845	3	93,923-	39-
2009	368,136	129,706	35		0	129,706-	35-
2010	118,658-	284,996	240-		0	284,996-	240
2011	29,063	1,526	5		0	1,526-	5-
2012	317,126	2,810	1		0	2,810-	1-
2013	106,701	33,375	31	12,451	12	20,925-	20-
2014	593,322	25,154	4		0	25,154-	4-
2015	337,566	3,363	1		0	3,363-	1-
2016	82,788	10,644	13		0	10,644-	13-
2017	65,678	35,011	53		0	35,011-	53-
2018	67,615	1,102	2		0	1,102-	2-
2019	29,008	8,703	30		0	8,703-	30-
2020	235,498	2,753	1		0	2,753-	1-
2021	44,879	45,676	102		0	45,676-	102-
2022	1,431	681	48		0	681-	48-
TOTAL	4,178,665	717,604	17	109,273	3	608,331-	15-
THREE-YEAR MOVING AVERAGES							
90-92	44,646	1,208	3	12,083	27	10,876	24
91-93	46,337	1,319	3	10,982	24	9,662	21
92-94	29,775	1,303	4		0	1,303-	4-
93-95	23,745	851	4		0	851-	4-

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 314.00 TURBOGENERATOR UNITS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
94-96	24,585	740	3		0	740-	3-
95-97	179,903	3,210	2	272-	0	3,482-	2-
96-98	185,210	3,840	2	176-	0	4,016-	2-
97-99	208,225	7,704	4	6,447	3	1,257-	1-
98-00	34,223	4,494	13	6,719	20	2,226	7
99-01	38,149	3,864	10	17,752	47	13,888	36
00-02	19,580		0	11,129	57	11,129	57
01-03	121,699		0	11,129	9	11,129	9
02-04	119,205		0		0		0
03-05	238,133		0		0		0
04-06	180,707	202	0		0	202-	0
05-07	181,428	350	0		0	350-	0
06-08	134,502	34,272	25	2,615	2	31,658-	24-
07-09	212,522	77,306	36	2,615	1	74,691-	35-
08-10	163,613	172,157	105	2,615	2	169,542-	104-
09-11	92,847	138,743	149		0	138,743-	149-
10-12	75,844	96,444	127		0	96,444-	127-
11-13	150,964	12,570	8	4,150	3	8,420-	6-
12-14	339,050	20,446	6	4,150	1	16,296-	5-
13-15	345,863	20,631	6	4,150	1	16,481-	5-
14-16	337,892	13,054	4		0	13,054-	4-
15-17	162,011	16,339	10		0	16,339-	10-
16-18	72,027	15,586	22		0	15,586-	22-
17-19	54,100	14,938	28		0	14,938-	28-
18-20	110,707	4,186	4		0	4,186-	4-
19-21	103,128	19,044	18		0	19,044-	18-
20-22	93,936	16,370	17		0	16,370-	17-
FIVE-YEAR AVERAGE							
18-22	75,686	11,783	16		0	11,783-	16-

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 315.00 ACCESSORY ELECTRIC EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
1990	4,085	129	3		0	129-	3-
1991	2,732		0	2,401	88	2,401	88
1992							
1993	1,617	703	43		0	703-	43-
1994	12		0		0		0
1995	8,965		0		0		0
1996	418	96	23		0	96-	23-
1997							
1998							
1999							
2000							
2001							
2002	3,717		0		0		0
2003	7,080		0		0		0
2004	1,264		0		0		0
2005	8,275		0		0		0
2006	38,507	1,835	5	4,777	12	2,943	8
2007	4,595	1,058	23		0	1,058-	23-
2008	6,550	460	7		0	460-	7-
2009	15,190	1,302	9		0	1,302-	9-
2010	122,219	2,699	2	440	0	2,259-	2-
2011	6,940	94	1	1,151	17	1,057	15
2012	166,867	43,021	26		0	43,021-	26-
2013	11,604-	12,066	104-		0	12,066-	104
2014	200,074	4,697	2		0	4,697-	2-
2015	132,736	100	0	14,300	11	14,200	11
2016	9,955	44	0		0	44-	0
2017	5,447	19,203	353	17,824	327	1,379-	25-
2018	779	297	38		0	297-	38-
2019	2,340		0		0		0
2020	18,613	7,506	40		0	7,506-	40-
2021	6,681	232	3		0	232-	3-
2022	81,432		0	4,695	6	4,695	6
TOTAL	845,488	95,540	11	45,588	5	49,952-	6-
THREE-YEAR MOVING AVERAGES							
90-92	2,272	43	2	800	35	757	33
91-93	1,450	234	16	800	55	566	39
92-94	543	234	43		0	234-	43-
93-95	3,531	234	7		0	234-	7-

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 315.00 ACCESSORY ELECTRIC EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
94-96	3,132	32	1		0	32-	1-
95-97	3,128	32	1		0	32-	1-
96-98	139	32	23		0	32-	23-
97-99							
98-00							
99-01							
00-02	1,239		0		0		0
01-03	3,599		0		0		0
02-04	4,020		0		0		0
03-05	5,540		0		0		0
04-06	16,016	612	4	1,592	10	981	6
05-07	17,126	964	6	1,592	9	628	4
06-08	16,551	1,117	7	1,592	10	475	3
07-09	8,778	940	11		0	940-	11-
08-10	47,986	1,487	3	147	0	1,340-	3-
09-11	48,117	1,365	3	530	1	835-	2-
10-12	98,676	15,271	15	530	1	14,741-	15-
11-13	54,068	18,393	34	384	1	18,010-	33-
12-14	118,446	19,928	17		0	19,928-	17-
13-15	107,069	5,621	5	4,767	4	854-	1-
14-16	114,255	1,613	1	4,767	4	3,153	3
15-17	49,379	6,449	13	10,708	22	4,259	9
16-18	5,394	6,514	121	5,941	110	573-	11-
17-19	2,855	6,500	228	5,941	208	559-	20-
18-20	7,244	2,601	36		0	2,601-	36-
19-21	9,211	2,579	28		0	2,579-	28-
20-22	35,575	2,579	7	1,565	4	1,014-	3-
FIVE-YEAR AVERAGE							
18-22	21,969	1,607	7	939	4	668-	3-

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 316.00 MISCELLANEOUS POWER PLANT EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
1990	13,631	138	1	1,648	12	1,511	11
1991	26,861		0	18,021	67	18,021	67
1992	23,597		0	834	4	834	4
1993	6,692	10	0	787	12	777	12
1994	36,038	888	2	1,588	4	700	2
1995	23,403	303	1	4,459	19	4,156	18
1996	16,064	2,104	13	1,669	10	435-	3-
1997	111,145	3,643	3	16,903	15	13,260	12
1998	25,698	428	2	2,336	9	1,908	7
1999	9,357		0	65	1	65	1
2000	64,445	61	0		0	61-	0
2001	72,705		0	3,078	4	3,078	4
2002	10,890		0	1,524-	14-	1,524-	14-
2003	75,880		0		0		0
2004	18,068		0		0		0
2005	71,454		0		0		0
2006	26,100		0	1,302	5	1,302	5
2007	25,299		0	1,425	6	1,425	6
2008	13,084	936	7	1,441	11	505	4
2009	25,422		0	2,462	10	2,462	10
2010	42,562	2,014	5	4,662	11	2,648	6
2011	19,032		0		0		0
2012	51,412	200	0	1,500	3	1,300	3
2013	96,074	127	0	12,692	13	12,565	13
2014	27,797		0	1,100	4	1,100	4
2015	31,649	39	0	9,450	30	9,411	30
2016	10,800		0	711	7	711	7
2017	25,828	1,494	6	4,740	18	3,246	13
2018	70,776	1,829,766		112,944	160	1,716,822-	
2019	52,650	6,191	12	5,269	10	923-	2-
2020	58,554	1,068	2	7,332	13	6,264	11
2021	32,283		0	1,114	3	1,114	3
2022	100,005	1,061	1	9,384	9	8,323	8
TOTAL	1,315,256	1,850,469	141	227,391	17	1,623,078-	123-
THREE-YEAR MOVING AVERAGES							
90-92	21,363	46	0	6,834	32	6,789	32
91-93	19,050	3	0	6,547	34	6,544	34
92-94	22,109	299	1	1,069	5	770	3
93-95	22,045	400	2	2,278	10	1,878	9

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 316.00 MISCELLANEOUS POWER PLANT EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
94-96	25,169	1,098	4	2,572	10	1,474	6
95-97	50,204	2,017	4	7,677	15	5,660	11
96-98	50,969	2,058	4	6,969	14	4,911	10
97-99	48,734	1,357	3	6,434	13	5,078	10
98-00	33,167	163	0	800	2	637	2
99-01	48,835	20	0	1,047	2	1,027	2
00-02	49,347	20	0	518	1	498	1
01-03	53,158		0	518	1	518	1
02-04	34,946		0	508-	1-	508-	1-
03-05	55,134		0		0		0
04-06	38,541		0	434	1	434	1
05-07	40,951		0	909	2	909	2
06-08	21,494	312	1	1,389	6	1,077	5
07-09	21,268	312	1	1,776	8	1,464	7
08-10	27,023	983	4	2,855	11	1,872	7
09-11	29,005	671	2	2,375	8	1,703	6
10-12	37,669	738	2	2,054	5	1,316	3
11-13	55,506	109	0	4,731	9	4,622	8
12-14	58,428	109	0	5,098	9	4,988	9
13-15	51,840	55	0	7,747	15	7,692	15
14-16	23,415	13	0	3,754	16	3,741	16
15-17	22,759	511	2	4,967	22	4,456	20
16-18	35,801	610,420		39,465	110	570,955-	
17-19	49,751	612,484		40,984	82	571,499-	
18-20	60,660	612,342		41,848	69	570,493-	940-
19-21	47,829	2,420	5	4,572	10	2,152	4
20-22	63,614	710	1	5,943	9	5,234	8
FIVE-YEAR AVERAGE							
18-22	62,854	367,617	585	27,209	43	340,409-	542-

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 341.00 STRUCTURES AND IMPROVEMENTS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
1991	19,859	34,251	172	3,041	15	31,210-	157-
1992		1,170		918		252-	
1993	1,792	207	12		0	207-	12-
1994	246,450		0		0		0
1995		28,310		8,288		20,022-	
1996							
1997							
1998							
1999							
2000							
2001							
2002							
2003							
2004							
2005							
2006	16,948		0		0		0
2007		5,795				5,795-	
2008							
2009	63,136		0		0		0
2010	8,660	1,787	21		0	1,787-	21-
2011							
2012							
2013	293,715	8,670	3		0	8,670-	3-
2014	24,631	6,756	27		0	6,756-	27-
2015	38,461	12,509	33		0	12,509-	33-
2016		13,539		5		13,534-	
2017	8,089	32,076	397		0	32,076-	397-
2018							
2019		324				324-	
2020	5,000		0		0		0
2021		3,627				3,627-	
2022							
TOTAL	726,742	149,022	21	12,253	2	136,769-	19-
THREE-YEAR MOVING AVERAGES							
91-93	7,217	11,876	165	1,320	18	10,556-	146-
92-94	82,747	459	1	306	0	153-	0
93-95	82,747	9,506	11	2,763	3	6,743-	8-
94-96	82,150	9,437	11	2,763	3	6,674-	8-
95-97		9,437		2,763		6,674-	

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 341.00 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
THREE-YEAR MOVING AVERAGES							
96-98							
97-99							
98-00							
99-01							
00-02							
01-03							
02-04							
03-05							
04-06	5,649		0		0		0
05-07	5,649	1,932	34		0	1,932-	34-
06-08	5,649	1,932	34		0	1,932-	34-
07-09	21,045	1,932	9		0	1,932-	9-
08-10	23,932	596	2		0	596-	2-
09-11	23,932	596	2		0	596-	2-
10-12	2,887	596	21		0	596-	21-
11-13	97,905	2,890	3		0	2,890-	3-
12-14	106,115	5,142	5		0	5,142-	5-
13-15	118,936	9,312	8		0	9,312-	8-
14-16	21,031	10,935	52	2	0	10,933-	52-
15-17	15,517	19,375	125	2	0	19,373-	125-
16-18	2,696	15,205	564	2	0	15,203-	564-
17-19	2,696	10,800	401		0	10,800-	401-
18-20	1,667	108	6		0	108-	6-
19-21	1,667	1,317	79		0	1,317-	79-
20-22	1,667	1,209	73		0	1,209-	73-
FIVE-YEAR AVERAGE							
18-22	1,000	790	79		0	790-	79-

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 342.00 FUEL HOLDERS, PRODUCERS AND ACCESSORIES

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
1990	1,948		0		0		0
1991	20,809	1,972	9		0	1,972-	9-
1992							
1993							
1994							
1995		1,416		414		1,001-	
1996							
1997							
1998							
1999							
2000							
2001							
2002							
2003							
2004							
2005							
2006							
2007							
2008							
2009	13,792	3,487	25		0	3,487-	25-
2010							
2011							
2012							
2013	94,205		0		0		0
2014	76,901	20,293	26		0	20,293-	26-
2015		19,644				19,644-	
2016	24,754		0		0		0
2017	43,829	35,642	81		0	35,642-	81-
2018							
2019	15,000	9,355	62		0	9,355-	62-
2020							
2021	532		0		0		0
2022		359				359-	
TOTAL	291,770	92,167	32	414	0	91,752-	31-
THREE-YEAR MOVING AVERAGES							
90-92	7,586	657	9		0	657-	9-
91-93	6,936	657	9		0	657-	9-
92-94							
93-95		472		138		334-	

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 342.00 FUEL HOLDERS, PRODUCERS AND ACCESSORIES

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							
94-96		472		138		334-	
95-97		472		138		334-	
96-98							
97-99							
98-00							
99-01							
00-02							
01-03							
02-04							
03-05							
04-06							
05-07							
06-08							
07-09	4,597	1,162	25	0		1,162-	25-
08-10	4,597	1,162	25	0		1,162-	25-
09-11	4,597	1,162	25	0		1,162-	25-
10-12							
11-13	31,402		0	0			0
12-14	57,035	6,764	12	0		6,764-	12-
13-15	57,035	13,312	23	0		13,312-	23-
14-16	33,885	13,312	39	0		13,312-	39-
15-17	22,861	18,428	81	0		18,428-	81-
16-18	22,861	11,881	52	0		11,881-	52-
17-19	19,610	14,999	76	0		14,999-	76-
18-20	5,000	3,118	62	0		3,118-	62-
19-21	5,177	3,118	60	0		3,118-	60-
20-22	177	120	67	0		120-	67-
FIVE-YEAR AVERAGE							
18-22	3,106	1,943	63	0		1,943-	63-

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 343.00 PRIME MOVERS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
1990	93,760		0		0		0
1991	973,478		0		0		0
1992	6,892	469	7	34	0	435-	6-
1993	5,000		0		0		0
1994							
1995		125,981		36,884		89,097-	
1996	24,938	48,322	194	170	1	48,152-	193-
1997							
1998							
1999							
2000	41,835	39,239	94		0	39,239-	94-
2001							
2002							
2003	147,084		0		0		0
2004	389,263		0		0		0
2005							
2006	942,175	74,505	8		0	74,505-	8-
2007	143,566	402,475	280		0	402,475-	280-
2008	80,754	17,237	21		0	17,237-	21-
2009	391,996	161,374	41		0	161,374-	41-
2010	5,094		0		0		0
2011							
2012	2,706		0		0		0
2013	996,654	64	0		0	64-	0
2014	70,661	240,031	340		0	240,031-	340-
2015	737,822	28,908	4		0	28,908-	4-
2016	194,176	95,774	49		0	95,774-	49-
2017	150,479	50,621	34		0	50,621-	34-
2018	4,657	13,451	289		0	13,451-	289-
2019							
2020	580,218	190,140	33		0	190,140-	33-
2021							
2022							
TOTAL	5,983,207	1,488,592	25	37,087	1	1,451,505-	24-
THREE-YEAR MOVING AVERAGES							
90-92	358,043	156	0	11	0	145-	0
91-93	328,457	156	0	11	0	145-	0
92-94	3,964	156	4	11	0	145-	4-
93-95	1,667	41,994		12,295	738	29,699-	

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 343.00 PRIME MOVERS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
94-96	8,313	58,101	699	12,351	149	45,750-	550-
95-97	8,313	58,101	699	12,351	149	45,750-	550-
96-98	8,313	16,107	194	57	1	16,051-	193-
97-99							
98-00	13,945	13,080	94		0	13,080-	94-
99-01	13,945	13,080	94		0	13,080-	94-
00-02	13,945	13,080	94		0	13,080-	94-
01-03	49,028		0		0		0
02-04	178,782		0		0		0
03-05	178,782		0		0		0
04-06	443,813	24,835	6		0	24,835-	6-
05-07	361,914	158,993	44		0	158,993-	44-
06-08	388,832	164,739	42		0	164,739-	42-
07-09	205,439	193,695	94		0	193,695-	94-
08-10	159,282	59,537	37		0	59,537-	37-
09-11	132,363	53,791	41		0	53,791-	41-
10-12	2,600		0		0		0
11-13	333,120	21	0		0	21-	0
12-14	356,674	80,032	22		0	80,032-	22-
13-15	601,712	89,668	15		0	89,668-	15-
14-16	334,219	121,571	36		0	121,571-	36-
15-17	360,825	58,434	16		0	58,434-	16-
16-18	116,437	53,282	46		0	53,282-	46-
17-19	51,712	21,358	41		0	21,358-	41-
18-20	194,958	67,864	35		0	67,864-	35-
19-21	193,406	63,380	33		0	63,380-	33-
20-22	193,406	63,380	33		0	63,380-	33-
FIVE-YEAR AVERAGE							
18-22	116,975	40,718	35		0	40,718-	35-

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 344.00 GENERATORS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
2020	507,986	23,449	5		0	23,449-	5-
2021							
2022							
TOTAL	507,986	23,449	5		0	23,449-	5-
THREE-YEAR MOVING AVERAGES							
20-22	169,329	7,816	5		0	7,816-	5-

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 345.00 ACCESSORY ELECTRIC EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
1990	2,538		0		0		0
1991	112,780		0		0		0
1992							
1993							
1994	158,767		0		0		0
1995		30,198		8,841		21,357-	
1996							
1997							
1998							
1999							
2000							
2001							
2002							
2003							
2004	4,553		0		0		0
2005							
2006	5,187		0		0		0
2007		482				482-	
2008							
2009	115,690		0		0		0
2010	8,037		0	665	8	665	8
2011	37		0		0		0
2012	4,783	134	3		0	134-	3-
2013	124,130	1,384	1		0	1,384-	1-
2014	2,950		0		0		0
2015	164,087		0		0		0
2016		17,950				17,950-	
2017	87,465	43,864	50		0	43,864-	50-
2018		198				198-	
2019							
2020	1,000	389	39		0	389-	39-
2021							
2022	1,000		0		0		0
TOTAL	793,004	94,599	12	9,506	1	85,093-	11-
THREE-YEAR MOVING AVERAGES							
90-92	38,439		0		0		0
91-93	37,593		0		0		0
92-94	52,922		0		0		0
93-95	52,922	10,066	19	2,947	6	7,119-	13-

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 345.00 ACCESSORY ELECTRIC EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
94-96	52,922	10,066	19	2,947	6	7,119-	13-
95-97		10,066		2,947		7,119-	
96-98							
97-99							
98-00							
99-01							
00-02							
01-03							
02-04	1,518		0		0		0
03-05	1,518		0		0		0
04-06	3,247		0		0		0
05-07	1,729	161	9		0	161-	9-
06-08	1,729	161	9		0	161-	9-
07-09	38,563	161	0		0	161-	0
08-10	41,242		0	222	1	222	1
09-11	41,255		0	222	1	222	1
10-12	4,286	45	1	222	5	177	4
11-13	42,983	506	1		0	506-	1-
12-14	43,954	506	1		0	506-	1-
13-15	97,056	461	0		0	461-	0
14-16	55,679	5,983	11		0	5,983-	11-
15-17	83,851	20,605	25		0	20,605-	25-
16-18	29,155	20,671	71		0	20,671-	71-
17-19	29,155	14,687	50		0	14,687-	50-
18-20	333	196	59		0	196-	59-
19-21	333	130	39		0	130-	39-
20-22	667	130	19		0	130-	19-
FIVE-YEAR AVERAGE							
18-22	400	118	29		0	118-	29-

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 345.10 ACCESSORY ELECTRIC EQUIPMENT - WIND

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
2019	106,373		0		0		0
2020							
2021							
2022							
TOTAL	106,373		0		0		0
THREE-YEAR MOVING AVERAGES							
19-21	35,458		0		0		0
20-22							

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 346.00 MISCELLANEOUS POWER PLANT 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
1991	29,925		0		0		0
1992	4,749		0		0		0
1993	2,422		0		0		0
1994							
1995		2,831		829		2,002-	
1996							
1997							
1998							
1999							
2000	6,919		0		0		0
2001							
2002							
2003	3		0		0		0
2004	512		0		0		0
2005							
2006	1,151		0	4,290	373	4,290	373
2007		499				499-	
2008	260		0		0		0
2009	11,867		0		0		0
2010							
2011	11,526		0		0		0
2012							
2013	31,282		0		0		0
2014	416		0		0		0
2015	5,284		0		0		0
2016	1,691	581	34		0	581-	34-
2017	3,863		0		0		0
2018							
2019							
2020							
2021							
2022							
TOTAL	111,870	3,911	3	5,119	5	1,208	1
THREE-YEAR MOVING AVERAGES							
91-93	12,365		0		0		0
92-94	2,390		0		0		0
93-95	807	944	117	276	34	667-	83-
94-96		944		276		667-	
95-97		944		276		667-	

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 346.00 MISCELLANEOUS POWER PLANT 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							
96-98							
97-99							
98-00	2,306		0		0		0
99-01	2,306		0		0		0
00-02	2,306		0		0		0
01-03	1		0		0		0
02-04	172		0		0		0
03-05	172		0		0		0
04-06	554		0	1,430	258	1,430	258
05-07	384	166	43	1,430	373	1,264	329
06-08	470	166	35	1,430	304	1,264	269
07-09	4,042	166	4		0	166-	4-
08-10	4,042		0		0		0
09-11	7,798		0		0		0
10-12	3,842		0		0		0
11-13	14,269		0		0		0
12-14	10,566		0		0		0
13-15	12,327		0		0		0
14-16	2,464	194	8		0	194-	8-
15-17	3,613	194	5		0	194-	5-
16-18	1,851	194	10		0	194-	10-
17-19	1,288		0		0		0
18-20							
19-21							
20-22							
FIVE-YEAR AVERAGE							
18-22							

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 346.10 MISCELLANEOUS POWER PLANT EQUIPMENT - WIND

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
2020	13,125		0		0		0
2021		432				432-	
2022							
TOTAL	13,125	432	3		0	432-	3-
THREE-YEAR MOVING AVERAGES							
20-22	4,375	144	3		0	144-	3-

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 352.00 STRUCTURES AND IMPROVEMENTS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
2014		11,290				11,290-	
2015	1,402		0		0		0
2016	16,906	74	0		0	74-	0
2017	74,125		0		0		0
2018	42,189	46,752	111		0	46,752-	111-
2019	65,572	12,179	19		0	12,179-	19-
2020	48,381	45,483	94	9,807	20	35,676-	74-
2021		4,199				4,199-	
2022	11,659	2,223	19		0	2,223-	19-
TOTAL	260,233	122,200	47	9,807	4	112,394-	43-
THREE-YEAR MOVING AVERAGES							
14-16	6,103	3,788	62		0	3,788-	62-
15-17	30,811	25	0		0	25-	0
16-18	44,407	15,609	35		0	15,609-	35-
17-19	60,629	19,644	32		0	19,644-	32-
18-20	52,047	34,804	67	3,269	6	31,536-	61-
19-21	37,984	20,620	54	3,269	9	17,351-	46-
20-22	20,013	17,302	86	3,269	16	14,033-	70-
FIVE-YEAR AVERAGE							
18-22	33,560	22,167	66	1,961	6	20,206-	60-

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 353.00 STATION EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
1990	243,390	38,644	16	220,227	90	181,584	75
1991	150,037	4,172	3	7,760	5	3,588	2
1992	255,246	5,611	2	193,864	76	188,253	74
1993	11,061	1,919	17	400	4	1,519-	14-
1994	396,836	58,532	15	29,152	7	29,379-	7-
1995	362,506	31,158	9	8,038	2	23,120-	6-
1996	36,959	7,095	19		0	7,095-	19-
1997	81,222	4,061	5		0	4,061-	5-
1998	162,632	2,271	1		0	2,271-	1-
1999	2,150	887	41		0	887-	41-
2000	92,562	13,410	14		0	13,410-	14-
2001	1,032,229	95	0		0	95-	0
2002	591	200	34		0	200-	34-
2003		1,004				1,004-	
2004	9,909		0		0		0
2005	9	2,921			0	2,921-	
2006	66,256	11,512	17		0	11,512-	17-
2007	31,798	70,906	223		0	70,906-	223-
2008							
2009	21	3,336			0	3,336-	
2010	24,971	12,582	50		0	12,582-	50-
2011	434,003	64,025	15		0	64,025-	15-
2012	2,159,383	96,001	4		0	96,001-	4-
2013	119,558	186,495	156	10,393	9	176,103-	147-
2014	267,210	195,551	73	3,014	1	192,538-	72-
2015	557,118	187,454	34	120	0	187,334-	34-
2016	1,052,105	52,710	5		0	52,710-	5-
2017	1,871,188	235,364	13	2,340	0	233,024-	12-
2018	674,286	507,852	75	9,884	1	497,968-	74-
2019	993,807	2,075,041	209	229,273	23	1,845,768-	186-
2020	453,373	184,014	41	176	0	183,838-	41-
2021	1,016,867	465,071	46	7,109	1	457,961-	45-
2022	424,643	246,588	58	2,292	1	244,296-	58-
TOTAL	12,983,924	4,766,482	37	724,043	6	4,042,439-	31-
THREE-YEAR MOVING AVERAGES							
90-92	216,224	16,142	7	140,617	65	124,475	58
91-93	138,781	3,901	3	67,341	49	63,441	46
92-94	221,047	22,021	10	74,472	34	52,451	24
93-95	256,801	30,536	12	12,530	5	18,006-	7-

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 353.00 STATION EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
94-96	265,434	32,262	12	12,397	5	19,865-	7-
95-97	160,229	14,105	9	2,679	2	11,425-	7-
96-98	93,604	4,476	5		0	4,476-	5-
97-99	82,001	2,407	3		0	2,407-	3-
98-00	85,781	5,523	6		0	5,523-	6-
99-01	375,647	4,798	1		0	4,798-	1-
00-02	375,127	4,568	1		0	4,568-	1-
01-03	344,273	433	0		0	433-	0
02-04	3,500	401	11		0	401-	11-
03-05	3,306	1,308	40		0	1,308-	40-
04-06	25,391	4,811	19		0	4,811-	19-
05-07	32,687	28,446	87		0	28,446-	87-
06-08	32,684	27,473	84		0	27,473-	84-
07-09	10,606	24,747	233		0	24,747-	233-
08-10	8,331	5,306	64		0	5,306-	64-
09-11	152,998	26,648	17		0	26,648-	17-
10-12	872,786	57,536	7		0	57,536-	7-
11-13	904,315	115,507	13	3,464	0	112,043-	12-
12-14	848,717	159,349	19	4,469	1	154,880-	18-
13-15	314,629	189,834	60	4,509	1	185,325-	59-
14-16	625,478	145,238	23	1,045	0	144,194-	23-
15-17	1,160,137	158,509	14	820	0	157,689-	14-
16-18	1,199,193	265,309	22	4,075	0	261,234-	22-
17-19	1,179,761	939,419	80	80,499	7	858,920-	73-
18-20	707,156	922,302	130	79,778	11	842,524-	119-
19-21	821,349	908,042	111	78,853	10	829,189-	101-
20-22	631,628	298,558	47	3,192	1	295,365-	47-
FIVE-YEAR AVERAGE							
18-22	712,595	695,713	98	49,747	7	645,966-	91-

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 355.00 POLES AND FIXTURES

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
1990	109,098	73,775	68	71,503	66	2,272-	2-
1991	70,150	42,062	60	51,833	74	9,771	14
1992	26,892	24,298	90	43,834	163	19,537	73
1993	22,186	16,837	76	8,998	41	7,840-	35-
1994	8,881	7,786	88	7,455	84	331-	4-
1995	115,187	102,322	89	14,057	12	88,265-	77-
1996	40,178	52,621	131	38,602	96	14,019-	35-
1997	139,967	86,932	62	58,242	42	28,689-	20-
1998	14,339	21,394	149	12,190	85	9,203-	64-
1999	54	529	983		0	529-	983-
2000	125,384	85,992	69	13,046	10	72,945-	58-
2001	85,507	65,251	76	8,315	10	56,936-	67-
2002	87,855	56,556	64	8,519-	10-	65,075-	74-
2003	358	22,211		6,227-		28,438-	
2004	74,757	53,411	71	2,120	3	51,291-	69-
2005	35,082	19,804	56		0	19,804-	56-
2006	291,045	810,891	279	6,171	2	804,719-	276-
2007	83,671	307,502	368		0	307,502-	368-
2008	63,035	97,657	155	613	1	97,045-	154-
2009	83,151	392,918	473		0	392,918-	473-
2010	209,459	149,576	71	1,350	1	148,226-	71-
2011	16,700	23,483	141		0	23,483-	141-
2012	117,725	132,470	113		0	132,470-	113-
2013	247,963	324,554	131	101,569	41	222,985-	90-
2014	244,494	1,049,614	429	53,654	22	995,960-	407-
2015	91,424	409,807	448	2,787	3	407,021-	445-
2016	214,543	264,558	123		0	264,558-	123-
2017	203,075	267,416	132		0	267,416-	132-
2018	238,292	306,215	129		0	306,215-	129-
2019	53,149	251,885	474	11,507	22	240,378-	452-
2020	302,094	512,488	170		0	512,488-	170-
2021	506,520	210,292	42		0	210,292-	42-
2022	258,982	382,208	148		0	382,208-	148-
TOTAL	4,181,199	6,625,314	158	493,099	12	6,132,214-	147-
THREE-YEAR MOVING AVERAGES							
90-92	68,714	46,712	68	55,723	81	9,012	13
91-93	39,743	27,732	70	34,888	88	7,156	18
92-94	19,320	16,307	84	20,096	104	3,789	20
93-95	48,751	42,315	87	10,170	21	32,145-	66-

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 355.00 POLES AND FIXTURES

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
94-96	54,749	54,243	99	20,038	37	34,205-	62-
95-97	98,444	80,625	82	36,967	38	43,658-	44-
96-98	64,828	53,649	83	36,345	56	17,304-	27-
97-99	51,453	36,285	71	23,478	46	12,807-	25-
98-00	46,592	35,972	77	8,412	18	27,559-	59-
99-01	70,315	50,591	72	7,120	10	43,470-	62-
00-02	99,582	69,266	70	4,281	4	64,986-	65-
01-03	57,907	48,006	83	2,144-	4-	50,150-	87-
02-04	54,323	44,059	81	4,209-	8-	48,268-	89-
03-05	36,732	31,809	87	1,369-	4-	33,178-	90-
04-06	133,628	294,702	221	2,764	2	291,938-	218-
05-07	136,600	379,399	278	2,057	2	377,342-	276-
06-08	145,917	405,350	278	2,261	2	403,089-	276-
07-09	76,619	266,026	347	204	0	265,821-	347-
08-10	118,548	213,383	180	654	1	212,729-	179-
09-11	103,103	188,659	183	450	0	188,209-	183-
10-12	114,628	101,843	89	450	0	101,393-	88-
11-13	127,463	160,169	126	33,856	27	126,313-	99-
12-14	203,394	502,213	247	51,741	25	450,472-	221-
13-15	194,627	594,658	306	52,670	27	541,989-	278-
14-16	183,487	574,660	313	18,814	10	555,846-	303-
15-17	169,681	313,927	185	929	1	312,998-	184-
16-18	218,637	279,396	128		0	279,396-	128-
17-19	164,839	275,172	167	3,836	2	271,336-	165-
18-20	197,845	356,863	180	3,836	2	353,027-	178-
19-21	287,254	324,889	113	3,836	1	321,053-	112-
20-22	355,865	368,329	104		0	368,329-	104-
FIVE-YEAR AVERAGE							
18-22	271,807	332,618	122	2,301	1	330,316-	122-

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 356.00 OVERHEAD CONDUCTORS AND DEVICES

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
1990	59,151	37,896	64	41,026	69	3,130	5
1991	117,391	38,494	33	37,189	32	1,306-	1-
1992	72,500	27,084	37	32,890	45	5,805	8
1993	47,909	16,535	35	18,293	38	1,758	4
1994	19,381	9,432	49	9,279	48	153-	1-
1995	34,763	22,269	64	23,837	69	1,568	5
1996	35,241	21,141	60	21,286	60	145	0
1997	25,130	16,525	66	6,322	25	10,203-	41-
1998	3,452	11,219	325	1,610	47	9,609-	278-
1999	201		0		0		0
2000	112,088	87,544	78	12,445	11	75,099-	67-
2001	48,722	34,673	71	4,948	10	29,726-	61-
2002	47,134	10,983	23	1,106-	2-	12,089-	26-
2003							
2004	5,550	7,113	128		0	7,113-	128-
2005	24,921	12,845	52		0	12,845-	52-
2006	266,149	608,368	229	82,031	31	526,337-	198-
2007	7,827	74,309	949		0	74,309-	949-
2008	22,810	17,034	75	5,600	25	11,434-	50-
2009	222,012	57,935	26		0	57,935-	26-
2010	83,176	72,982	88	113,745	137	40,763	49
2011	6,586	9,225	140		0	9,225-	140-
2012	768,518	35,980	5		0	35,980-	5-
2013	103,933	355,397	342	42,993	41	312,404-	301-
2014	151,309	108,620	72	1,788	1	106,833-	71-
2015	164,680	66,456	40	1,505	1	64,951-	39-
2016	694,075	284,535	41	1,400	0	283,135-	41-
2017	1,292,768	174,439	13	7,000	1	167,439-	13-
2018	573,996	388,172	68	29,826	5	358,347-	62-
2019	21,172	201,631	952	11,507	54	190,124-	898-
2020	181,207	103,055	57	40,877	23	62,177-	34-
2021	458,790	28,976	6	22,728	5	6,249-	1-
2022	173,191	134,028	77	12,246	7	121,782-	70-
TOTAL	5,845,730	3,074,900	53	581,262	10	2,493,637-	43-
THREE-YEAR MOVING AVERAGES							
90-92	83,014	34,492	42	37,035	45	2,543	3
91-93	79,267	27,371	35	29,457	37	2,086	3
92-94	46,596	17,684	38	20,154	43	2,470	5
93-95	34,018	16,079	47	17,136	50	1,058	3

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 356.00 OVERHEAD CONDUCTORS AND DEVICES

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
94-96	29,795	17,614	59	18,134	61	520	2
95-97	31,711	19,978	63	17,148	54	2,830-	9-
96-98	21,274	16,295	77	9,739	46	6,556-	31-
97-99	9,594	9,248	96	2,644	28	6,604-	69-
98-00	38,580	32,921	85	4,685	12	28,236-	73-
99-01	53,670	40,739	76	5,797	11	34,942-	65-
00-02	69,315	44,400	64	5,429	8	38,971-	56-
01-03	31,952	15,219	48	1,281	4	13,938-	44-
02-04	17,561	6,032	34	369-	2-	6,401-	36-
03-05	10,157	6,653	65		0	6,653-	65-
04-06	98,873	209,442	212	27,344	28	182,099-	184-
05-07	99,632	231,841	233	27,344	27	204,497-	205-
06-08	98,928	233,237	236	29,210	30	204,027-	206-
07-09	84,216	49,759	59	1,867	2	47,893-	57-
08-10	109,333	49,317	45	39,782	36	9,536-	9-
09-11	103,924	46,714	45	37,915	36	8,799-	8-
10-12	286,093	39,396	14	37,915	13	1,481-	1-
11-13	293,012	133,534	46	14,331	5	119,203-	41-
12-14	341,253	166,666	49	14,927	4	151,739-	44-
13-15	139,974	176,825	126	15,429	11	161,396-	115-
14-16	336,688	153,204	46	1,564	0	151,640-	45-
15-17	717,174	175,144	24	3,302	0	171,842-	24-
16-18	853,613	282,382	33	12,742	1	269,640-	32-
17-19	629,312	254,748	40	16,111	3	238,637-	38-
18-20	258,792	230,953	89	27,403	11	203,549-	79-
19-21	220,390	111,221	50	25,037	11	86,183-	39-
20-22	271,063	88,686	33	25,284	9	63,403-	23-
FIVE-YEAR AVERAGE							
18-22	281,671	171,173	61	23,437	8	147,736-	52-

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 357.00 UNDERGROUND CONDUIT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
2002		408				408-	
2003							
2004							
2005							
2006							
2007							
2008							
2009							
2010							
2011	7,708		0		0		0
2012							
2013							
2014							
2015							
2016							
2017							
2018	5,710		0		0		0
2019							
2020							
2021							
2022							
TOTAL	13,418	408	3		0	408-	3-
THREE-YEAR MOVING AVERAGES							
02-04		136				136-	
03-05							
04-06							
05-07							
06-08							
07-09							
08-10							
09-11	2,569		0		0		0
10-12	2,569		0		0		0
11-13	2,569		0		0		0
12-14							
13-15							
14-16							
15-17							
16-18	1,903		0		0		0
17-19	1,903		0		0		0

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 357.00 UNDERGROUND CONDUIT

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							
18-20	1,903		0		0		0
19-21							
20-22							
FIVE-YEAR AVERAGE							
18-22	1,142		0		0		0

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 358.00 UNDERGROUND CONDUCTORS AND DEVICES

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
2001	128	35	27	157	123	122	96
2002		385				385-	
2003							
2004							
2005							
2006							
2007							
2008							
2009							
2010							
2011	13,158		0		0		0
2012							
2013							
2014							
2015							
2016							
2017							
2018							
2019							
2020							
2021							
2022							
TOTAL	13,286	420	3	157	1	263-	2-
THREE-YEAR MOVING AVERAGES							
01-03	43	140	328	52	123	88-	206-
02-04		128				128-	
03-05							
04-06							
05-07							
06-08							
07-09							
08-10							
09-11	4,386		0		0		0
10-12	4,386		0		0		0
11-13	4,386		0		0		0
12-14							
13-15							
14-16							
15-17							

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 358.00 UNDERGROUND CONDUCTORS AND DEVICES

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							
16-18							
17-19							
18-20							
19-21							
20-22							
FIVE-YEAR AVERAGE							
18-22							

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 361.00 STRUCTURES AND IMPROVEMENTS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
2012		2,016				2,016-	
2013							
2014	2,404		0		0		0
2015		1,202				1,202-	
2016							
2017							
2018							
2019				4,995		4,995	
2020							
2021							
2022							
TOTAL	2,404	3,218	134	4,995	208	1,777	74
THREE-YEAR MOVING AVERAGES							
12-14	801	672	84		0	672-	84-
13-15	801	401	50		0	401-	50-
14-16	801	401	50		0	401-	50-
15-17		401				401-	
16-18							
17-19				1,665		1,665	
18-20				1,665		1,665	
19-21				1,665		1,665	
20-22							
FIVE-YEAR AVERAGE							
18-22				999		999	

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 362.00 STATION EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
1990	115,701	8,150	7	19,174	17	11,024	10
1991	314,844	49,175	16	105,727	34	56,552	18
1992	177,376	26,041	15	4,625	3	21,416-	12-
1993	15,405	510	3	4	0	506-	3-
1994	113,423	16,434	14	5,508	5	10,926-	10-
1995	82,748	127	0		0	127-	0
1996	185,795	15,823	9		0	15,823-	9-
1997	17,142	10,982	64	5,326	31	5,656-	33-
1998	29,553	9,801	33	3,964	13	5,837-	20-
1999	30,155		0		0		0
2000	25,068	11,605	46	4,518	18	7,087-	28-
2001	299,233	3,027	1		0	3,027-	1-
2002	88,711	32,271	36	2,702	3	29,569-	33-
2003	68,935	55,494	81	1,060	2	54,434-	79-
2004	21,936	602	3	1,186	5	584	3
2005	39,454	2,124	5		0	2,124-	5-
2006							
2007	30,551	6,128	20		0	6,128-	20-
2008	45,248	18,201	40	1,004	2	17,197-	38-
2009	18,371	23,676	129		0	23,676-	129-
2010	256,176	23,338	9	6,271	2	17,067-	7-
2011	77,173	27,733	36		0	27,733-	36-
2012	9,486	29,008	306		0	29,008-	306-
2013	74,137	35,845	48		0	35,845-	48-
2014	79,918	71,290	89		0	71,290-	89-
2015	99,215	26,160	26		0	26,160-	26-
2016	105,339	61,584	58		0	61,584-	58-
2017	185,103	21,090	11		0	21,090-	11-
2018	1,290,662	29,654	2	500	0	29,154-	2-
2019	462,111	184,599	40	314	0	184,285-	40-
2020	475,437	39,650	8	11,648	2	28,003-	6-
2021	929,175	155,024	17	10,700	1	144,324-	16-
2022	225,828	97,238	43		0	97,238-	43-
TOTAL	5,989,409	1,092,385	18	184,232	3	908,152-	15-
THREE-YEAR MOVING AVERAGES							
90-92	202,640	27,789	14	43,175	21	15,387	8
91-93	169,208	25,242	15	36,785	22	11,544	7
92-94	102,068	14,328	14	3,379	3	10,949-	11-
93-95	70,525	5,690	8	1,837	3	3,853-	5-

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 362.00 STATION EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
94-96	127,322	10,794	8	1,836	1	8,958-	7-
95-97	95,228	8,977	9	1,775	2	7,202-	8-
96-98	77,497	12,202	16	3,097	4	9,105-	12-
97-99	25,617	6,928	27	3,097	12	3,831-	15-
98-00	28,259	7,135	25	2,827	10	4,308-	15-
99-01	118,152	4,877	4	1,506	1	3,371-	3-
00-02	137,670	15,634	11	2,407	2	13,228-	10-
01-03	152,293	30,264	20	1,254	1	29,010-	19-
02-04	59,860	29,456	49	1,649	3	27,807-	46-
03-05	43,442	19,407	45	749	2	18,658-	43-
04-06	20,463	909	4	395	2	513-	3-
05-07	23,335	2,751	12		0	2,751-	12-
06-08	25,266	8,110	32	335	1	7,775-	31-
07-09	31,390	16,002	51	335	1	15,667-	50-
08-10	106,599	21,738	20	2,425	2	19,313-	18-
09-11	117,240	24,916	21	2,090	2	22,825-	19-
10-12	114,279	26,693	23	2,090	2	24,603-	22-
11-13	53,599	30,862	58		0	30,862-	58-
12-14	54,514	45,381	83		0	45,381-	83-
13-15	84,423	44,432	53		0	44,432-	53-
14-16	94,824	53,011	56		0	53,011-	56-
15-17	129,886	36,278	28		0	36,278-	28-
16-18	527,034	37,443	7	167	0	37,276-	7-
17-19	645,959	78,448	12	272	0	78,176-	12-
18-20	742,737	84,635	11	4,154	1	80,481-	11-
19-21	622,241	126,424	20	7,554	1	118,870-	19-
20-22	543,480	97,304	18	7,449	1	89,855-	17-
FIVE-YEAR AVERAGE							
18-22	676,643	101,233	15	4,632	1	96,601-	14-

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 364.00 POLES, TOWERS AND FIXTURES

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
1990	176,565	158,675	90	80,321	45	78,354-	44-
1991	140,813	129,564	92	56,045	40	73,519-	52-
1992	111,710	112,811	101	46,066	41	66,745-	60-
1993	114,877	132,872	116	41,014	36	91,858-	80-
1994	173,899	153,369	88	86,063	49	67,306-	39-
1995	88,721	96,478	109	31,161	35	65,316-	74-
1996	108,758	153,826	141	12,066	11	141,760-	130-
1997	82,295	126,934	154	49,220	60	77,713-	94-
1998	75,490	120,381	159	29,539	39	90,841-	120-
1999	104,871	165,211	158	25,386	24	139,825-	133-
2000	319,044	262,859	82	54,092	17	208,766-	65-
2001	257,333	158,560	62	38,102	15	120,458-	47-
2002	152,976	253,829	166	11,607-	8-	265,437-	174-
2003	125,438	176,126	140	6,038	5	170,088-	136-
2004	175,047	104,301	60	1,166-	1-	105,467-	60-
2005	255,447	150,275	59		0	150,275-	59-
2006	337,151	745,241	221		0	745,241-	221-
2007	166,126	108,684	65		0	108,684-	65-
2008	271,243	232,212	86	7,978	3	224,235-	83-
2009	201,696	116,518	58	500	0	116,018-	58-
2010	302,079	277,114	92		0	277,114-	92-
2011	313,030	141,818	45		0	141,818-	45-
2012	509,250	416,348	82	13,207	3	403,141-	79-
2013	355,254	382,779	108	2,518	1	380,261-	107-
2014	471,746	559,641	119	3,145	1	556,496-	118-
2015	463,392	535,192	115	15,808	3	519,384-	112-
2016	484,783	543,565	112		0	543,565-	112-
2017	538,075	684,959	127		0	684,959-	127-
2018	855,040	507,731	59		0	507,731-	59-
2019	575,444	512,347	89		0	512,347-	89-
2020	1,073,806	639,636	60		0	639,636-	60-
2021	1,002,514	593,854	59		0	593,854-	59-
2022	729,603	513,374	70		0	513,374-	70-
TOTAL	11,113,517	9,967,082	90	585,497	5	9,381,585-	84-
THREE-YEAR MOVING AVERAGES							
90-92	143,029	133,683	93	60,811	43	72,873-	51-
91-93	122,467	125,082	102	47,708	39	77,374-	63-
92-94	133,495	133,017	100	57,714	43	75,303-	56-
93-95	125,832	127,573	101	52,746	42	74,827-	59-

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 364.00 POLES, TOWERS AND FIXTURES

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
94-96	123,792	134,557	109	43,097	35	91,461-	74-
95-97	93,258	125,746	135	30,816	33	94,930-	102-
96-98	88,848	133,713	150	30,275	34	103,438-	116-
97-99	87,552	137,508	157	34,715	40	102,793-	117-
98-00	166,468	182,817	110	36,339	22	146,478-	88-
99-01	227,083	195,543	86	39,193	17	156,350-	69-
00-02	243,118	225,083	93	26,862	11	198,220-	82-
01-03	178,582	196,172	110	10,844	6	185,328-	104-
02-04	151,154	178,085	118	2,245-	1-	180,331-	119-
03-05	185,311	143,567	77	1,624	1	141,943-	77-
04-06	255,882	333,272	130	389-	0	333,661-	130-
05-07	252,908	334,733	132		0	334,733-	132-
06-08	258,173	362,046	140	2,659	1	359,387-	139-
07-09	213,022	152,471	72	2,826	1	149,645-	70-
08-10	258,339	208,615	81	2,826	1	205,789-	80-
09-11	272,268	178,483	66	167	0	178,317-	65-
10-12	374,786	278,427	74	4,402	1	274,024-	73-
11-13	392,512	313,648	80	5,242	1	308,407-	79-
12-14	445,417	452,923	102	6,290	1	446,633-	100-
13-15	430,131	492,537	115	7,157	2	485,380-	113-
14-16	473,307	546,132	115	6,318	1	539,815-	114-
15-17	495,417	587,905	119	5,269	1	582,636-	118-
16-18	625,966	578,752	92		0	578,752-	92-
17-19	656,186	568,346	87		0	568,346-	87-
18-20	834,763	553,238	66		0	553,238-	66-
19-21	883,921	581,946	66		0	581,946-	66-
20-22	935,308	582,288	62		0	582,288-	62-
FIVE-YEAR AVERAGE							
18-22	847,281	553,389	65		0	553,389-	65-

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 365.00 OVERHEAD CONDUCTORS AND DEVICES

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
1990	130,163	101,783	78	71,823	55	29,960-	23-
1991	151,756	82,699	54	53,448	35	29,251-	19-
1992	231,162	109,904	48	53,305	23	56,599-	24-
1993	86,011	83,297	97	28,034	33	55,263-	64-
1994	356,811	209,429	59	44,273	12	165,156-	46-
1995	147,644	96,013	65	14,061	10	81,952-	56-
1996	96,433	110,653	115	8,394	9	102,258-	106-
1997	84,431	62,995	75	45,570	54	17,425-	21-
1998	110,491	128,426	116	30,043	27	98,383-	89-
1999	62,303	85,712	138	15,260	24	70,452-	113-
2000	234,095	198,616	85	11,524	5	187,092-	80-
2001	137,375	87,384	64	8,722	6	78,662-	57-
2002	171,924	150,087	87	11,342-	7-	161,429-	94-
2003	146,964	93,942	64	3,079	2	90,862-	62-
2004	239,483	55,840	23	176	0	55,665-	23-
2005	429,550	77,304	18	18,177	4	59,128-	14-
2006	224,940	99,044	44	128-	0	99,172-	44-
2007	478,006	91,912	19	3,711	1	88,201-	18-
2008	252,287	113,611	45	5,583	2	108,029-	43-
2009	462,494	75,367	16	3,563	1	71,804-	16-
2010	671,050	215,658	32	79,789	12	135,869-	20-
2011	242,069	181,081	75	3,993	2	177,088-	73-
2012	821,614	346,495	42	8,241	1	338,254-	41-
2013	571,545	240,971	42	1,338	0	239,633-	42-
2014	1,467,046	338,101	23	18,825	1	319,276-	22-
2015	720,005	372,884	52	7,430	1	365,454-	51-
2016	827,992	401,078	48	24,036	3	377,042-	46-
2017	756,095	399,398	53	66,982	9	332,416-	44-
2018	1,265,794	343,176	27	53,828	4	289,348-	23-
2019	951,882	220,192	23	67,596	7	152,596-	16-
2020	2,490,781	512,958	21	118,942	5	394,016-	16-
2021	2,248,127	251,846	11	169,511	8	82,335-	4-
2022	1,042,481	273,199	26	120,730	12	152,469-	15-
TOTAL	18,310,805	6,211,053	34	1,148,514	6	5,062,539-	28-
THREE-YEAR MOVING AVERAGES							
90-92	171,027	98,129	57	59,525	35	38,603-	23-
91-93	156,310	91,967	59	44,929	29	47,038-	30-
92-94	224,661	134,210	60	41,871	19	92,339-	41-
93-95	196,822	129,580	66	28,789	15	100,791-	51-

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 365.00 OVERHEAD CONDUCTORS AND DEVICES

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
94-96	200,296	138,698	69	22,243	11	116,456-	58-
95-97	109,503	89,887	82	22,675	21	67,212-	61-
96-98	97,118	100,691	104	28,002	29	72,689-	75-
97-99	85,742	92,377	108	30,291	35	62,086-	72-
98-00	135,630	137,584	101	18,942	14	118,642-	87-
99-01	144,591	123,904	86	11,835	8	112,069-	78-
00-02	181,131	145,362	80	2,968	2	142,394-	79-
01-03	152,087	110,471	73	153	0	110,318-	73-
02-04	186,124	99,956	54	2,696-	1-	102,652-	55-
03-05	271,999	75,695	28	7,144	3	68,551-	25-
04-06	297,991	77,396	26	6,075	2	71,321-	24-
05-07	377,499	89,420	24	7,253	2	82,167-	22-
06-08	318,411	101,522	32	3,055	1	98,467-	31-
07-09	397,596	93,630	24	4,285	1	89,345-	22-
08-10	461,944	134,879	29	29,645	6	105,234-	23-
09-11	458,538	157,368	34	29,115	6	128,254-	28-
10-12	578,244	247,745	43	30,674	5	217,070-	38-
11-13	545,076	256,182	47	4,524	1	251,658-	46-
12-14	953,402	308,523	32	9,468	1	299,055-	31-
13-15	919,532	317,319	35	9,198	1	308,121-	34-
14-16	1,005,014	370,688	37	16,764	2	353,924-	35-
15-17	768,031	391,120	51	32,816	4	358,304-	47-
16-18	949,960	381,217	40	48,282	5	332,936-	35-
17-19	991,257	320,922	32	62,802	6	258,120-	26-
18-20	1,569,486	358,775	23	80,122	5	278,653-	18-
19-21	1,896,930	328,332	17	118,683	6	209,649-	11-
20-22	1,927,130	346,001	18	136,394	7	209,607-	11-
FIVE-YEAR AVERAGE							
18-22	1,599,813	320,274	20	106,121	7	214,153-	13-

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 366.00 UNDERGROUND CONDUIT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
1990	4,883	1,242	25	86	2	1,157-	24-
1991	5,434	813	15	1,240	23	427	8
1992	6,735	1,709	25	202	3	1,507-	22-
1993	4,067	868	21	232	6	636-	16-
1994	2,381	1,146	48	191	8	955-	40-
1995	3,502	1,826	52		0	1,826-	52-
1996	2,191	1,023	47	38	2	985-	45-
1997	3,123	1,376	44	144-	5-	1,520-	49-
1998	2,398	4,182	174	13	1	4,170-	174-
1999	1,076	1,293	120	135	13	1,158-	108-
2000	25,567	6,658	26	728-	3-	7,386-	29-
2001	23,911	6,039	25	164	1	5,875-	25-
2002	15,344	12,814	84	525-	3-	13,339-	87-
2003	8,059	14,659	182	540	7	14,119-	175-
2004	31,167	7,293	23		0	7,293-	23-
2005	256,689	8,093	3		0	8,093-	3-
2006	38,965	10,263	26		0	10,263-	26-
2007	43,821	6,677	15		0	6,677-	15-
2008	14,570	5,052	35		0	5,052-	35-
2009	24,049	3,547	15		0	3,547-	15-
2010	8,886	2,980	34		0	2,980-	34-
2011	2,647	359	14		0	359-	14-
2012	32,891	3,086	9		0	3,086-	9-
2013	1,862	3,498	188	651	35	2,847-	153-
2014	29,761		0		0		0
2015	30,823	2,017	7		0	2,017-	7-
2016	166,994	11,051	7		0	11,051-	7-
2017	50,886	24,095	47		0	24,095-	47-
2018							
2019							
2020							
2021	8,319		0		0		0
2022		297				297-	
TOTAL	850,998	143,958	17	2,095	0	141,863-	17-
THREE-YEAR MOVING AVERAGES							
90-92	5,684	1,255	22	509	9	746-	13-
91-93	5,412	1,130	21	558	10	572-	11-
92-94	4,394	1,241	28	208	5	1,033-	24-
93-95	3,316	1,280	39	141	4	1,139-	34-

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 366.00 UNDERGROUND CONDUIT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
94-96	2,691	1,332	49	76	3	1,255-	47-
95-97	2,938	1,408	48	36-	1-	1,444-	49-
96-98	2,570	2,194	85	31-	1-	2,225-	87-
97-99	2,199	2,284	104	1	0	2,283-	104-
98-00	9,680	4,045	42	193-	2-	4,238-	44-
99-01	16,851	4,664	28	143-	1-	4,806-	29-
00-02	21,607	8,504	39	363-	2-	8,867-	41-
01-03	15,771	11,171	71	60	0	11,111-	70-
02-04	18,190	11,589	64	5	0	11,583-	64-
03-05	98,638	10,015	10	180	0	9,835-	10-
04-06	108,940	8,549	8		0	8,549-	8-
05-07	113,158	8,344	7		0	8,344-	7-
06-08	32,452	7,331	23		0	7,331-	23-
07-09	27,480	5,092	19		0	5,092-	19-
08-10	15,835	3,860	24		0	3,860-	24-
09-11	11,860	2,295	19		0	2,295-	19-
10-12	14,808	2,142	14		0	2,142-	14-
11-13	12,467	2,314	19	217	2	2,097-	17-
12-14	21,505	2,195	10	217	1	1,978-	9-
13-15	20,815	1,838	9	217	1	1,621-	8-
14-16	75,859	4,356	6		0	4,356-	6-
15-17	82,901	12,388	15		0	12,388-	15-
16-18	72,627	11,715	16		0	11,715-	16-
17-19	16,962	8,032	47		0	8,032-	47-
18-20							
19-21	2,773		0		0		0
20-22	2,773	99	4		0	99-	4-
FIVE-YEAR AVERAGE							
18-22	1,664	59	4		0	59-	4-

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 367.00 UNDERGROUND CONDUCTORS AND DEVICES

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
1990	40,906	11,062	27	11,140	27	78	0
1991	99,467	16,798	17	14,078	14	2,721-	3-
1992	103,038	13,338	13	22,969	22	9,631	9
1993	76,875	16,839	22	21,252	28	4,413	6
1994	82,686	41,675	50	33,314	40	8,361-	10-
1995	30,955	11,432	37	11,442	37	9	0
1996	86,616	168	0	20,199	23	20,031	23
1997	19,986	15,689	78	2,050-	10-	17,739-	89-
1998	40,852	19,419	48	1,113	3	18,306-	45-
1999	25,924	16,470	64	10,412	40	6,058-	23-
2000	363,283	83,551	23	9,808	3	73,743-	20-
2001	406,663	15,549	4	391	0	15,158-	4-
2002	268,381	41,123	15	1,259-	0	42,382-	16-
2003	79,223	16,033	20	587	1	15,446-	19-
2004	268,409	13,865	5		0	13,865-	5-
2005	341,686	53,138	16		0	53,138-	16-
2006	495,529	47,715	10		0	47,715-	10-
2007	225,558	27,527	12		0	27,527-	12-
2008	288,350	36,784	13		0	36,784-	13-
2009	412,431	34,961	8	7,180	2	27,781-	7-
2010	996,817	56,467	6	10,500	1	45,967-	5-
2011	432,977	13,891	3		0	13,891-	3-
2012	712,100	124,916	18	48,871	7	76,045-	11-
2013	470,403	180,322	38		0	180,322-	38-
2014	636,969	176,869	28	6,697	1	170,172-	27-
2015	574,801	210,468	37	185	0	210,283-	37-
2016	1,028,795	165,703	16		0	165,703-	16-
2017	1,350,396	504,232	37		0	504,232-	37-
2018	448,484	287,013	64		0	287,013-	64-
2019	420,700	62,726	15		0	62,726-	15-
2020	566,004	78,663	14		0	78,663-	14-
2021	619,107	82,572	13		0	82,572-	13-
2022	402,235	19,979	5		0	19,979-	5-
TOTAL	12,416,608	2,496,961	20	226,830	2	2,270,131-	18-
THREE-YEAR MOVING AVERAGES							
90-92	81,137	13,733	17	16,062	20	2,329	3
91-93	93,127	15,659	17	19,433	21	3,774	4
92-94	87,533	23,951	27	25,845	30	1,894	2
93-95	63,505	23,316	37	22,003	35	1,313-	2-

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 367.00 UNDERGROUND CONDUCTORS AND DEVICES

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
94-96	66,752	17,759	27	21,652	32	3,893	6
95-97	45,852	9,096	20	9,864	22	767	2
96-98	49,151	11,758	24	6,421	13	5,338-	11-
97-99	28,921	17,192	59	3,158	11	14,034-	49-
98-00	143,353	39,813	28	7,111	5	32,702-	23-
99-01	265,290	38,523	15	6,870	3	31,653-	12-
00-02	346,109	46,741	14	2,980	1	43,761-	13-
01-03	251,423	24,235	10	93-	0	24,329-	10-
02-04	205,338	23,674	12	224-	0	23,898-	12-
03-05	229,773	27,679	12	196	0	27,483-	12-
04-06	368,541	38,239	10		0	38,239-	10-
05-07	354,258	42,793	12		0	42,793-	12-
06-08	336,479	37,342	11		0	37,342-	11-
07-09	308,780	33,091	11	2,393	1	30,697-	10-
08-10	565,866	42,737	8	5,893	1	36,844-	7-
09-11	614,075	35,106	6	5,893	1	29,213-	5-
10-12	713,965	65,091	9	19,790	3	45,301-	6-
11-13	538,493	106,377	20	16,290	3	90,086-	17-
12-14	606,490	160,703	26	18,523	3	142,180-	23-
13-15	560,724	189,220	34	2,294	0	186,926-	33-
14-16	746,855	184,347	25	2,294	0	182,053-	24-
15-17	984,664	293,468	30	62	0	293,406-	30-
16-18	942,559	318,983	34		0	318,983-	34-
17-19	739,860	284,657	38		0	284,657-	38-
18-20	478,396	142,801	30		0	142,801-	30-
19-21	535,270	74,654	14		0	74,654-	14-
20-22	529,116	60,405	11		0	60,405-	11-
FIVE-YEAR AVERAGE							
18-22	491,306	106,191	22		0	106,191-	22-

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 368.00 LINE TRANSFORMERS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
1990	154,992	47,863	31	24,189	16	23,674-	15-
1991	136,461	64,386	47	14,700	11	49,686-	36-
1992	159,497	48,124	30	16,042	10	32,083-	20-
1993	137,905	60,549	44	10,395	8	50,154-	36-
1994	145,312	55,400	38	15,164	10	40,236-	28-
1995	131,489	45,287	34	36,649	28	8,637-	7-
1996	83,101	64,880	78	18,334	22	46,546-	56-
1997	84,831	91,837	108	25,360	30	66,477-	78-
1998	849,635	130,164	15	66,491	8	63,673-	7-
1999	30,048	51,504	171	5,054	17	46,449-	155-
2000	105,038	113,518	108	24,644	23	88,875-	85-
2001	356,843	161,799	45	5,326	1	156,473-	44-
2002	1,690	63,898		12,251-	725-	76,148-	
2003		1,718				1,718-	
2004	63,179		0	750	1	750	1
2005	124,641		0	914	1	914	1
2006	6,195		0		0		0
2007	72,702	2,224	3		0	2,224-	3-
2008	42,921		0	9,391	22	9,391	22
2009	19,657	4,759	24		0	4,759-	24-
2010	583,767	1,834	0		0	1,834-	0
2011	7,100	447	6	66,576	938	66,129	931
2012	9,295	31,036	334	51,181	551	20,144	217
2013	476,800	66,458	14	68,532	14	2,074	0
2014		4,840		94,594		89,754	
2015	11,448	581	5	71,621	626	71,039	621
2016	324,022	622-	0	49,081	15	49,703	15
2017		12,439		29,018		16,579	
2018	2,300,920	13,760	1	33,052	1	19,293	1
2019	33,284	32,129	97	41,327	124	9,197	28
2020		23,590		45,743		22,153	
2021		16,888		76,129		59,241	
2022	500,651	48,924	10	65,643	13	16,719	3
TOTAL	6,953,427	1,260,216	18	953,649	14	306,566-	4-
THREE-YEAR MOVING AVERAGES							
90-92	150,317	53,458	36	18,310	12	35,148-	23-
91-93	144,621	57,686	40	13,712	9	43,974-	30-
92-94	147,571	54,691	37	13,867	9	40,824-	28-
93-95	138,235	53,745	39	20,736	15	33,009-	24-

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 368.00 LINE TRANSFORMERS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
94-96	119,968	55,189	46	23,382	19	31,807-	27-
95-97	99,807	67,335	67	26,781	27	40,554-	41-
96-98	339,189	95,627	28	36,728	11	58,899-	17-
97-99	321,505	91,169	28	32,302	10	58,867-	18-
98-00	328,240	98,396	30	32,063	10	66,332-	20-
99-01	163,976	108,941	66	11,675	7	97,266-	59-
00-02	154,524	113,072	73	5,906	4	107,165-	69-
01-03	119,511	75,805	63	2,308-	2-	78,113-	65-
02-04	21,623	21,872	101	3,834-	18-	25,706-	119-
03-05	62,607	573	1	555	1	18-	0
04-06	64,672		0	555	1	555	1
05-07	67,846	741	1	305	0	437-	1-
06-08	40,606	741	2	3,130	8	2,389	6
07-09	45,094	2,328	5	3,130	7	803	2
08-10	215,449	2,198	1	3,130	1	933	0
09-11	203,508	2,347	1	22,192	11	19,845	10
10-12	200,054	11,106	6	39,252	20	28,146	14
11-13	164,398	32,647	20	62,096	38	29,449	18
12-14	162,032	34,112	21	71,436	44	37,324	23
13-15	162,749	23,960	15	78,249	48	54,289	33
14-16	111,823	1,600	1	71,765	64	70,166	63
15-17	111,823	4,133	4	49,906	45	45,774	41
16-18	874,981	8,525	1	37,050	4	28,525	3
17-19	778,068	19,443	2	34,466	4	15,023	2
18-20	778,068	23,160	3	40,041	5	16,881	2
19-21	11,095	24,202	218	54,400	490	30,197	272
20-22	166,884	29,801	18	62,505	37	32,704	20
FIVE-YEAR AVERAGE							
18-22	566,971	27,058	5	52,379	9	25,321	4

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNTS 369.10 AND 369.20 SERVICES

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
1990	31,533	37,286	118	12,874	41	24,413-	77-
1991	42,686	57,590	135	14,879	35	42,711-	100-
1992	31,101	51,921	167	12,009	39	39,912-	128-
1993	38,269	59,281	155	9,218	24	50,063-	131-
1994	35,022	62,609	179	6,448	18	56,162-	160-
1995	30,474	41,627	137	1,664	5	39,963-	131-
1996	26,242	58,106	221	4,302	16	53,804-	205-
1997	40,320	94,561	235	2,653	7	91,908-	228-
1998	26,481	45,486	172	3,937	15	41,549-	157-
1999	96,474	69,711	72	3,839	4	65,872-	68-
2000	237,299	86,500	36	4,440	2	82,060-	35-
2001	212,402	55,799	26	12,599	6	43,200-	20-
2002	26,672	76,774	288	2,307-	9-	79,080-	296-
2003	48,145	61,527	128	157	0	61,369-	127-
2004	21,648	59,837	276	3,001	14	56,837-	263-
2005	21,271	68,797	323		0	68,797-	323-
2006	29,963	68,336	228		0	68,336-	228-
2007	22,756	60,903	268		0	60,903-	268-
2008	34,596	71,683	207		0	71,683-	207-
2009	56,034	40,071	72		0	40,071-	72-
2010	357,198	70,608	20		0	70,608-	20-
2011	123,907	26,736	22		0	26,736-	22-
2012	124,973	64,673	52		0	64,673-	52-
2013	90,842	61,653	68		0	61,653-	68-
2014	115,121	49,214	43	4,624	4	44,589-	39-
2015	176,971	78,847	45		0	78,847-	45-
2016	122,223	63,321	52		0	63,321-	52-
2017	360,647	74,442	21		0	74,442-	21-
2018	148,129	57,794	39		0	57,794-	39-
2019	157,209	75,202	48		0	75,202-	48-
2020	172,365	46,171	27		0	46,171-	27-
2021	185,670	64,946	35		0	64,946-	35-
2022	143,700	70,949	49		0	70,949-	49-
TOTAL	3,388,341	2,032,960	60	94,336	3	1,938,624-	57-
THREE-YEAR MOVING AVERAGES							
90-92	35,107	48,932	139	13,254	38	35,678-	102-
91-93	37,352	56,264	151	12,035	32	44,229-	118-
92-94	34,798	57,937	166	9,225	27	48,712-	140-
93-95	34,588	54,506	158	5,777	17	48,729-	141-

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNTS 369.10 AND 369.20 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							
94-96	30,579	54,114	177	4,138	14	49,976-	163-
95-97	32,346	64,765	200	2,873	9	61,892-	191-
96-98	31,015	66,051	213	3,630	12	62,421-	201-
97-99	54,425	69,919	128	3,476	6	66,443-	122-
98-00	120,085	67,232	56	4,072	3	63,161-	53-
99-01	182,058	70,670	39	6,959	4	63,711-	35-
00-02	158,791	73,024	46	4,911	3	68,114-	43-
01-03	95,739	64,700	68	3,483	4	61,217-	64-
02-04	32,155	66,046	205	284	1	65,762-	205-
03-05	30,355	63,387	209	1,053	3	62,334-	205-
04-06	24,294	65,657	270	1,000	4	64,656-	266-
05-07	24,663	66,012	268		0	66,012-	268-
06-08	29,105	66,974	230		0	66,974-	230-
07-09	37,795	57,552	152		0	57,552-	152-
08-10	149,276	60,787	41		0	60,787-	41-
09-11	179,046	45,805	26		0	45,805-	26-
10-12	202,026	54,006	27		0	54,006-	27-
11-13	113,241	51,021	45		0	51,021-	45-
12-14	110,312	58,513	53	1,541	1	56,972-	52-
13-15	127,645	63,238	50	1,541	1	61,696-	48-
14-16	138,105	63,794	46	1,541	1	62,253-	45-
15-17	219,947	72,203	33		0	72,203-	33-
16-18	210,333	65,186	31		0	65,186-	31-
17-19	221,995	69,146	31		0	69,146-	31-
18-20	159,234	59,723	38		0	59,723-	38-
19-21	171,748	62,106	36		0	62,106-	36-
20-22	167,245	60,689	36		0	60,689-	36-
FIVE-YEAR AVERAGE							
18-22	161,415	63,013	39		0	63,013-	39-

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 370.00 METERS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
1990	90,679	1,755	2	2,294	3	539	1
1991	66,881	822	1	661	1	161-	0
1992	89,256	705	1	276	0	429-	0
1993	62,624	454	1	818	1	364	1
1994	174,762	8,060	5	610	0	7,450-	4-
1995	250,454	1,522	1	2,134-	1-	3,655-	1-
1996	299,174	933	0		0	933-	0
1997	408,823	12,897	3	4,868	1	8,028-	2-
1998	226,915	126	0		0	126-	0
1999	148,638		0		0		0
2000	195,183		0		0		0
2001	226,785		0		0		0
2002	6,280		0		0		0
2003	33,323	770	2		0	770-	2-
2004	21,125		0		0		0
2005	103,519		0		0		0
2006	41,656	9,330	22		0	9,330-	22-
2007	50,740		0		0		0
2008	77,278	5,151	7		0	5,151-	7-
2009	60,751	8,556	14		0	8,556-	14-
2010	136,297	327	0		0	327-	0
2011	118,810	90,191	76		0	90,191-	76-
2012	107,062	16,480	15		0	16,480-	15-
2013	79,647	17,912	22		0	17,912-	22-
2014		22,277				22,277-	
2015		26,867				26,867-	
2016	341,276	25,069	7		0	25,069-	7-
2017		30,037				30,037-	
2018	819,121	21,979	3		0	21,979-	3-
2019	6,495,528	442,807	7		0	442,807-	7-
2020	1,753,787	56,160	3		0	56,160-	3-
2021	463,246	772,699	167		0	772,699-	167-
2022	79,244	1,489-	2-		0	1,489	2
TOTAL	13,028,863	1,572,397	12	7,393	0	1,565,004-	12-
THREE-YEAR MOVING AVERAGES							
90-92	82,272	1,094	1	1,077	1	17-	0
91-93	72,920	660	1	585	1	75-	0
92-94	108,880	3,073	3	568	1	2,505-	2-
93-95	162,613	3,345	2	235-	0	3,581-	2-

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 370.00 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							
94-96	241,463	3,505	1	508-	0	4,013-	2-
95-97	319,484	5,117	2	912	0	4,206-	1-
96-98	311,637	4,652	1	1,623	1	3,029-	1-
97-99	261,459	4,341	2	1,623	1	2,718-	1-
98-00	190,245	42	0		0	42-	0
99-01	190,202		0		0		0
00-02	142,749		0		0		0
01-03	88,796	257	0		0	257-	0
02-04	20,243	257	1		0	257-	1-
03-05	52,656	257	0		0	257-	0
04-06	55,433	3,110	6		0	3,110-	6-
05-07	65,305	3,110	5		0	3,110-	5-
06-08	56,558	4,827	9		0	4,827-	9-
07-09	62,923	4,569	7		0	4,569-	7-
08-10	91,442	4,678	5		0	4,678-	5-
09-11	105,286	33,025	31		0	33,025-	31-
10-12	120,723	35,666	30		0	35,666-	30-
11-13	101,839	41,528	41		0	41,528-	41-
12-14	62,236	18,890	30		0	18,890-	30-
13-15	26,549	22,352	84		0	22,352-	84-
14-16	113,759	24,738	22		0	24,738-	22-
15-17	113,759	27,325	24		0	27,325-	24-
16-18	386,799	25,695	7		0	25,695-	7-
17-19	2,438,216	164,941	7		0	164,941-	7-
18-20	3,022,812	173,648	6		0	173,648-	6-
19-21	2,904,187	423,889	15		0	423,889-	15-
20-22	765,426	275,790	36		0	275,790-	36-
FIVE-YEAR AVERAGE							
18-22	1,922,185	258,431	13		0	258,431-	13-

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 371.00 INSTALLATIONS ON CUSTOMERS' PREMISES

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
1990	18,458	6,194	34	7,149	39	955	5
1991	22,813	6,549	29	7,554	33	1,005	4
1992	21,260	9,430	44	8,590	40	840-	4-
1993	25,711	9,962	39	7,520	29	2,442-	9-
1994	21,200	6,314	30	5,587	26	727-	3-
1995	21,069	277-	1-	637	3	914	4
1996	12,747	52-	0		0	52	0
1997	14,108	11,186	79	9,203	65	1,982-	14-
1998	13,440	10,785	80	8,264	61	2,521-	19-
1999	3,540	805	23	254	7	550-	16-
2000	35,377	13,501	38	3,784	11	9,716-	27-
2001	38,160	11,712	31	5,132	13	6,580-	17-
2002	108,142	16,613	15	5,310-	5-	21,923-	20-
2003	196,274	8,210	4		0	8,210-	4-
2004	227,864	9,933	4		0	9,933-	4-
2005	291,476	14,519	5		0	14,519-	5-
2006	338,870	15,023	4		0	15,023-	4-
2007	154,940	14,019	9		0	14,019-	9-
2008	155,705	17,616	11		0	17,616-	11-
2009	117,834	10,830	9		0	10,830-	9-
2010	98,934	16,406	17		0	16,406-	17-
2011	33,481	7,288	22		0	7,288-	22-
2012	9,462	4,666	49		0	4,666-	49-
2013	12,510	9,186	73		0	9,186-	73-
2014	10,367	3,686	36		0	3,686-	36-
2015	18,660	11,450	61		0	11,450-	61-
2016	19,995	9,412	47		0	9,412-	47-
2017	20,483	6,756	33		0	6,756-	33-
2018	25,019	5,409	22		0	5,409-	22-
2019	25,143	7,366	29		0	7,366-	29-
2020	26,093	6,853	26		0	6,853-	26-
2021	38,242	9,877	26		0	9,877-	26-
2022	31,888	12,100	38		0	12,100-	38-
TOTAL	2,209,266	303,327	14	58,367	3	244,960-	11-
THREE-YEAR MOVING AVERAGES							
90-92	20,843	7,391	35	7,765	37	373	2
91-93	23,261	8,647	37	7,888	34	759-	3-
92-94	22,724	8,569	38	7,233	32	1,336-	6-
93-95	22,660	5,333	24	4,581	20	752-	3-

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 371.00 INSTALLATIONS ON CUSTOMERS' PREMISES

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
94-96	18,339	1,995	11	2,075	11	80	0
95-97	15,975	3,619	23	3,280	21	339-	2-
96-98	13,432	7,306	54	5,822	43	1,484-	11-
97-99	10,363	7,592	73	5,907	57	1,685-	16-
98-00	17,452	8,363	48	4,101	23	4,263-	24-
99-01	25,692	8,672	34	3,057	12	5,615-	22-
00-02	60,560	13,942	23	1,202	2	12,740-	21-
01-03	114,192	12,179	11	59-	0	12,238-	11-
02-04	177,427	11,585	7	1,770-	1-	13,355-	8-
03-05	238,538	10,887	5		0	10,887-	5-
04-06	286,070	13,158	5		0	13,158-	5-
05-07	261,762	14,520	6		0	14,520-	6-
06-08	216,505	15,553	7		0	15,553-	7-
07-09	142,826	14,155	10		0	14,155-	10-
08-10	124,157	14,951	12		0	14,951-	12-
09-11	83,416	11,508	14		0	11,508-	14-
10-12	47,293	9,453	20		0	9,453-	20-
11-13	18,485	7,047	38		0	7,047-	38-
12-14	10,780	5,846	54		0	5,846-	54-
13-15	13,846	8,107	59		0	8,107-	59-
14-16	16,341	8,182	50		0	8,182-	50-
15-17	19,713	9,206	47		0	9,206-	47-
16-18	21,832	7,192	33		0	7,192-	33-
17-19	23,548	6,511	28		0	6,511-	28-
18-20	25,418	6,543	26		0	6,543-	26-
19-21	29,826	8,032	27		0	8,032-	27-
20-22	32,074	9,610	30		0	9,610-	30-
FIVE-YEAR AVERAGE							
18-22	29,277	8,321	28		0	8,321-	28-

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 373.00 STREET LIGHTING AND SIGNAL SYSTEMS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
1990	52,709	21,557	41	8,953	17	12,604-	24-
1991	37,510	15,716	42	9,639	26	6,078-	16-
1992	62,289	17,797	29	12,442	20	5,355-	9-
1993	18,018	4,946	27	3,803	21	1,143-	6-
1994	77,648	23,948	31	19,378	25	4,569-	6-
1995	11,713	2,171	19	1,986	17	185-	2-
1996	23,904	5,389	23	1,891	8	3,498-	15-
1997	92,868	18,785	20	19,739	21	953	1
1998	69,447	19,862	29	3,433	5	16,429-	24-
1999	2,779	603	22	1,140	41	537	19
2000	49,513	23,340	47	2,468	5	20,872-	42-
2001	69,539	36,853	53	22,108	32	14,744-	21-
2002	6,047	20,776	344	1,875-	31-	22,651-	375-
2003	10,176	16,897	166	340	3	16,557-	163-
2004	9,429	32,508	345	238	3	32,270-	342-
2005	11,671	5,805	50	363-	3-	6,168-	53-
2006	11,418	18,677	164	706	6	17,971-	157-
2007	13,159	10,999	84		0	10,999-	84-
2008	32,470	13,736	42		0	13,736-	42-
2009	21,968	17,598	80		0	17,598-	80-
2010	50,778	44,978	89		0	44,978-	89-
2011	29,438	5,968	20		0	5,968-	20-
2012	35,593	59,725	168	520	1	59,204-	166-
2013	17,448	60,738	348	23,168	133	37,570-	215-
2014	26,869	16,579	62	4,624	17	11,955-	44-
2015	51,078	50,467	99		0	50,467-	99-
2016	37,021	77,042	208		0	77,042-	208-
2017	22,695	70,964	313		0	70,964-	313-
2018	54,087	39,654	73		0	39,654-	73-
2019	12,447	4,277	34		0	4,277-	34-
2020	12,957	11,575	89		0	11,575-	89-
2021	10,812	7,927	73	8	0	7,919-	73-
2022	102,980	43,320	42		0	43,320-	42-
TOTAL	1,148,479	821,180	72	134,348	12	686,832-	60-
THREE-YEAR MOVING AVERAGES							
90-92	50,836	18,357	36	10,345	20	8,012-	16-
91-93	39,272	12,820	33	8,628	22	4,192-	11-
92-94	52,652	15,564	30	11,875	23	3,689-	7-
93-95	35,793	10,355	29	8,389	23	1,966-	5-

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 373.00 STREET LIGHTING AND SIGNAL SYSTEMS

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							
94-96	37,755	10,503	28	7,752	21	2,751-	7-
95-97	42,828	8,782	21	7,872	18	910-	2-
96-98	62,073	14,679	24	8,354	13	6,325-	10-
97-99	55,031	13,083	24	8,104	15	4,980-	9-
98-00	40,580	14,602	36	2,347	6	12,255-	30-
99-01	40,610	20,265	50	8,572	21	11,693-	29-
00-02	41,700	26,990	65	7,567	18	19,423-	47-
01-03	28,587	24,842	87	6,858	24	17,984-	63-
02-04	8,551	23,394	274	432-	5-	23,826-	279-
03-05	10,426	18,403	177	71	1	18,332-	176-
04-06	10,839	18,997	175	194	2	18,803-	173-
05-07	12,083	11,827	98	114	1	11,713-	97-
06-08	19,016	14,471	76	235	1	14,236-	75-
07-09	22,533	14,111	63		0	14,111-	63-
08-10	35,072	25,438	73		0	25,438-	73-
09-11	34,061	22,848	67		0	22,848-	67-
10-12	38,603	36,890	96	173	0	36,717-	95-
11-13	27,493	42,144	153	7,896	29	34,248-	125-
12-14	26,637	45,681	171	9,438	35	36,243-	136-
13-15	31,798	42,595	134	9,264	29	33,331-	105-
14-16	38,323	48,029	125	1,541	4	46,488-	121-
15-17	36,931	66,157	179		0	66,157-	179-
16-18	37,934	62,553	165		0	62,553-	165-
17-19	29,743	38,298	129		0	38,298-	129-
18-20	26,497	18,502	70		0	18,502-	70-
19-21	12,072	7,926	66	3	0	7,924-	66-
20-22	42,249	20,941	50	3	0	20,938-	50-
FIVE-YEAR AVERAGE							
18-22	38,657	21,351	55	2	0	21,349-	55-

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 390.10 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
1991	5,886		0		0		0
1992							
1993	2,552	153	6		0	153-	6-
1994	8,485		0		0		0
1995							
1996	66,760	18,338	27		0	18,338-	27-
1997		3,668		53		3,615-	
1998							
1999	9,103		0	12,985	143	12,985	143
2000	392-		0		0		0
2001							
2002							
2003							
2004							
2005	3,237		0		0		0
2006							
2007	16,943	5,102	30		0	5,102-	30-
2008							
2009							
2010	8,111	3,550	44		0	3,550-	44-
2011							
2012	4,003		0		0		0
2013	40,876		0	25,500	62	25,500	62
2014	89,583	50,537	56		0	50,537-	56-
2015							
2016	22,536		0	16,886	75	16,886	75
2017		570				570-	
2018							
2019	3,000		0		0		0
2020	1,585	4,597	290		0	4,597-	290-
2021	162,598	3,984	2		0	3,984-	2-
2022	24,714	2,872	12		0	2,872-	12-
TOTAL	469,580	93,372	20	55,424	12	37,948-	8-
THREE-YEAR MOVING AVERAGES							
91-93	2,813	51	2		0	51-	2-
92-94	3,679	51	1		0	51-	1-
93-95	3,679	51	1		0	51-	1-
94-96	25,082	6,113	24		0	6,113-	24-
95-97	22,253	7,335	33	18	0	7,318-	33-

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 390.10 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
THREE-YEAR MOVING AVERAGES							
96-98	22,253	7,335	33	18	0	7,318-	33-
97-99	3,034	1,223	40	4,346	143	3,123	103
98-00	2,904		0	4,328	149	4,328	149
99-01	2,904		0	4,328	149	4,328	149
00-02	131-		0		0		0
01-03							
02-04							
03-05	1,079		0		0		0
04-06	1,079		0		0		0
05-07	6,727	1,701	25		0	1,701-	25-
06-08	5,648	1,701	30		0	1,701-	30-
07-09	5,648	1,701	30		0	1,701-	30-
08-10	2,704	1,183	44		0	1,183-	44-
09-11	2,704	1,183	44		0	1,183-	44-
10-12	4,038	1,183	29		0	1,183-	29-
11-13	14,960		0	8,500	57	8,500	57
12-14	44,821	16,846	38	8,500	19	8,346-	19-
13-15	43,486	16,846	39	8,500	20	8,346-	19-
14-16	37,373	16,846	45	5,629	15	11,217-	30-
15-17	7,512	190	3	5,629	75	5,439	72
16-18	7,512	190	3	5,629	75	5,439	72
17-19	1,000	190	19		0	190-	19-
18-20	1,528	1,532	100		0	1,532-	100-
19-21	55,728	2,860	5		0	2,860-	5-
20-22	62,966	3,818	6		0	3,818-	6-
FIVE-YEAR AVERAGE							
18-22	38,379	2,291	6		0	2,291-	6-

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCUONT 397.20 COMMUNICATION EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
2003	2,804		0		0		0
2004							
2005	422		0		0		0
2006	129		0		0		0
2007							
2008							
2009							
2010							
2011							
2012	13,934		0		0		0
2013	3,933		0		0		0
2014							
2015							
2016							
2017							
2018	52,527		0		0		0
2019							
2020							
2021	14,991	367	2		0	367-	2-
2022							
TOTAL	88,740	367	0		0	367-	0
THREE-YEAR MOVING AVERAGES							
03-05	1,075		0		0		0
04-06	184		0		0		0
05-07	184		0		0		0
06-08	43		0		0		0
07-09							
08-10							
09-11							
10-12	4,645		0		0		0
11-13	5,956		0		0		0
12-14	5,956		0		0		0
13-15	1,311		0		0		0
14-16							
15-17							
16-18	17,509		0		0		0
17-19	17,509		0		0		0
18-20	17,509		0		0		0

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCUONT 397.20 COMMUNICATION 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							
19-21	4,997	122	2		0	122-	2-
20-22	4,997	122	2		0	122-	2-
FIVE-YEAR AVERAGE							
18-22	13,504	73	1		0	73-	1-

GAS PLANT

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 311.00 LIQUEFIED PETROLEUM GAS EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
1990	501		0		0		0
1991	600		0		0		0
1992	884	574	65		0	574-	65-
1993	1,497	5,181	346	31-	2-	5,212-	348-
1994							
1995	166,552		0		0		0
1996							
1997	411,160		0	75,986-	18-	75,986-	18-
1998							
1999							
2000							
2001							
2002							
2003	194,915		0	193,195	99	193,195	99
2004	215,581		0	63,135	29	63,135	29
2005	183,513		0	35,202	19	35,202	19
2006	181,394	5,726	3	84,808	47	79,082	44
2007							
2008							
2009							
2010	760		0	174,243		174,243	
2011	173,683		0		0		0
2012	51,587	55,350	107		0	55,350-	107-
2013	69,184		0		0		0
2014	1,007,359	7,988	1	273,618	27	265,630	26
2015							
2016							
2017							
2018							
2019							
2020							
2021							
2022							
TOTAL	2,659,169	74,819	3	748,185	28	673,365	25
THREE-YEAR MOVING AVERAGES							
90-92	662	191	29		0	191-	29-
91-93	993	1,918	193	10-	1-	1,929-	194-
92-94	793	1,918	242	10-	1-	1,929-	243-
93-95	56,016	1,727	3	10-	0	1,737-	3-

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 311.00 LIQUEFIED PETROLEUM GAS 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							
94-96	55,517		0		0		0
95-97	192,571		0	25,329-	13-	25,329-	13-
96-98	137,053		0	25,329-	18-	25,329-	18-
97-99	137,053		0	25,329-	18-	25,329-	18-
98-00							
99-01							
00-02							
01-03	64,972		0	64,398	99	64,398	99
02-04	136,832		0	85,443	62	85,443	62
03-05	198,003		0	97,177	49	97,177	49
04-06	193,496	1,909	1	61,048	32	59,140	31
05-07	121,636	1,909	2	40,003	33	38,095	31
06-08	60,465	1,909	3	28,269	47	26,361	44
07-09							
08-10	253		0	58,081		58,081	
09-11	58,148		0	58,081	100	58,081	100
10-12	75,343	18,450	24	58,081	77	39,631	53
11-13	98,151	18,450	19		0	18,450-	19-
12-14	376,043	21,113	6	91,206	24	70,093	19
13-15	358,847	2,663	1	91,206	25	88,543	25
14-16	335,786	2,663	1	91,206	27	88,543	26
15-17							
16-18							
17-19							
18-20							
19-21							
20-22							
FIVE-YEAR AVERAGE							
18-22							

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 367.00 MAINS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
2011	6,765		0		0		0
2012							
2013							
2014							
2015							
2016							
2017							
2018							
2019							
2020							
2021							
2022	239,257	203,078	85		0	203,078-	85-
TOTAL	246,022	203,078	83		0	203,078-	83-
THREE-YEAR MOVING AVERAGES							
11-13	2,255		0		0		0
12-14							
13-15							
14-16							
15-17							
16-18							
17-19							
18-20							
19-21							
20-22	79,752	67,693	85		0	67,693-	85-
FIVE-YEAR AVERAGE							
18-22	47,851	40,616	85		0	40,616-	85-

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 375.00 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
1994		736		34-		769-	
1995	2,839	44	2		0	44-	2-
1996							
1997							
1998							
1999							
2000							
2001							
2002							
2003							
2004							
2005							
2006							
2007							
2008							
2009							
2010							
2011							
2012							
2013	3,360	2,790	83		0	2,790-	83-
2014							
2015							
2016	2,951		0		0		0
2017		5,151				5,151-	
2018							
2019							
2020							
2021							
2022							
TOTAL	9,151	8,720	95	34-	0	8,754-	96-
THREE-YEAR MOVING AVERAGES							
94-96	946	260	27	11-	1-	271-	29-
95-97	946	15	2		0	15-	2-
96-98							
97-99							
98-00							
99-01							
00-02							
01-03							

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 375.00 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
THREE-YEAR MOVING AVERAGES							
02-04							
03-05							
04-06							
05-07							
06-08							
07-09							
08-10							
09-11							
10-12							
11-13	1,120	930	83	0		930-	83-
12-14	1,120	930	83	0		930-	83-
13-15	1,120	930	83	0		930-	83-
14-16	984	0		0		0	
15-17	984	1,717	175	0		1,717-	175-
16-18	984	1,717	175	0		1,717-	175-
17-19		1,717				1,717-	
18-20							
19-21							
20-22							
FIVE-YEAR AVERAGE							
18-22							

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 376.11 MAINS - STEEL

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
1990	66,163	28,432	43	8,880-	13-	37,312-	56-
1991	29,707	9,845	33	2,317	8	7,528-	25-
1992	23,811	6,687	28	195-	1-	6,882-	29-
1993	45,696	9,045	20	304-	1-	9,349-	20-
1994	30,726	8,591	28	1,208-	4-	9,799-	32-
1995	4,788	3,750	78	1,315	27	2,435-	51-
1996	24,421	13,216	54	10,372-	42-	23,588-	97-
1997	28,887	45,237	157	18,014-	62-	63,251-	219-
1998	23,132	51,506	223	134-	1-	51,640-	223-
1999	3,885	15,065	388	1,884-	48-	16,950-	436-
2000	227,194	48,868	22	70,615-	31-	119,482-	53-
2001	238,556	26,670	11	670-	0	27,340-	11-
2002	420,507	160,386	38	32,315	8	128,071-	30-
2003	243,206	38,270	16	2,436	1	35,834-	15-
2004	698,351	24,757	4	336,735	48	311,977	45
2005	10,171	14,462	142		0	14,462-	142-
2006	48,805	25,391	52		0	25,391-	52-
2007	8,018	35,199	439		0	35,199-	439-
2008	12,372	26,301	213		0	26,301-	213-
2009	3,562	6,900	194		0	6,900-	194-
2010	108,442	48,968	45		0	48,968-	45-
2011	50,416	16,135	32		0	16,135-	32-
2012	117,250	70,174	60		0	70,174-	60-
2013	353,485	126,636	36		0	126,636-	36-
2014	31,351	181,519	579	32	0	181,487-	579-
2015	65,682	135,806	207	17,286	26	118,519-	180-
2016	64,088	12,230	19		0	12,230-	19-
2017	20,102	82,776	412		0	82,776-	412-
2018	34,492	69,759	202		0	69,759-	202-
2019	25,628	125,553	490		0	125,553-	490-
2020	44,044	34,462	78		0	34,462-	78-
2021	218,307	58,477	27		0	58,477-	27-
2022	63,041	23,738	38		0	23,738-	38-
TOTAL	3,388,284	1,584,813	47	280,162	8	1,304,651-	39-
THREE-YEAR MOVING AVERAGES							
90-92	39,894	14,988	38	2,253-	6-	17,241-	43-
91-93	33,071	8,526	26	606	2	7,919-	24-
92-94	33,411	8,108	24	569-	2-	8,677-	26-
93-95	27,070	7,129	26	65-	0	7,194-	27-

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 376.11 MAINS - STEEL

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
94-96	19,978	8,519	43	3,421-	17-	11,941-	60-
95-97	19,365	20,735	107	9,023-	47-	29,758-	154-
96-98	25,480	36,653	144	9,507-	37-	46,160-	181-
97-99	18,634	37,270	200	6,677-	36-	43,947-	236-
98-00	84,737	38,480	45	24,211-	29-	62,691-	74-
99-01	156,545	30,201	19	24,390-	16-	54,591-	35-
00-02	295,419	78,641	27	12,990-	4-	91,631-	31-
01-03	300,756	75,109	25	11,360	4	63,748-	21-
02-04	454,021	74,471	16	123,829	27	49,357	11
03-05	317,243	25,830	8	113,057	36	87,227	27
04-06	252,442	21,537	9	112,245	44	90,708	36
05-07	22,332	25,018	112		0	25,018-	112-
06-08	23,065	28,964	126		0	28,964-	126-
07-09	7,984	22,800	286		0	22,800-	286-
08-10	41,458	27,390	66		0	27,390-	66-
09-11	54,140	24,001	44		0	24,001-	44-
10-12	92,036	45,092	49		0	45,092-	49-
11-13	173,717	70,981	41		0	70,981-	41-
12-14	167,362	126,110	75	11	0	126,099-	75-
13-15	150,172	147,987	99	5,773	4	142,214-	95-
14-16	53,707	109,852	205	5,773	11	104,079-	194-
15-17	49,957	76,937	154	5,762	12	71,175-	142-
16-18	39,561	54,922	139		0	54,922-	139-
17-19	26,741	92,696	347		0	92,696-	347-
18-20	34,721	76,591	221		0	76,591-	221-
19-21	95,993	72,830	76		0	72,830-	76-
20-22	108,464	38,892	36		0	38,892-	36-
FIVE-YEAR AVERAGE							
18-22	77,103	62,398	81		0	62,398-	81-

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 376.30 MAINS - PLASTIC

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
2002	18,444	17,962	97	2-	0	17,964-	97-
2003	28,633	67,008	234	1,997	7	65,011-	227-
2004	197,606	3,522	2	138,592	70	135,069	68
2005	31,244	8,471	27		0	8,471-	27-
2006	13,340	14,992	112		0	14,992-	112-
2007	11,316	12,471	110		0	12,471-	110-
2008	3,744	80,672			0	80,672-	
2009	18,923	3,198	17		0	3,198-	17-
2010	32,177	7,640	24		0	7,640-	24-
2011	95,605	8,431	9		0	8,431-	9-
2012	17,995	11,142	62		0	11,142-	62-
2013	118,275	26,900	23		0	26,900-	23-
2014	62,168	158,444	255		0	158,444-	255-
2015	22,103	14,189	64		0	14,189-	64-
2016	47,182	31,855	68		0	31,855-	68-
2017	27,458	32,478	118		0	32,478-	118-
2018	27,212	45,304	166		0	45,304-	166-
2019	3,555	28,515	802		0	28,515-	802-
2020	75,452	10,963	15		0	10,963-	15-
2021	28,551	18,936	66		0	18,936-	66-
2022	38,199	24,392	64		0	24,392-	64-
TOTAL	919,181	627,486	68	140,587	15	486,899-	53-
THREE-YEAR MOVING AVERAGES							
02-04	81,561	29,497	36	46,862	57	17,365	21
03-05	85,828	26,334	31	46,863	55	20,529	24
04-06	80,730	8,995	11	46,197	57	37,202	46
05-07	18,633	11,978	64		0	11,978-	64-
06-08	9,467	36,045	381		0	36,045-	381-
07-09	11,327	32,114	284		0	32,114-	284-
08-10	18,281	30,504	167		0	30,504-	167-
09-11	48,902	6,423	13		0	6,423-	13-
10-12	48,592	9,071	19		0	9,071-	19-
11-13	77,291	15,491	20		0	15,491-	20-
12-14	66,146	65,495	99		0	65,495-	99-
13-15	67,515	66,511	99		0	66,511-	99-
14-16	43,817	68,163	156		0	68,163-	156-
15-17	32,248	26,174	81		0	26,174-	81-
16-18	33,951	36,546	108		0	36,546-	108-
17-19	19,408	35,432	183		0	35,432-	183-

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 376.30 MAINS - PLASTIC

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
18-20	35,406	28,261	80		0	28,261-	80-
19-21	35,853	19,471	54		0	19,471-	54-
20-22	47,401	18,097	38		0	18,097-	38-
FIVE-YEAR AVERAGE							
18-22	34,594	25,622	74		0	25,622-	74-

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 378.00 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
1990	622	770	124	1,062-	171-	1,831-	294-
1991	500	100	20		0	100-	20-
1992	420	288	68	1,275-	303-	1,562-	372-
1993	609	135	22	972-	159-	1,107-	182-
1994	301	176	58		0	176-	58-
1995	159	197	124	171-	108-	369-	232-
1996	810		0		0		0
1997	226	1,963	869	2,206-	977-	4,168-	
1998	11,385	14,014	123	8,628-	76-	22,643-	199-
1999		101				101-	
2000	7,646	126	2	22-	0	148-	2-
2001	13,246	2,590	20		0	2,590-	20-
2002							
2003							
2004	24,785		0		0		0
2005	217	68	32		0	68-	32-
2006		2,028				2,028-	
2007	6,847	562	8		0	562-	8-
2008							
2009		546				546-	
2010	1,296	1,815	140		0	1,815-	140-
2011	20,723	4,897	24		0	4,897-	24-
2012	18,839	3,104	16		0	3,104-	16-
2013	78,611	12,245	16		0	12,245-	16-
2014	14,643	931	6		0	931-	6-
2015	24,053	37,146	154		0	37,146-	154-
2016	90,307	78,883	87		0	78,883-	87-
2017	40,056	39,412	98		0	39,412-	98-
2018							
2019	32,567	1,857	6		0	1,857-	6-
2020	12,525	2,524	20		0	2,524-	20-
2021	7,241	49,576	685		0	49,576-	685-
2022	40,154	83,128	207		0	83,128-	207-
TOTAL	448,787	339,182	76	14,336-	3-	353,517-	79-
THREE-YEAR MOVING AVERAGES							
90-92	514	386	75	779-	151-	1,165-	227-
91-93	510	174	34	749-	147-	923-	181-
92-94	444	199	45	749-	169-	948-	214-
93-95	356	169	48	381-	107-	550-	154-

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
94-96	423	124	29	57-	13-	182-	43-
95-97	398	720	181	792-	199-	1,512-	380-
96-98	4,140	5,326	129	3,611-	87-	8,937-	216-
97-99	3,870	5,359	138	3,611-	93-	8,971-	232-
98-00	6,344	4,747	75	2,883-	45-	7,630-	120-
99-01	6,964	939	13	7-	0	946-	14-
00-02	6,964	905	13	7-	0	913-	13-
01-03	4,415	863	20		0	863-	20-
02-04	8,262		0		0		0
03-05	8,334	23	0		0	23-	0
04-06	8,334	699	8		0	699-	8-
05-07	2,355	886	38		0	886-	38-
06-08	2,282	863	38		0	863-	38-
07-09	2,282	369	16		0	369-	16-
08-10	432	787	182		0	787-	182-
09-11	7,340	2,419	33		0	2,419-	33-
10-12	13,619	3,272	24		0	3,272-	24-
11-13	39,391	6,749	17		0	6,749-	17-
12-14	37,364	5,427	15		0	5,427-	15-
13-15	39,102	16,774	43		0	16,774-	43-
14-16	43,001	38,987	91		0	38,987-	91-
15-17	51,472	51,814	101		0	51,814-	101-
16-18	43,454	39,432	91		0	39,432-	91-
17-19	24,208	13,756	57		0	13,756-	57-
18-20	15,031	1,460	10		0	1,460-	10-
19-21	17,444	17,985	103		0	17,985-	103-
20-22	19,973	45,076	226		0	45,076-	226-
FIVE-YEAR AVERAGE							
18-22	18,497	27,417	148		0	27,417-	148-

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 379.00 MEASURING AND REGULATING STATION EQUIPMENT - CITY GATE

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
1991	13,229		0		0		0
1992							
1993							
1994							
1995							
1996							
1997							
1998							
1999							
2000	11,806	7,942	67	1,998-	17-	9,941-	84-
2001							
2002		2,514				2,514-	
2003							
2004							
2005							
2006							
2007		191				191-	
2008							
2009	433		0		0		0
2010							
2011	5,159		0		0		0
2012	29,018	6,933	24		0	6,933-	24-
2013	179,421	28,356	16		0	28,356-	16-
2014							
2015	15,443		0		0		0
2016	79,862	66,582	83		0	66,582-	83-
2017	500	46,762			0	46,762-	
2018	336	213	63		0	213-	63-
2019	12,674	217	2		0	217-	2-
2020	4,000	32,883	822		0	32,883-	822-
2021	6,517	1,052	16		0	1,052-	16-
2022	25,831	151	1		0	151-	1-
TOTAL	384,229	193,795	50	1,998-	1-	195,793-	51-
THREE-YEAR MOVING AVERAGES							
91-93	4,410		0		0		0
92-94							
93-95							
94-96							
95-97							

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 379.00 MEASURING AND REGULATING STATION EQUIPMENT - CITY GATE

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
96-98							
97-99							
98-00	3,935	2,647	67	666-	17-	3,314-	84-
99-01	3,935	2,647	67	666-	17-	3,314-	84-
00-02	3,935	3,485	89	666-	17-	4,152-	105-
01-03		838				838-	
02-04		838				838-	
03-05							
04-06							
05-07		64				64-	
06-08		64				64-	
07-09	144	64	44		0	64-	44-
08-10	144	0			0		0
09-11	1,864	0			0		0
10-12	11,392	2,311	20		0	2,311-	20-
11-13	71,199	11,763	17		0	11,763-	17-
12-14	69,480	11,763	17		0	11,763-	17-
13-15	64,955	9,452	15		0	9,452-	15-
14-16	31,768	22,194	70		0	22,194-	70-
15-17	31,935	37,781	118		0	37,781-	118-
16-18	26,899	37,852	141		0	37,852-	141-
17-19	4,503	15,730	349		0	15,730-	349-
18-20	5,670	11,104	196		0	11,104-	196-
19-21	7,730	11,384	147		0	11,384-	147-
20-22	12,116	11,362	94		0	11,362-	94-
FIVE-YEAR AVERAGE							
18-22	9,872	6,903	70		0	6,903-	70-

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 380.00 SERVICES - STEEL

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
1990	24,079	39,399	164	2,001-	8-	41,400-	172-
1991	18,998	44,491	234	1,511-	8-	46,002-	242-
1992	21,905	51,849	237	3,301-	15-	55,150-	252-
1993	18,037	39,240	218	1,805-	10-	41,045-	228-
1994	37,802	80,056	212	3,445-	9-	83,501-	221-
1995	10,845	2,963	27	53-	0	3,016-	28-
1996	35,750	87,118	244	1,345-	4-	88,463-	247-
1997	30,655	87,542	286	8,114-	26-	95,656-	312-
1998	77,505	145,559	188	5,293-	7-	150,852-	195-
1999	36,963	84,742	229	4,418-	12-	89,161-	241-
2000	592,478	184,747	31	2,873-	0	187,620-	32-
2001	168,058	260,582	155	2,461-	1-	263,043-	157-
2002	45,872	92,889	202	517-	1-	93,407-	204-
2003	73,400	33,714	46	2	0	33,712-	46-
2004	20,024	69,840	349	58	0	69,782-	348-
2005	24,625	63,766	259		0	63,766-	259-
2006	26,926	100,120	372		0	100,120-	372-
2007	22,515	102,344	455		0	102,344-	455-
2008	34,716	96,671	278		0	96,671-	278-
2009	67,089	106,242	158		0	106,242-	158-
2010	65,458	171,295	262		0	171,295-	262-
2011	36,347	57,156	157		0	57,156-	157-
2012	22,684	177,326	782		0	177,326-	782-
2013	36,867	179,222	486		0	179,222-	486-
2014	27,847	219,532	788	26	0	219,506-	788-
2015	28,886	231,393	801		0	231,393-	801-
2016	36,586	267,803	732		0	267,803-	732-
2017	63,382	280,751	443		0	280,751-	443-
2018	39,522	337,916	855		0	337,916-	855-
2019	51,442	340,676	662		0	340,676-	662-
2020	64,099	119,035	186		0	119,035-	186-
2021	68,141	188,124	276		0	188,124-	276-
2022	27,824	192,740	693		0	192,740-	693-
TOTAL	1,957,325	4,536,844	232	37,053-	2-	4,573,897-	234-
THREE-YEAR MOVING AVERAGES							
90-92	21,661	45,246	209	2,271-	10-	47,517-	219-
91-93	19,647	45,193	230	2,206-	11-	47,399-	241-
92-94	25,915	57,048	220	2,850-	11-	59,898-	231-
93-95	22,228	40,753	183	1,768-	8-	42,520-	191-

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 380.00 SERVICES - STEEL

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
94-96	28,132	56,712	202	1,614-	6-	58,327-	207-
95-97	25,750	59,208	230	3,171-	12-	62,379-	242-
96-98	47,970	106,740	223	4,917-	10-	111,657-	233-
97-99	48,374	105,948	219	5,942-	12-	111,890-	231-
98-00	235,649	138,349	59	4,195-	2-	142,544-	60-
99-01	265,833	176,691	66	3,251-	1-	179,942-	68-
00-02	268,803	179,406	67	1,951-	1-	181,357-	67-
01-03	95,777	129,062	135	992-	1-	130,054-	136-
02-04	46,432	65,481	141	153-	0	65,634-	141-
03-05	39,350	55,773	142	20	0	55,753-	142-
04-06	23,858	77,909	327	19	0	77,889-	326-
05-07	24,688	88,743	359		0	88,743-	359-
06-08	28,052	99,712	355		0	99,712-	355-
07-09	41,440	101,752	246		0	101,752-	246-
08-10	55,754	124,736	224		0	124,736-	224-
09-11	56,298	111,564	198		0	111,564-	198-
10-12	41,496	135,259	326		0	135,259-	326-
11-13	31,966	137,901	431		0	137,901-	431-
12-14	29,133	192,026	659	9	0	192,018-	659-
13-15	31,200	210,049	673	9	0	210,040-	673-
14-16	31,106	239,576	770	9	0	239,567-	770-
15-17	42,952	259,982	605		0	259,982-	605-
16-18	46,497	295,490	636		0	295,490-	636-
17-19	51,449	319,781	622		0	319,781-	622-
18-20	51,687	265,876	514		0	265,876-	514-
19-21	61,227	215,945	353		0	215,945-	353-
20-22	53,355	166,633	312		0	166,633-	312-
FIVE-YEAR AVERAGE							
18-22	50,205	235,698	469		0	235,698-	469-

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 380.10 SERVICES - PLASTIC

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
2002	200,027	70,286	35		0	70,286-	35-
2003	81,837	33,436	41		0	33,436-	41-
2004	140,983	38,644	27		0	38,644-	27-
2005	99,492	84,469	85	5	0	84,464-	85-
2006	34,529	58,456	169		0	58,456-	169-
2007	120,164	69,751	58		0	69,751-	58-
2008	40,829	75,469	185		0	75,469-	185-
2009	115,128	55,287	48		0	55,287-	48-
2010	53,580	105,865	198		0	105,865-	198-
2011	32,781	29,061	89		0	29,061-	89-
2012	38,942	73,287	188		0	73,287-	188-
2013	17,951-	59,939	334-		0	59,939-	334
2014	60,184	135,717	226	6	0	135,711-	225-
2015	42,930	108,237	252		0	108,237-	252-
2016	70,688	103,823	147		0	103,823-	147-
2017	68,618	206,425	301	503	1	205,922-	300-
2018	68,814	261,433	380	1,283	2	260,149-	378-
2019	39,573	232,203	587	820	2	231,383-	585-
2020	57,575	96,066	167	352	1	95,714-	166-
2021	70,110	138,649	198	410	1	138,239-	197-
2022	87,342	134,779	154	1,191	1	133,588-	153-
TOTAL	1,506,176	2,171,280	144	4,570	0	2,166,709-	144-
THREE-YEAR MOVING AVERAGES							
02-04	140,949	47,455	34		0	47,455-	34-
03-05	107,438	52,183	49	2	0	52,181-	49-
04-06	91,668	60,523	66	2	0	60,521-	66-
05-07	84,728	70,892	84	2	0	70,890-	84-
06-08	65,174	67,892	104		0	67,892-	104-
07-09	92,040	66,836	73		0	66,836-	73-
08-10	69,846	78,873	113		0	78,873-	113-
09-11	67,163	63,404	94		0	63,404-	94-
10-12	41,768	69,404	166		0	69,404-	166-
11-13	17,924	54,096	302		0	54,096-	302-
12-14	27,059	89,648	331	2	0	89,646-	331-
13-15	28,388	101,298	357	2	0	101,296-	357-
14-16	57,934	115,926	200	2	0	115,924-	200-
15-17	60,745	139,495	230	168	0	139,327-	229-
16-18	69,373	190,560	275	595	1	189,965-	274-
17-19	59,002	233,354	396	869	1	232,485-	394-

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 380.10 SERVICES - PLASTIC

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
18-20	55,321	196,567	355	818	1	195,749-	354-
19-21	55,753	155,639	279	527	1	155,112-	278-
20-22	71,676	123,164	172	651	1	122,513-	171-
FIVE-YEAR AVERAGE							
18-22	64,683	172,626	267	811	1	171,815-	266-

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 381.00 METERS AND REGULATORS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
1990	31,481	2,088	7	3,602-	11-	5,690-	18-
1991	36,993	5,111	14	5,416-	15-	10,527-	28-
1992	24,923	128	1	2,202-	9-	2,331-	9-
1993	42,737		0	4,917-	12-	4,917-	12-
1994	35,876	10	0	4,796-	13-	4,805-	13-
1995	70,664	4,103	6	2,452-	3-	6,555-	9-
1996	27,174		0	302-	1-	302-	1-
1997	45,058		0	145	0	145	0
1998	91,078	55	0	13,005-	14-	13,060-	14-
1999	37,302		0	4,703-	13-	4,703-	13-
2000							
2001	34,746		0	955-	3-	955-	3-
2002	34,672	28	0		0	28-	0
2003	67,531	5,180	8	301	0	4,879-	7-
2004	28,807	718	2		0	718-	2-
2005	8,598	159	2		0	159-	2-
2006	42,006	9,517	23		0	9,517-	23-
2007	34,026	3,719	11		0	3,719-	11-
2008	105,176	14,415	14	1,404	1	13,011-	12-
2009	60,211	744	1		0	744-	1-
2010	28,049	3,608	13		0	3,608-	13-
2011	103,601	169,206	163		0	169,206-	163-
2012	100,902	11,249	11		0	11,249-	11-
2013	59,392	9,048	15		0	9,048-	15-
2014		11,913				11,913-	
2015	10	11,525			0	11,525-	
2016	78,152	10,966	14		0	10,966-	14-
2017		11,769				11,769-	
2018	95,542	12,063	13		0	12,063-	13-
2019	85,926	646,913	753		0	646,913-	753-
2020	93,698	22,595	24	4,150	4	18,445-	20-
2021	50,707	7,782	15		0	7,782-	15-
2022	31,302		0		0		0
TOTAL	1,586,339	974,611	61	36,351-	2-	1,010,962-	64-
THREE-YEAR MOVING AVERAGES							
90-92	31,133	2,443	8	3,740-	12-	6,183-	20-
91-93	34,884	1,746	5	4,179-	12-	5,925-	17-
92-94	34,512	46	0	3,972-	12-	4,018-	12-
93-95	49,759	1,371	3	4,055-	8-	5,426-	11-

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 381.00 METERS AND REGULATORS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
94-96	44,571	1,371	3	2,517-	6-	3,888-	9-
95-97	47,632	1,368	3	870-	2-	2,237-	5-
96-98	54,437	18	0	4,387-	8-	4,406-	8-
97-99	57,813	18	0	5,854-	10-	5,873-	10-
98-00	42,793	18	0	5,903-	14-	5,921-	14-
99-01	24,016		0	1,886-	8-	1,886-	8-
00-02	23,139	9	0	318-	1-	327-	1-
01-03	45,650	1,736	4	218-	0	1,954-	4-
02-04	43,670	1,975	5	100	0	1,875-	4-
03-05	34,978	2,019	6	100	0	1,919-	5-
04-06	26,470	3,465	13		0	3,465-	13-
05-07	28,210	4,465	16		0	4,465-	16-
06-08	60,403	9,217	15	468	1	8,749-	14-
07-09	66,471	6,293	9	468	1	5,825-	9-
08-10	64,479	6,255	10	468	1	5,787-	9-
09-11	63,954	57,853	90		0	57,853-	90-
10-12	77,517	61,354	79		0	61,354-	79-
11-13	87,965	63,168	72		0	63,168-	72-
12-14	53,431	10,737	20		0	10,737-	20-
13-15	19,801	10,829	55		0	10,829-	55-
14-16	26,054	11,468	44		0	11,468-	44-
15-17	26,054	11,420	44		0	11,420-	44-
16-18	57,898	11,599	20		0	11,599-	20-
17-19	60,489	223,582	370		0	223,582-	370-
18-20	91,722	227,190	248	1,383	2	225,807-	246-
19-21	76,777	225,763	294	1,383	2	224,380-	292-
20-22	58,569	10,126	17	1,383	2	8,742-	15-
FIVE-YEAR AVERAGE							
18-22	71,435	137,871	193	830	1	137,041-	192-

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 390.10 STRUCTURES AND IMPROVEMENTS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
1993	10,953	1,169	11	40-	0	1,209-	11-
1994	9,862	7,460	76		0	7,460-	76-
1995	600	113	19		0	113-	19-
1996	20,915	47,680	228	691-	3-	48,371-	231-
1997	18,297-	44,638-	244	691	4-	45,329	248-
1998	34,128	3,592	11	200-	1-	3,792-	11-
1999							
2000	36,647		0	33,328-	91-	33,328-	91-
2001	7,002		0		0		0
2002							
2003	22,500	4,725	21		0	4,725-	21-
2004							
2005							
2006	10,775		0		0		0
2007							
2008							
2009	5,176		0		0		0
2010	170,034	210	0	223,211	131	223,001	131
2011							
2012	59,243-	76,229	129-		0	76,229-	129
2013	93,746	6,256	7		0	6,256-	7-
2014		2,195				2,195-	
2015	13,640	1,568	11		0	1,568-	11-
2016	19,264	3,441	18	5,419	28	1,978	10
2017	82,796	38,564	47		0	38,564-	47-
2018	68,295	24,940	37		0	24,940-	37-
2019	245,218	35,900	15	191,216	78	155,317	63
2020	17,250	13,104	76		0	13,104-	76-
2021	10,952	2,472	23		0	2,472-	23-
2022	24,672	3,392	14		0	3,392-	14-
TOTAL	826,885	228,368	28	386,278	47	157,910	19
THREE-YEAR MOVING AVERAGES							
93-95	7,138	2,914	41	13-	0	2,927-	41-
94-96	10,459	18,418	176	230-	2-	18,648-	178-
95-97	1,073	1,052	98		0	1,052-	98-
96-98	12,249	2,211	18	67-	1-	2,278-	19-
97-99	5,277	13,682-	259-	164	3	13,846	262
98-00	23,592	1,197	5	11,176-	47-	12,373-	52-
99-01	14,550		0	11,109-	76-	11,109-	76-

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 390.10 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
THREE-YEAR MOVING AVERAGES							
00-02	14,550		0	11,109-	76-	11,109-	76-
01-03	9,834	1,575	16		0	1,575-	16-
02-04	7,500	1,575	21		0	1,575-	21-
03-05	7,500	1,575	21		0	1,575-	21-
04-06	3,592		0		0		0
05-07	3,592		0		0		0
06-08	3,592		0		0		0
07-09	1,725		0		0		0
08-10	58,403	70	0	74,404	127	74,334	127
09-11	58,403	70	0	74,404	127	74,334	127
10-12	36,930	25,480	69	74,404	201	48,924	132
11-13	11,501	27,495	239		0	27,495-	239-
12-14	11,501	28,227	245		0	28,227-	245-
13-15	35,795	3,339	9		0	3,339-	9-
14-16	10,968	2,401	22	1,806	16	595-	5-
15-17	38,566	14,524	38	1,806	5	12,718-	33-
16-18	56,785	22,315	39	1,806	3	20,509-	36-
17-19	132,103	33,135	25	63,739	48	30,604	23
18-20	110,255	24,648	22	63,739	58	39,091	35
19-21	91,140	17,158	19	63,739	70	46,580	51
20-22	17,625	6,322	36		0	6,322-	36-
FIVE-YEAR AVERAGE							
18-22	73,278	15,961	22	38,243	52	22,282	30

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 397.20 COMMUNICATION EQUIPMENT - NEBRASKA

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
2003	20,850		0		0		0
2004							
2005							
2006							
2007	7,194		0		0		0
2008							
2009							
2010							
2011	1,288		0		0		0
2012	14,902		0		0		0
2013	1,576		0		0		0
2014							
2015							
2016	25,332		0		0		0
2017							
2018	69,253		0		0		0
2019							
2020							
2021							
2022							
TOTAL	140,396		0		0		0
THREE-YEAR MOVING AVERAGES							
03-05	6,950		0		0		0
04-06							
05-07	2,398		0		0		0
06-08	2,398		0		0		0
07-09	2,398		0		0		0
08-10							
09-11	430		0		0		0
10-12	5,397		0		0		0
11-13	5,922		0		0		0
12-14	5,493		0		0		0
13-15	525		0		0		0
14-16	8,444		0		0		0
15-17	8,444		0		0		0
16-18	31,529		0		0		0
17-19	23,084		0		0		0
18-20	23,084		0		0		0

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 397.20 COMMUNICATION EQUIPMENT - NEBRASKA

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							
19-21							
20-22							
FIVE-YEAR AVERAGE							
18-22	13,851		0		0		0

COMMON PLANT

NORTHWESTERN ENERGY
COMMON PLANT

ACCOUNT 390.10 STRUCTURES AND IMPROVEMENTS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
1990	20,000	700	4		0	700-	4-
1991							
1992	2,500	1,443	58		0	1,443-	58-
1993	3,157		0		0		0
1994	163,152		0	26,127	16	26,127	16
1995	17,204	20,182	117	3,176	18	17,006-	99-
1996	325,485	300,750	92	329,842	101	29,092	9
1997		44,012		638		43,375-	
1998	117,177		0	62,107	53	62,107	53
1999	3,500	31,226	892		0	31,226-	892-
2000	26,179		0		0		0
2001							
2002							
2003							
2004	1,811,079		0	183,607	10	183,607	10
2005	14,408	4,293	30		0	4,293-	30-
2006	302,817		0	162,888	54	162,888	54
2007	88,285	24,760	28		0	24,760-	28-
2008							
2009	69,206	6,457	9		0	6,457-	9-
2010	32,493	4,886	15		0	4,886-	15-
2011							
2012	26,386		0		0		0
2013	20,334	6,500	32		0	6,500-	32-
2014	23,381	2,151	9	401	2	1,750-	7-
2015	131,766		0	24,558	19	24,558	19
2016	146,747	33,986	23		0	33,986-	23-
2017	160,674	100,251	62	19,844	12	80,406-	50-
2018	502,579	75,858	15		0	75,858-	15-
2019	35,627	51,839	146		0	51,839-	146-
2020	23,151	10,593	46		0	10,593-	46-
2021	130,172	2,102	2		0	2,102-	2-
2022	41,903	13,583	32	27,094	65	13,511	32
TOTAL	4,239,362	735,571	17	840,281	20	104,710	2
THREE-YEAR MOVING AVERAGES							
90-92	7,500	714	10		0	714-	10-
91-93	1,886	481	26		0	481-	26-
92-94	56,270	481	1	8,709	15	8,228	15
93-95	61,171	6,727	11	9,768	16	3,041	5

NORTHWESTERN ENERGY
COMMON PLANT

ACCOUNT 390.10 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							
94-96	168,614	106,977	63	119,715	71	12,738	8
95-97	114,230	121,648	106	111,218	97	10,430-	9-
96-98	147,554	114,921	78	130,862	89	15,941	11
97-99	40,226	25,079	62	20,915	52	4,165-	10-
98-00	48,952	10,409	21	20,702	42	10,294	21
99-01	9,893	10,409	105		0	10,409-	105-
00-02	8,726		0		0		0
01-03							
02-04	603,693		0	61,202	10	61,202	10
03-05	608,496	1,431	0	61,202	10	59,771	10
04-06	709,434	1,431	0	115,498	16	114,067	16
05-07	135,170	9,684	7	54,296	40	44,612	33
06-08	130,367	8,253	6	54,296	42	46,043	35
07-09	52,497	10,406	20		0	10,406-	20-
08-10	33,900	3,781	11		0	3,781-	11-
09-11	33,900	3,781	11		0	3,781-	11-
10-12	19,626	1,629	8		0	1,629-	8-
11-13	15,574	2,167	14		0	2,167-	14-
12-14	23,367	2,884	12	134	1	2,750-	12-
13-15	58,494	2,884	5	8,320	14	5,436	9
14-16	100,632	12,046	12	8,320	8	3,726-	4-
15-17	146,396	44,746	31	14,801	10	29,945-	20-
16-18	270,000	70,032	26	6,615	2	63,417-	23-
17-19	232,960	75,982	33	6,615	3	69,368-	30-
18-20	187,119	46,096	25		0	46,096-	25-
19-21	62,983	21,511	34		0	21,511-	34-
20-22	65,075	8,759	13	9,031	14	272	0
FIVE-YEAR AVERAGE							
18-22	146,686	30,795	21	5,419	4	25,376-	17-

NORTHWESTERN ENERGY
COMMON PLANT

ACCOUNT 397.10 COMMUNICATION EQUIPMENT - MICROWAVE AND FIBER OPTIC

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
1990				1,250		1,250	
1991	117,591		0		0		0
1992							
1993	14,588		0	300	2	300	2
1994	4,266	509	12		0	509-	12-
1995				25		25	
1996	13,967		0		0		0
1997	1,974		0	1,000	51	1,000	51
1998	1,661,142		0	1,047,870	63	1,047,870	63
1999							
2000		605				605-	
2001							
2002							
2003	158,282		0		0		0
2004							
2005	19,300		0		0		0
2006	75,593		0		0		0
2007	42,430	1,086	3		0	1,086-	3-
2008		2,000				2,000-	
2009	43,457	99,887	230		0	99,887-	230-
2010	414,451	882-	0		0	882	0
2011							
2012	274,602	1,779	1		0	1,779-	1-
2013							
2014							
2015	1,412,109		0		0		0
2016	146,463		0		0		0
2017							
2018	462,019		0		0		0
2019	10,000		0		0		0
2020		16,014				16,014-	
2021	1,778		0		0		0
2022							
TOTAL	4,874,010	120,998	2	1,050,445	22	929,447	19
THREE-YEAR MOVING AVERAGES							
90-92	39,197		0	417	1	417	1
91-93	44,060		0	100	0	100	0
92-94	6,285	170	3	100	2	70-	1-
93-95	6,285	170	3	108	2	61-	1-

NORTHWESTERN ENERGY
COMMON PLANT

ACCOUNT 397.10 COMMUNICATION EQUIPMENT - MICROWAVE AND FIBER OPTIC

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							
94-96	6,077	170	3	8	0	161-	3-
95-97	5,314		0	342	6	342	6
96-98	559,028		0	349,623	63	349,623	63
97-99	554,372		0	349,623	63	349,623	63
98-00	553,714	202	0	349,290	63	349,088	63
99-01		202				202-	
00-02		202				202-	
01-03	52,761		0		0		0
02-04	52,761		0		0		0
03-05	59,194		0		0		0
04-06	31,631		0		0		0
05-07	45,774	362	1		0	362-	1-
06-08	39,341	1,029	3		0	1,029-	3-
07-09	28,629	34,325	120		0	34,325-	120-
08-10	152,636	33,668	22		0	33,668-	22-
09-11	152,636	33,002	22		0	33,002-	22-
10-12	229,684	299	0		0	299-	0
11-13	91,534	593	1		0	593-	1-
12-14	91,534	593	1		0	593-	1-
13-15	470,703		0		0		0
14-16	519,524		0		0		0
15-17	519,524		0		0		0
16-18	202,827		0		0		0
17-19	157,340		0		0		0
18-20	157,340	5,338	3		0	5,338-	3-
19-21	3,926	5,338	136		0	5,338-	136-
20-22	593	5,338	901		0	5,338-	901-
FIVE-YEAR AVERAGE							
18-22	94,759	3,203	3		0	3,203-	3-

ELECTRIC, GAS AND COMMON PLANT

NORTHWESTERN ENERGY
ELECTRIC, GAS AND COMMON PLANTS

ACCOUNT 392.10 TRANSPORTATION EQUIPMENT - TRAILERS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
2002	133,229		0		0		0
2003	625		0		0		0
2004							
2005	118,915		0		0		0
2006	1,562		0	24,532		24,532	
2007	477,482		0	61,179	13	61,179	13
2008	335,020		0	35,495	11	35,495	11
2009	222,145		0	44,709	20	44,709	20
2010	480,227		0	35,604	7	35,604	7
2011							
2012	116,587		0	29,617	25	29,617	25
2013	216,599		0	16,264	8	16,264	8
2014				6,000		6,000	
2015	525		0		0		0
2016	7,317		0		0		0
2017	3,045		0	792	26	792	26
2018							
2019							
2020				48		48	
2021							
2022							
TOTAL	2,113,277		0	254,239	12	254,239	12
THREE-YEAR MOVING AVERAGES							
02-04	44,618		0		0		0
03-05	39,847		0		0		0
04-06	40,159		0	8,177	20	8,177	20
05-07	199,320		0	28,570	14	28,570	14
06-08	271,355		0	40,402	15	40,402	15
07-09	344,882		0	47,128	14	47,128	14
08-10	345,797		0	38,602	11	38,602	11
09-11	234,124		0	26,771	11	26,771	11
10-12	198,938		0	21,740	11	21,740	11
11-13	111,062		0	15,294	14	15,294	14
12-14	111,062		0	17,294	16	17,294	16
13-15	72,375		0	7,421	10	7,421	10
14-16	2,614		0	2,000	77	2,000	77
15-17	3,629		0	264	7	264	7
16-18	3,454		0	264	8	264	8
17-19	1,015		0	264	26	264	26

NORTHWESTERN ENERGY
ELECTRIC, GAS AND COMMON PLANTS

ACCOUNT 392.10 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							
18-20				16		16	
19-21				16		16	
20-22				16		16	
FIVE-YEAR AVERAGE							
18-22				10		10	

NORTHWESTERN ENERGY
ELECTRIC, GAS AND COMMON PLANTS

ACCOUNT 392.20 TRANSPORTATION EQUIPMENT - AUTOMOBILES

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
1990	14,188		0		0		0
1991	46,499		0	1,202	3	1,202	3
1992	25,056		0	1,255	5	1,255	5
1993	29,943		0	1,800	6	1,800	6
1994	49,993		0	2,255	5	2,255	5
1995	79,446		0	4,124	5	4,124	5
1996	24,714		0		0		0
1997	98,669		0	14,906	15	14,906	15
1998	222,253		0	112,272	51	112,272	51
1999	18,397		0	2,955	16	2,955	16
2000	12,712		0		0		0
2001	1,296,203	20,000	2	689,205	53	669,205	52
2002	88,034		0	6,755	8	6,755	8
2003	6,455		0	1,222	19	1,222	19
2004	71		0		0		0
2005	91,948		0	4,953	5	4,953	5
2006							
2007	12,398		0	35,255	284	35,255	284
2008	23,044		0	2,563	11	2,563	11
2009				9,347		9,347	
2010							
2011							
2012	20,231		0		0		0
2013	22,483		0	4,298	19	4,298	19
2014							
2015							
2016							
2017	50,814		0	624	1	624	1
2018	15,814		0	4,150	26	4,150	26
2019				1,475		1,475	
2020	113,965		0	6,144	5	6,144	5
2021	156,035		0	4,320	3	4,320	3
2022	20,405		0	16,080	79	16,080	79
TOTAL	2,539,768	20,000	1	927,160	37	907,160	36
THREE-YEAR MOVING AVERAGES							
90-92	28,581		0	819	3	819	3
91-93	33,832		0	1,419	4	1,419	4
92-94	34,997		0	1,770	5	1,770	5
93-95	53,127		0	2,726	5	2,726	5

NORTHWESTERN ENERGY
ELECTRIC, GAS AND COMMON PLANTS

ACCOUNT 392.20 TRANSPORTATION EQUIPMENT - AUTOMOBILES

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
94-96	51,384		0	2,126	4	2,126	4
95-97	67,609		0	6,344	9	6,344	9
96-98	115,212		0	42,393	37	42,393	37
97-99	113,106		0	43,378	38	43,378	38
98-00	84,454		0	38,409	45	38,409	45
99-01	442,437	6,667	2	230,720	52	224,053	51
00-02	465,649	6,667	1	231,987	50	225,320	48
01-03	463,564	6,667	1	232,394	50	225,727	49
02-04	31,520		0	2,659	8	2,659	8
03-05	32,825		0	2,058	6	2,058	6
04-06	30,673		0	1,651	5	1,651	5
05-07	34,782		0	13,403	39	13,403	39
06-08	11,814		0	12,606	107	12,606	107
07-09	11,814		0	15,722	133	15,722	133
08-10	7,681		0	3,970	52	3,970	52
09-11				3,116		3,116	
10-12	6,744		0		0		0
11-13	14,238		0	1,433	10	1,433	10
12-14	14,238		0	1,433	10	1,433	10
13-15	7,494		0	1,433	19	1,433	19
14-16							
15-17	16,938		0	208	1	208	1
16-18	22,209		0	1,591	7	1,591	7
17-19	22,209		0	2,083	9	2,083	9
18-20	43,260		0	3,923	9	3,923	9
19-21	90,000		0	3,980	4	3,980	4
20-22	96,802		0	8,848	9	8,848	9
FIVE-YEAR AVERAGE							
18-22	61,244		0	6,434	11	6,434	11

NORTHWESTERN ENERGY
ELECTRIC, GAS AND COMMON PLANTS

ACCOUNT 392.30 TRANSPORTATION EQUIPMENT - HEAVY TRUCKS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
1990	133,623	1,842	1	26,617	20	24,775	19
1991	273,543	5,171	2	99,839	36	94,668	35
1992	69,140		0	55	0	55	0
1993	3,909		0		0		0
1994	18,443		0	635	3	635	3
1995	3,363		0		0		0
1996							
1997							
1998							
1999							
2000							
2001	2,468		0		0		0
2002				12,034		12,034	
2003				9,329		9,329	
2004	11,297		0		0		0
2005	35		0	11,748		11,748	
2006	563		0		0		0
2007							
2008	1,283		0		0		0
2009	4,364		0		0		0
2010	3,059		0	656	21	656	21
2011	11,145		0		0		0
2012	10,459		0		0		0
2013	8,638		0	50	1	50	1
2014	115,659		0	1,821	2	1,821	2
2015	275,438		0	4,500	2	4,500	2
2016	297,196		0	1,348	0	1,348	0
2017	395,943		0	34,464	9	34,464	9
2018	192,237		0	85,260	44	85,260	44
2019	200,140		0	100	0	100	0
2020	1,640,707		0	121,818	7	121,818	7
2021	577,851		0	82,176	14	82,176	14
2022				190		190	
TOTAL	4,250,503	7,014	0	492,641	12	485,627	11
THREE-YEAR MOVING AVERAGES							
90-92	158,768	2,338	1	42,170	27	39,832	25
91-93	115,530	1,724	1	33,298	29	31,574	27
92-94	30,497		0	230	1	230	1
93-95	8,572		0	212	2	212	2

NORTHWESTERN ENERGY
ELECTRIC, GAS AND COMMON PLANTS

ACCOUNT 392.30 TRANSPORTATION EQUIPMENT - HEAVY TRUCKS

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							
94-96	7,269		0	212	3	212	3
95-97	1,121		0		0		0
96-98							
97-99							
98-00							
99-01	823		0		0		0
00-02	823		0	4,011	488	4,011	488
01-03	823		0	7,121	865	7,121	865
02-04	3,766		0	7,121	189	7,121	189
03-05	3,777		0	7,026	186	7,026	186
04-06	3,965		0	3,916	99	3,916	99
05-07	199		0	3,916		3,916	
06-08	615		0		0		0
07-09	1,882		0		0		0
08-10	2,902		0	219	8	219	8
09-11	6,189		0	219	4	219	4
10-12	8,221		0	219	3	219	3
11-13	10,081		0	17	0	17	0
12-14	44,919		0	624	1	624	1
13-15	133,245		0	2,124	2	2,124	2
14-16	229,431		0	2,556	1	2,556	1
15-17	322,859		0	13,437	4	13,437	4
16-18	295,126		0	40,357	14	40,357	14
17-19	262,774		0	39,941	15	39,941	15
18-20	677,695		0	69,059	10	69,059	10
19-21	806,233		0	68,031	8	68,031	8
20-22	739,519		0	68,061	9	68,061	9
FIVE-YEAR AVERAGE							
18-22	522,187		0	57,909	11	57,909	11

NORTHWESTERN ENERGY
ELECTRIC, GAS AND COMMON PLANTS

ACCOUNT 392.40 TRANSPORTATION EQUIPMENT - LIGHT TRUCKS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
1990	128,459		0	1,500	1	1,500	1
1991	164,609	598	0	1,686	1	1,088	1
1992	73,309		0		0		0
1993	79,121		0		0		0
1994	33,247		0	2,458	7	2,458	7
1995	12,322		0		0		0
1996	18,479		0	1,024	6	1,024	6
1997	49,600		0	7,407	15	7,407	15
1998	76,734		0	51,550	67	51,550	67
1999	10,996		0	395-	4-	395-	4-
2000	12,136		0		0		0
2001							
2002	734,635		0	95,489	13	95,489	13
2003	37,353		0	3,223	9	3,223	9
2004				450		450	
2005	510,618		0	84,704	17	84,704	17
2006							
2007	383,177		0		0		0
2008	178,277		0		0		0
2009	573,276		0		0		0
2010	201,342		0	24,364	12	24,364	12
2011	386,190		0	35,809	9	35,809	9
2012	173,478		0	10,502	6	10,502	6
2013	193,386		0	36,719	19	36,719	19
2014	347,538		0	21,984	6	21,984	6
2015	385,353		0	3,392	1	3,392	1
2016	188,222		0	22,029	12	22,029	12
2017	152,218		0	16,080	11	16,080	11
2018	25,000		0	16,403	66	16,403	66
2019	90,043		0		0		0
2020	1,001,311		0	31,980	3	31,980	3
2021	443,207		0	111,938	25	111,938	25
2022				19,680		19,680	
TOTAL	6,663,635	598	0	599,977	9	599,379	9
THREE-YEAR MOVING AVERAGES							
90-92	122,125	199	0	1,062	1	863	1
91-93	105,680	199	0	562	1	363	0
92-94	61,893		0	819	1	819	1
93-95	41,563		0	819	2	819	2

NORTHWESTERN ENERGY
ELECTRIC, GAS AND COMMON PLANTS

ACCOUNT 392.40 TRANSPORTATION EQUIPMENT - LIGHT TRUCKS

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							
94-96	21,349		0	1,160	5	1,160	5
95-97	26,800		0	2,810	10	2,810	10
96-98	48,271		0	19,994	41	19,994	41
97-99	45,776		0	19,521	43	19,521	43
98-00	33,289		0	17,052	51	17,052	51
99-01	7,711		0	132-	2-	132-	2-
00-02	248,924		0	31,830	13	31,830	13
01-03	257,329		0	32,904	13	32,904	13
02-04	257,329		0	33,054	13	33,054	13
03-05	182,657		0	29,459	16	29,459	16
04-06	170,206		0	28,385	17	28,385	17
05-07	297,932		0	28,235	9	28,235	9
06-08	187,151		0		0		0
07-09	378,243		0		0		0
08-10	317,632		0	8,121	3	8,121	3
09-11	386,936		0	20,058	5	20,058	5
10-12	253,670		0	23,558	9	23,558	9
11-13	251,018		0	27,677	11	27,677	11
12-14	238,134		0	23,068	10	23,068	10
13-15	308,759		0	20,698	7	20,698	7
14-16	307,038		0	15,802	5	15,802	5
15-17	241,931		0	13,834	6	13,834	6
16-18	121,813		0	18,171	15	18,171	15
17-19	89,087		0	10,828	12	10,828	12
18-20	372,118		0	16,128	4	16,128	4
19-21	511,520		0	47,973	9	47,973	9
20-22	481,506		0	54,533	11	54,533	11
FIVE-YEAR AVERAGE							
18-22	311,912		0	36,000	12	36,000	12

NORTHWESTERN ENERGY
ELECTRIC, GAS AND COMMON PLANTS

ACCOUNT 392.60 TRANSPORTATION EQUIPMENT - AIRCRAFT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
1997	2,055,111		0	400,000	19	400,000	19
1998							
1999							
2000							
2001							
2002							
2003							
2004							
2005	337,504		0	224,070	66	224,070	66
2006	3,806,826		0	3,098,638	81	3,098,638	81
2007							
2008							
2009							
2010							
2011							
2012							
2013							
2014							
2015							
2016							
2017							
2018	949,094		0	208,762	22	208,762	22
2019							
2020							
2021							
2022							
TOTAL	7,148,536		0	3,931,470	55	3,931,470	55
THREE-YEAR MOVING AVERAGES							
97-99	685,037		0	133,333	19	133,333	19
98-00							
99-01							
00-02							
01-03							
02-04							
03-05	112,501		0	74,690	66	74,690	66
04-06	1,381,443		0	1,107,569	80	1,107,569	80
05-07	1,381,443		0	1,107,569	80	1,107,569	80
06-08	1,268,942		0	1,032,879	81	1,032,879	81
07-09							

NORTHWESTERN ENERGY
ELECTRIC, GAS AND COMMON PLANTS

ACCOUNT 392.60 TRANSPORTATION EQUIPMENT - AIRCRAFT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
08-10							
09-11							
10-12							
11-13							
12-14							
13-15							
14-16							
15-17							
16-18	316,365		0	69,588	22	69,588	22
17-19	316,365		0	69,588	22	69,588	22
18-20	316,365		0	69,588	22	69,588	22
19-21							
20-22							
FIVE-YEAR AVERAGE							
18-22	189,819		0	41,752	22	41,752	22

NORTHWESTERN ENERGY
ELECTRIC, GAS AND COMMON PLANTS

ACCOUNT 396.00 POWER OPERATED EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
1990	71,672		0		0		0
1991	69,736	1	0		0	1-	0
1992	8,925		0		0		0
1993	16,272		0		0		0
1994	74,870		0	515	1	515	1
1995	34,920		0		0		0
1996	32,668		0	3,500-	11-	3,500-	11-
1997	95,666		0		0		0
1998	11,034		0		0		0
1999							
2000	27,734		0	96-	0	96-	0
2001							
2002	7,766	220	3		0	220-	3-
2003	1,728		0		0		0
2004	5,489		0		0		0
2005	5,442		0		0		0
2006	46,818		0	15,000	32	15,000	32
2007	153,634		0	33,470	22	33,470	22
2008	20,330		0	4,421	22	4,421	22
2009	66,774		0	53	0	53	0
2010	108,185	1,892	2	18,437	17	16,545	15
2011	22,903	2,864	13	924	4	1,940-	8-
2012	132,700		0		0		0
2013	602,878	890	0	991	0	101	0
2014	30,907		0	2,256	7	2,256	7
2015	18,213		0	5,501	30	5,501	30
2016	99,452		0		0		0
2017	4,201		0	1,440	34	1,440	34
2018	21,313		0	371	2	371	2
2019	68,886		0		0		0
2020	57,242		0	3,125	5	3,125	5
2021				7,680		7,680	
2022	27,190		0		0		0
TOTAL	1,945,547	5,868	0	90,588	5	84,720	4
THREE-YEAR MOVING AVERAGES							
90-92	50,111		0		0		0
91-93	31,644		0		0		0
92-94	33,355		0	172	1	172	1
93-95	42,021		0	172	0	172	0

NORTHWESTERN ENERGY
ELECTRIC, GAS AND COMMON PLANTS

ACCOUNT 396.00 POWER OPERATED 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							
94-96	47,486		0	995-	2-	995-	2-
95-97	54,418		0	1,167-	2-	1,167-	2-
96-98	46,456		0	1,167-	3-	1,167-	3-
97-99	35,567		0		0		0
98-00	12,923		0	32-	0	32-	0
99-01	9,245		0	32-	0	32-	0
00-02	11,833	73	1	32-	0	106-	1-
01-03	3,164	73	2		0	73-	2-
02-04	4,994	73	1		0	73-	1-
03-05	4,220		0		0		0
04-06	19,250		0	5,000	26	5,000	26
05-07	68,631		0	16,157	24	16,157	24
06-08	73,594		0	17,631	24	17,631	24
07-09	80,246		0	12,648	16	12,648	16
08-10	65,096	631	1	7,637	12	7,007	11
09-11	65,954	1,585	2	6,471	10	4,886	7
10-12	87,929	1,585	2	6,454	7	4,868	6
11-13	252,827	1,252	0	638	0	613-	0
12-14	255,495	297	0	1,082	0	786	0
13-15	217,333	297	0	2,916	1	2,619	1
14-16	49,524		0	2,586	5	2,586	5
15-17	40,622		0	2,314	6	2,314	6
16-18	41,655		0	604	1	604	1
17-19	31,467		0	604	2	604	2
18-20	49,147		0	1,165	2	1,165	2
19-21	42,043		0	3,602	9	3,602	9
20-22	28,144		0	3,602	13	3,602	13
FIVE-YEAR AVERAGE							
18-22	34,926		0	2,235	6	2,235	6

PART IX. DETAILED DEPRECIATION CALCULATIONS

ELECTRIC PLANT

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 311.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
BIG STONE						
INTERIM SURVIVOR CURVE.. IOWA 90-S1						
PROBABLE RETIREMENT YEAR.. 12-2046						
NET SALVAGE PERCENT.. -4						
1976	4,719,863.37	3,250,415	4,908,658			
1977	22,132.00	15,135	22,914	103	21.65	5
1978	6,093.00	4,135	6,260	76	21.72	3
1980	13,920.90	9,300	14,080	398	21.84	18
1981	47,792.28	31,664	47,939	1,765	21.90	81
1982	3,095,460.81	2,033,104	3,078,074	141,206	21.96	6,430
1983	6,241.00	4,062	6,150	341	22.02	15
1984	15,350.63	9,896	14,982	982	22.08	44
1986	1,801.00	1,138	1,723	150	22.19	7
1987	6,152.57	3,846	5,823	576	22.25	26
1993	24,417.78	14,126	21,386	4,008	22.59	177
1995	9,090.09	5,095	7,714	1,740	22.70	77
1996	1,028.29	567	858	211	22.75	9
1997	496,605.16	268,559	406,592	109,877	22.81	4,817
1999	27,579.68	14,332	21,698	6,985	22.91	305
2000	280,685.76	142,675	216,007	75,906	22.96	3,306
2001	5,081.48	2,523	3,820	1,465	23.01	64
2002	4,073.84	1,972	2,986	1,251	23.06	54
2003	1,561.07	735	1,113	511	23.11	22
2004	8,378.36	3,832	5,802	2,912	23.16	126
2005	57,465.69	25,463	38,550	21,214	23.21	914
2006	3,667.58	1,570	2,377	1,437	23.25	62
2007	13,323.44	5,494	8,318	5,539	23.30	238
2008	340,342.50	134,765	204,031	149,925	23.34	6,424
2009	22,989.52	8,696	13,166	10,744	23.39	459
2010	2,917.68	1,050	1,590	1,445	23.43	62
2011	34,691.30	11,809	17,879	18,200	23.47	775
2012	31,265.44	9,999	15,138	17,378	23.51	739
2013	41,019.22	12,225	18,508	24,152	23.55	1,026
2014	52,724.29	14,486	21,931	32,902	23.59	1,395
2015	211,048.15	52,719	79,815	139,675	23.63	5,911
2016	16,491.02	3,692	5,590	11,561	23.66	489
2018	100,682.66	16,660	25,223	79,487	23.73	3,350
2019	51,770.12	6,913	10,466	43,375	23.76	1,826
2020	17,910.12	1,771	2,681	15,945	23.79	670
2021	31,730.59	1,955	2,960	30,040	23.82	1,261
2022	54,631.00	1,167	1,767	55,049	23.84	2,309
	9,877,979.39	6,127,545	9,264,568	1,008,531		43,496

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 311.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
NEAL 4						
INTERIM SURVIVOR CURVE.. IOWA 90-S1						
PROBABLE RETIREMENT YEAR.. 12-2040						
NET SALVAGE PERCENT.. -4						
1981	3,119,583.28	2,262,978	2,275,472	968,894	16.87	57,433
1982	9,355.26	6,739	6,776	2,953	16.90	175
1983	7,858.65	5,618	5,649	2,524	16.94	149
1984	23,360.02	16,570	16,661	7,633	16.97	450
1985	6,879.08	4,839	4,866	2,289	17.01	135
1986	4,715.50	3,289	3,307	1,597	17.04	94
1987	2,639.39	1,825	1,835	910	17.07	53
1988	1,641.75	1,124	1,130	577	17.10	34
1989	19,951.04	13,525	13,600	7,149	17.14	417
1990	3,542.99	2,377	2,390	1,295	17.17	75
1991	97,454.34	64,668	65,025	36,327	17.20	2,112
1992	13,922.79	9,133	9,183	5,296	17.23	307
1994	6,462.72	4,134	4,157	2,564	17.29	148
1995	54,952.42	34,669	34,860	22,290	17.32	1,287
1997	8,739.11	5,349	5,379	3,710	17.38	213
1998	82,862.53	49,884	50,159	36,018	17.41	2,069
2000	2,312.50	1,342	1,349	1,056	17.47	60
2001	1,511.32	859	864	708	17.50	40
2002	2,410.79	1,341	1,348	1,159	17.53	66
2005	38,580.12	19,872	19,982	20,142	17.61	1,144
2006	176,786.52	88,382	88,870	94,988	17.63	5,388
2007	23,595.84	11,411	11,474	13,066	17.66	740
2008	10,518.83	4,907	4,934	6,005	17.68	340
2009	31,834.97	14,255	14,334	18,775	17.71	1,060
2011	11,948.09	4,870	4,897	7,529	17.75	424
2012	1,473.66	568	571	961	17.77	54
2013	2,827,828.92	1,020,595	1,026,230	1,914,712	17.80	107,568
2014	57,258.38	19,185	19,291	40,258	17.82	2,259
2015	33,792.07	10,382	10,439	24,704	17.84	1,385
2016	9,988.59	2,770	2,785	7,603	17.85	426
2017	1,994.30	487	490	1,584	17.87	89
2018	3,815.07	796	800	3,167	17.89	177
2019	29,046.92	4,941	4,968	25,241	17.90	1,410
2020	481,942.26	61,364	61,703	439,517	17.92	24,527
2021	132,564.39	10,643	10,702	127,165	17.93	7,092
2022	19,746.29	557	560	19,976	17.94	1,113
	7,362,870.70	3,766,248	3,787,042	3,870,344		220,513

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 311.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
COYOTE						
INTERIM SURVIVOR CURVE.. IOWA 90-S1						
PROBABLE RETIREMENT YEAR.. 12-2041						
NET SALVAGE PERCENT.. -5						
1981	8,213,304.26	5,920,096	7,699,616	924,354	17.73	52,135
1986	9,579.02	6,629	8,622	1,436	17.92	80
1987	44,869.07	30,759	40,005	7,108	17.96	396
1988	1,829.07	1,242	1,615	305	17.99	17
1989	11,700.38	7,861	10,224	2,061	18.03	114
1990	17,483.23	11,623	15,117	3,241	18.06	179
1991	2,672.16	1,756	2,284	522	18.10	29
1992	14,428.58	9,370	12,187	2,963	18.13	163
1993	415,689.53	266,507	346,616	89,858	18.17	4,945
1994	24,598.70	15,563	20,241	5,588	18.20	307
1995	1,613.80	1,006	1,308	386	18.24	21
1996	27,392.73	16,828	21,886	6,876	18.27	376
1997	26,999.56	16,324	21,231	7,119	18.30	389
1998	8,845.11	5,255	6,835	2,453	18.34	134
2000	15,071.29	8,625	11,218	4,607	18.40	250
2002	22,426.05	12,289	15,983	7,564	18.46	410
2003	3,787.29	2,026	2,635	1,342	18.49	73
2005	14,091.57	7,136	9,281	5,515	18.55	297
2006	16,969.71	8,329	10,833	6,986	18.58	376
2007	24,069.50	11,419	14,851	10,422	18.61	560
2010	11,420.99	4,785	6,223	5,769	18.69	309
2011	39,617.26	15,770	20,510	21,088	18.72	1,126
2012	56,936.44	21,402	27,835	31,948	18.74	1,705
2013	396,030.13	139,395	181,296	234,536	18.76	12,502
2014	34,326.57	11,199	14,565	21,478	18.79	1,143
2015	38,933.97	11,631	15,127	25,754	18.81	1,369
2016	309,376.29	83,264	108,292	216,553	18.83	11,500
2018	24,871.67	5,020	6,529	19,586	18.87	1,038
2019	162,131.20	26,547	34,527	135,711	18.89	7,184
2020	14,148.13	1,735	2,257	12,599	18.90	667
2022	26,277.83	710	923	26,668	18.93	1,409
	10,031,491.09	6,682,101	8,690,671	1,842,394		101,203
	27,272,341.18	16,575,894	21,742,281	6,721,269		365,212

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 18.4 1.34

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 312.00 BOILER PLANT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
BIG STONE						
INTERIM SURVIVOR CURVE.. IOWA 45-R1						
PROBABLE RETIREMENT YEAR.. 12-2046						
NET SALVAGE PERCENT.. -4						
1976	8,946,365.11	6,286,210	3,679,268	5,624,952	14.36	391,710
1977	230,758.27	160,356	93,855	146,134	14.65	9,975
1980	56,724.23	38,096	22,297	36,696	15.48	2,371
1981	854,883.48	567,321	332,048	557,030	15.75	35,367
1982	103,248.00	67,703	39,626	67,752	16.01	4,232
1991	2,160,866.71	1,251,747	732,637	1,514,664	18.11	83,637
1992	44,131.89	25,157	14,724	31,173	18.31	1,703
1994	10,793.55	5,944	3,479	7,746	18.70	414
1997	237,442.33	123,438	72,247	174,693	19.24	9,080
1998	43,872.81	22,327	13,068	32,560	19.41	1,677
1999	627,209.23	311,981	182,600	469,698	19.58	23,989
2000	254,216.19	123,518	72,294	192,091	19.73	9,736
2001	5,128.70	2,430	1,422	3,912	19.88	197
2002	56,904.01	26,244	15,360	43,820	20.03	2,188
2003	2,285,391.46	1,024,475	599,617	1,777,190	20.17	88,111
2004	89,556.58	38,948	22,796	70,343	20.30	3,465
2005	543,159.21	228,524	133,753	431,132	20.43	21,103
2006	8,375.16	3,402	1,991	6,719	20.55	327
2008	189,607.37	71,032	41,574	155,617	20.78	7,489
2009	72,879.05	26,106	15,280	60,515	20.88	2,898
2010	145,983.42	49,699	29,088	122,734	20.98	5,850
2012	4,341,074.33	1,312,835	768,392	3,746,326	21.17	176,964
2013	232,307.62	65,394	38,275	203,325	21.26	9,564
2014	102,641.08	26,677	15,614	91,133	21.34	4,271
2015	96,791,559.51	22,905,916	13,406,647	87,256,575	21.42	4,073,603
2016	146,567.22	31,006	18,148	134,282	21.50	6,246
2017	45,971.98	8,524	4,989	42,822	21.57	1,985
2018	3,120,244.63	488,867	286,130	2,958,925	21.65	136,671
2019	1,257,330.86	158,693	92,882	1,214,742	21.72	55,927
2020	194,352.06	18,230	10,670	191,456	21.79	8,786
2021	1,220,287.69	71,780	42,012	1,227,087	21.85	56,160
2022	1,430,384.66	28,621	16,752	1,470,848	21.92	67,101
	125,850,218.40	35,571,201	20,819,535	110,064,692		5,302,797

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 312.00 BOILER PLANT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
NEAL 4						
INTERIM SURVIVOR CURVE.. IOWA 45-R1						
PROBABLE RETIREMENT YEAR.. 12-2040						
NET SALVAGE PERCENT.. -4						
1981	13,073,583.34	9,278,406	11,439,492	2,157,035	13.38	161,213
1982	8,648.01	6,083	7,500	1,494	13.54	110
1983	72,881.91	50,817	62,653	13,144	13.69	960
1985	34,234.00	23,410	28,863	6,741	14.00	482
1988	11,685.99	7,748	9,553	2,601	14.41	180
1990	19,104.42	12,378	15,261	4,608	14.67	314
1991	1,017,122.72	651,123	802,780	255,028	14.79	17,243
1992	119,236.46	75,362	92,915	31,091	14.91	2,085
1993	1,083,429.58	675,519	832,858	293,909	15.03	19,555
1994	512.57	315	388	145	15.14	10
1995	73,235.60	44,360	54,692	21,473	15.25	1,408
2000	34,260.74	19,020	23,450	12,181	15.72	775
2003	4,314.56	2,239	2,760	1,727	15.96	108
2004	15,280.46	7,724	9,523	6,369	16.03	397
2005	610,384.02	300,038	369,922	264,878	16.10	16,452
2006	785,759.00	374,788	462,082	355,107	16.16	21,974
2007	41,436.42	19,100	23,549	19,545	16.23	1,204
2008	55,662.55	24,763	30,531	27,358	16.28	1,680
2009	3,237.03	1,383	1,705	1,661	16.34	102
2010	219,033.08	89,464	110,302	117,493	16.39	7,169
2011	46,500.36	18,073	22,282	26,078	16.44	1,586
2012	4,983.27	1,830	2,256	2,926	16.49	177
2013	22,792,046.65	7,843,801	9,670,745	14,032,984	16.54	848,427
2014	261,948.14	83,831	103,357	169,070	16.58	10,197
2015	132,421.71	38,889	47,947	89,772	16.62	5,401
2016	337,453.09	89,349	110,160	240,791	16.66	14,453
2017	238,330.21	55,695	68,667	179,196	16.70	10,730
2018	35,726.49	7,137	8,799	28,356	16.74	1,694
2019	1,038,198.89	168,826	208,148	871,579	16.78	51,942
2020	36,322.91	4,422	5,452	32,324	16.82	1,922
2021	389,585.31	30,055	37,055	368,113	16.85	21,846
2022	158,132.75	4,268	5,262	159,196	16.89	9,425
	42,754,692.24	20,010,216	24,670,908	19,793,972		1,231,221

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 312.00 BOILER PLANT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
COYOTE						
INTERIM SURVIVOR CURVE.. IOWA 45-R1						
PROBABLE RETIREMENT YEAR.. 12-2041						
NET SALVAGE PERCENT.. -5						
1981	19,691,546.82	13,928,678	17,553,775	3,122,349	13.84	225,603
1984	293,770.37	201,828	254,356	54,103	14.36	3,768
1986	2,560.85	1,723	2,171	517	14.68	35
1987	13,688.93	9,109	11,480	2,894	14.84	195
1988	7,232.47	4,760	5,999	1,595	14.98	106
1989	12,383.17	8,053	10,149	2,853	15.13	189
1990	11,741.25	7,543	9,506	2,822	15.27	185
1993	1,250,953.01	771,997	972,918	340,583	15.67	21,735
1994	27,291.30	16,599	20,919	7,737	15.79	490
1996	185.83	110	139	56	16.02	3
2000	260,399.07	142,408	179,471	93,948	16.44	5,715
2001	1,339.59	717	904	503	16.53	30
2002	203,551.79	106,446	134,150	79,580	16.62	4,788
2003	508,008.87	259,152	326,599	206,810	16.70	12,384
2004	130,373.44	64,772	81,630	55,262	16.78	3,293
2005	227,056.13	109,535	138,043	100,366	16.86	5,953
2006	193,035.74	90,289	113,788	88,900	16.93	5,251
2007	24,281.71	10,976	13,833	11,663	17.00	686
2008	133,474.36	58,079	73,195	66,953	17.07	3,922
2009	47,310.64	19,766	24,910	24,766	17.13	1,446
2010	865,812.63	345,541	435,472	473,631	17.19	27,553
2011	46,406.93	17,584	22,160	26,567	17.25	1,540
2012	560,060.84	200,500	252,682	335,381	17.30	19,386
2013	60,272.57	20,210	25,470	37,816	17.35	2,180
2014	28,475.47	8,854	11,158	18,741	17.40	1,077
2015	329,092.09	93,781	118,189	227,358	17.45	13,029
2016	3,975,656.00	1,020,191	1,285,707	2,888,731	17.50	165,070
2017	134,820.13	30,465	38,394	103,167	17.54	5,882
2018	432,873.92	83,349	105,042	349,476	17.59	19,868
2019	1,559,101.72	244,134	307,673	1,329,384	17.63	75,405
2020	47,613.48	5,580	7,032	42,962	17.67	2,431
2021	100,106.94	7,394	9,318	95,794	17.71	5,409
2022	119,786.04	3,110	3,919	121,856	17.75	6,865
	31,300,264.10	17,893,233	22,550,151	10,315,126		641,472
	199,905,174.74	73,474,650	68,040,595	140,173,790		7,175,490
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					19.5	3.59

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 314.00 TURBOGENERATOR UNITS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
BIG STONE						
INTERIM SURVIVOR CURVE.. IOWA 65-S0						
PROBABLE RETIREMENT YEAR.. 12-2046						
NET SALVAGE PERCENT.. -4						
1976	3,031,177.78	2,018,182	2,940,502	211,923	19.67	10,774
1977	18,229.00	12,052	17,560	1,398	19.75	71
1978	896.00	588	857	75	19.83	4
1979	174,962.87	113,977	166,065	15,896	19.91	798
1982	1,663,477.11	1,058,095	1,541,650	188,366	20.13	9,357
1983	69,790.16	44,013	64,127	8,455	20.20	419
1984	778,100.00	486,109	708,263	100,961	20.28	4,978
1988	575,157.93	345,111	502,829	95,336	20.56	4,637
1989	3,063.04	1,817	2,647	538	20.63	26
1993	8,288.52	4,671	6,806	1,814	20.90	87
1994	52,122.24	28,947	42,176	12,031	20.97	574
1996	1,630.18	877	1,278	418	21.10	20
1997	610,226.92	322,554	469,963	164,673	21.17	7,779
2002	12,965.05	6,165	8,982	4,501	21.50	209
2003	26,159.46	12,123	17,663	9,543	21.56	443
2005	1,956,715.87	854,897	1,245,589	789,395	21.70	36,378
2006	32,585.73	13,776	20,072	13,817	21.77	635
2007	2,514.30	1,026	1,495	1,120	21.83	51
2008	2,787,806.76	1,092,927	1,592,400	1,306,919	21.90	59,677
2010	15,199.40	5,435	7,919	7,889	22.04	358
2011	7,053.92	2,391	3,484	3,852	22.11	174
2012	130,303.41	41,557	60,549	74,967	22.18	3,380
2013	64,334.42	19,162	27,919	38,989	22.25	1,752
2014	647,594.90	178,134	259,542	413,957	22.33	18,538
2015	740,343.57	185,906	270,866	499,091	22.40	22,281
2016	23,597.89	5,312	7,740	16,802	22.48	747
2017	71,728.35	14,148	20,614	53,984	22.56	2,393
2018	106,910.15	17,920	26,110	85,077	22.64	3,758
2019	140,979.37	19,134	27,878	118,740	22.72	5,226
2021	63,725.73	4,024	5,863	60,412	22.90	2,638
2022	308,482.19	6,830	9,951	310,870	22.99	13,522
	14,126,122.22	6,917,860	10,079,358	4,611,809		211,684

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 314.00 TURBOGENERATOR UNITS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
NEAL 4						
INTERIM SURVIVOR CURVE.. IOWA 65-S0						
PROBABLE RETIREMENT YEAR.. 12-2040						
NET SALVAGE PERCENT.. -4						
1981	2,682,107.82	1,893,077	2,351,045	438,347	15.80	27,743
1982	1,336.46	937	1,164	226	15.85	14
1983	10,770.13	7,495	9,308	1,893	15.89	119
1984	4,142.01	2,861	3,553	755	15.93	47
1986	3,505.18	2,383	2,959	686	16.01	43
1988	5,655.76	3,778	4,692	1,190	16.10	74
1991	2,854.02	1,850	2,298	671	16.22	41
1992	58,416.44	37,458	46,520	14,233	16.25	876
1994	2,813.86	1,761	2,187	739	16.33	45
1995	8,874.20	5,482	6,808	2,421	16.37	148
1998	4,333.09	2,559	3,178	1,328	16.49	81
2000	532,735.34	303,761	377,246	176,799	16.57	10,670
2012	24,267.97	9,304	11,555	13,684	17.04	803
2013	2,476,341.19	890,984	1,106,529	1,468,866	17.09	85,949
2014	23,463.82	7,854	9,754	14,648	17.13	855
2017	14,623.23	3,587	4,455	10,753	17.27	623
2018	3,753.20	790	981	2,922	17.31	169
2019	53,501.69	9,180	11,401	44,241	17.36	2,548
2020	35,346.88	4,533	5,630	31,131	17.42	1,787
	5,948,842.29	3,189,634	3,961,262	2,225,534		132,635
COYOTE						
INTERIM SURVIVOR CURVE.. IOWA 65-S0						
PROBABLE RETIREMENT YEAR.. 12-2041						
NET SALVAGE PERCENT.. -5						
1981	3,054,387.41	2,139,589	2,734,269	472,838	16.55	28,570
1984	133,275.04	91,311	116,690	23,249	16.69	1,393
1989	5,103.13	3,344	4,273	1,085	16.92	64
1996	213.88	129	165	60	17.22	3
1997	857,478.35	508,024	649,225	251,128	17.26	14,550
2000	155,676.22	87,497	111,816	51,644	17.39	2,970
2002	8,493.59	4,578	5,850	3,068	17.48	176
2003	618,775.54	325,871	416,444	233,270	17.52	13,314
2004	6,455.29	3,316	4,238	2,540	17.56	145
2005	12,017.71	6,003	7,671	4,947	17.61	281
2006	7,814.15	3,790	4,843	3,361	17.65	190
2007	19,096.97	8,963	11,454	8,598	17.69	486

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 314.00 TURBOGENERATOR UNITS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
COYOTE						
INTERIM SURVIVOR CURVE.. IOWA 65-S0						
PROBABLE RETIREMENT YEAR.. 12-2041						
NET SALVAGE PERCENT.. -5						
2008	20,097.01	9,096	11,624	9,478	17.74	534
2009	821,289.48	357,325	456,640	405,714	17.78	22,819
2010	57,537.43	23,937	30,590	29,824	17.83	1,673
2012	128,156.03	47,948	61,275	73,289	17.92	4,090
2013	174,667.12	61,292	78,328	105,073	17.97	5,847
2014	2,047.51	667	852	1,297	18.02	72
2015	2,651.40	792	1,012	1,772	18.07	98
2016	145,528.26	39,236	50,141	102,663	18.12	5,666
2017	30,569.36	7,270	9,291	22,807	18.17	1,255
2018	38,427.20	7,820	9,993	30,355	18.22	1,666
2019	223,184.19	36,933	47,198	187,145	18.28	10,238
2021	5,477.16	428	547	5,204	18.39	283
2022	8,563.30	233	298	8,694	18.46	471
	6,536,982.73	3,775,392	4,824,729	2,039,103		116,854
	26,611,947.24	13,882,886	18,865,348	8,876,446		461,173
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					19.2	1.73

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 315.00 ACCESSORY ELECTRIC EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
BIG STONE						
INTERIM SURVIVOR CURVE.. IOWA 65-R3						
PROBABLE RETIREMENT YEAR.. 12-2046						
NET SALVAGE PERCENT.. -4						
1976	2,754,182.05	1,973,651	2,016,391	847,958	18.81	45,080
1977	961.00	682	697	303	19.08	16
1978	7,455.00	5,237	5,350	2,403	19.34	124
1979	2,776.00	1,930	1,972	915	19.59	47
1980	6,097.00	4,196	4,287	2,054	19.83	104
1982	60,584.00	40,811	41,695	21,313	20.27	1,051
1991	1,976.75	1,189	1,215	841	21.80	39
2001	15,622.34	7,767	7,935	8,312	22.83	364
2005	449,405.40	198,913	203,221	264,161	23.12	11,426
2006	24,786.76	10,593	10,822	14,956	23.18	645
2008	7,118.28	2,810	2,871	4,532	23.29	195
2009	25,168.65	9,497	9,703	16,473	23.34	706
2010	2,927.24	1,050	1,073	1,972	23.39	84
2011	15,888.49	5,388	5,505	11,019	23.44	470
2012	455,897.21	145,251	148,396	325,737	23.48	13,873
2013	46,973.05	13,938	14,240	34,612	23.52	1,472
2014	71,295.44	19,505	19,927	54,220	23.56	2,301
2015	11,201.61	2,787	2,847	8,802	23.60	373
2018	2,537.21	419	428	2,211	23.69	93
2021	75,996.74	4,662	4,763	74,274	23.77	3,125
2022	3,694.33	79	81	3,761	23.79	158
	4,042,544.55	2,450,355	2,503,418	1,700,828		81,746
NEAL 4						
INTERIM SURVIVOR CURVE.. IOWA 65-R3						
PROBABLE RETIREMENT YEAR.. 12-2040						
NET SALVAGE PERCENT.. -4						
1981	2,355,852.56	1,730,202	1,774,549	675,537	16.01	42,195
1986	3,490.04	2,453	2,516	1,114	16.52	67
1987	2,064.60	1,437	1,474	673	16.61	41
1988	6,668.16	4,594	4,712	2,223	16.69	133
1991	19,700.19	13,128	13,464	7,024	16.91	415
1994	1,661.76	1,065	1,092	636	17.10	37
1995	5,188.96	3,279	3,363	2,033	17.16	118
1998	693.07	417	428	293	17.31	17
2000	239,948.48	139,199	142,767	106,780	17.40	6,137
2005	59,142.62	30,418	31,198	30,311	17.58	1,724

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 315.00 ACCESSORY ELECTRIC EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
NEAL 4						
INTERIM SURVIVOR CURVE.. IOWA 65-R3						
PROBABLE RETIREMENT YEAR.. 12-2040						
NET SALVAGE PERCENT.. -4						
2006	301,122.87	150,245	154,096	159,072	17.61	9,033
2010	19,986.43	8,537	8,756	12,030	17.72	679
2011	5,778.83	2,349	2,409	3,601	17.74	203
2013	2,767,617.66	996,821	1,022,371	1,855,952	17.78	104,384
2017	14,319.98	3,488	3,577	11,315	17.85	634
2018	6,387.26	1,332	1,366	5,277	17.86	295
2019	171,613.86	29,078	29,823	148,655	17.88	8,314
2020	12,548.95	1,595	1,636	11,415	17.89	638
2021	685.89	55	56	657	17.90	37
2022	76,564.75	2,163	2,218	77,409	17.91	4,322
	6,071,036.92	3,121,855	3,201,872	3,112,006		179,423
COYOTE						
INTERIM SURVIVOR CURVE.. IOWA 65-R3						
PROBABLE RETIREMENT YEAR.. 12-2041						
NET SALVAGE PERCENT.. -5						
1981	2,196,869.88	1,606,418	2,093,999	212,714	16.74	12,707
1984	18,927.31	13,475	17,565	2,309	17.11	135
1986	914.93	639	833	128	17.32	7
1997	4,848.83	2,935	3,826	1,265	18.16	70
1998	5,156.72	3,068	3,999	1,415	18.21	78
2002	4,828.19	2,644	3,447	1,623	18.40	88
2004	1,662.57	865	1,128	618	18.48	33
2006	19,951.82	9,776	12,743	8,206	18.55	442
2007	7,235.86	3,425	4,465	3,133	18.59	169
2008	445,943.02	203,315	265,025	203,215	18.62	10,914
2010	170,703.72	71,303	92,945	86,294	18.68	4,620
2011	25,969.63	10,311	13,441	13,828	18.70	739
2012	14,007.01	5,248	6,841	7,866	18.73	420
2015	6,193.46	1,845	2,405	4,098	18.79	218
2016	6,096.98	1,635	2,131	4,271	18.81	227
2017	4,574.11	1,080	1,408	3,395	18.83	180

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 315.00 ACCESSORY ELECTRIC EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
COYOTE						
INTERIM SURVIVOR CURVE.. IOWA 65-R3						
PROBABLE RETIREMENT YEAR.. 12-2041						
NET SALVAGE PERCENT.. -5						
2018	10,725.29	2,160	2,816	8,446	18.84	448
2019	72,798.36	11,907	15,521	60,917	18.86	3,230
2021	7,229.88	559	729	6,863	18.88	364
	3,024,637.57	1,952,608	2,545,265	630,604		35,089
	13,138,219.04	7,524,818	8,250,555	5,443,438		296,258
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					18.4	2.25

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 316.00 MISCELLANEOUS POWER PLANT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
BIG STONE						
INTERIM SURVIVOR CURVE.. IOWA 40-L0.5						
PROBABLE RETIREMENT YEAR.. 12-2046						
NET SALVAGE PERCENT.. -4						
1976	522,262.22	334,495	114,671	428,481	14.79	28,971
1977	28,555.00	18,163	6,227	23,471	14.91	1,574
1978	6,421.19	4,055	1,390	5,288	15.03	352
1980	12,512.04	7,780	2,667	10,345	15.28	677
1981	7,904.88	4,876	1,672	6,549	15.40	425
1982	5,969.31	3,652	1,252	4,956	15.52	319
1983	10,693.93	6,491	2,225	8,896	15.63	569
1984	15,784.09	9,497	3,256	13,160	15.75	836
1986	4,989.69	2,947	1,010	4,179	15.99	261
1988	6,309.08	3,653	1,252	5,309	16.22	327
1989	39,692.44	22,739	7,795	33,485	16.34	2,049
1990	18,814.90	10,658	3,654	15,914	16.46	967
1994	7,381.06	3,980	1,364	6,312	16.91	373
1995	17,302.26	9,196	3,153	14,842	17.03	872
1996	3,730.27	1,954	670	3,210	17.14	187
1998	30,263.15	15,351	5,263	26,211	17.36	1,510
1999	28,637.16	14,279	4,895	24,888	17.47	1,425
2002	17,538.50	8,232	2,822	15,418	17.81	866
2003	4,688.25	2,150	737	4,139	17.93	231
2004	13,096.99	5,855	2,007	11,614	18.05	643
2005	9,617.87	4,182	1,434	8,569	18.18	471
2006	14,602.19	6,158	2,111	13,075	18.31	714
2007	14,397.01	5,871	2,013	12,960	18.45	702
2008	7,166.47	2,816	965	6,488	18.59	349
2009	65,570.09	24,726	8,477	59,716	18.74	3,187
2010	9,342.44	3,362	1,153	8,564	18.90	453
2011	38,176.21	13,039	4,470	35,233	19.06	1,849
2012	15,556.00	5,007	1,716	14,462	19.23	752
2013	36,229.36	10,913	3,741	33,937	19.40	1,749
2014	15,205.13	4,234	1,451	14,362	19.58	734
2015	47,631.96	12,119	4,155	45,383	19.76	2,297
2016	38,134.31	8,732	2,993	36,666	19.94	1,839
2017	19,117.17	3,833	1,314	18,568	20.14	922
2018	131,344.35	22,410	7,683	128,916	20.33	6,341
2019	61,951.46	8,570	2,938	61,492	20.53	2,995

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 316.00 MISCELLANEOUS POWER PLANT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
BIG STONE						
INTERIM SURVIVOR CURVE.. IOWA 40-L0.5						
PROBABLE RETIREMENT YEAR.. 12-2046						
NET SALVAGE PERCENT.. -4						
2020	19,124.16	1,971	676	19,213	20.73	927
2021	63,035.79	4,081	1,399	64,158	20.94	3,064
2022	98,758.24	2,278	781	101,928	21.16	4,817
	1,507,506.62	634,305	217,452	1,350,355		77,596
NEAL 4						
INTERIM SURVIVOR CURVE.. IOWA 40-L0.5						
PROBABLE RETIREMENT YEAR.. 12-2040						
NET SALVAGE PERCENT.. -4						
1991	1,861.64	1,161	951	985	13.70	72
1992	16,370.52	10,108	8,283	8,742	13.77	635
1994	9,070.94	5,480	4,491	4,943	13.92	355
1995	6,624.48	3,955	3,241	3,648	13.99	261
1998	53,130.34	30,472	24,972	30,284	14.20	2,133
2000	48,197.83	26,788	21,953	28,173	14.34	1,965
2004	231.88	119	98	144	14.63	10
2005	17,544.56	8,789	7,203	11,044	14.71	751
2006	705.77	344	282	452	14.79	31
2008	644.30	295	242	428	14.98	29
2009	30,460.46	13,430	11,006	20,673	15.07	1,372
2010	33,266.34	14,058	11,520	23,077	15.18	1,520
2011	62,535.50	25,207	20,657	44,380	15.28	2,904
2012	5,438.26	2,077	1,702	3,954	15.39	257
2013	136,288.00	48,962	40,124	101,616	15.50	6,556
2014	69,738.80	23,293	19,088	53,440	15.62	3,421
2015	6,410.33	1,967	1,612	5,055	15.74	321
2016	27,564.12	7,657	6,275	22,392	15.86	1,412
2017	53,785.81	13,209	10,825	45,113	15.98	2,823
2018	27,911.28	5,880	4,819	24,209	16.10	1,504
2019	53,195.20	9,164	7,510	47,813	16.22	2,948
2020	132,814.18	17,229	14,119	124,008	16.35	7,585
2021	54,155.79	4,439	3,638	52,684	16.48	3,197
2022	46,286.23	1,351	1,107	47,031	16.62	2,830
	894,232.56	275,434	225,716	704,286		44,892

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 316.00 MISCELLANEOUS POWER PLANT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
COYOTE						
INTERIM SURVIVOR CURVE.. IOWA 40-L0.5						
PROBABLE RETIREMENT YEAR.. 12-2041						
NET SALVAGE PERCENT.. -5						
1981	202,337.48	135,455	158,815	53,640	13.41	4,000
1984	25,796.18	16,916	19,833	7,253	13.66	531
1985	2,301.49	1,497	1,755	661	13.75	48
1986	36,833.17	23,780	27,881	10,794	13.83	780
1987	6,342.54	4,061	4,761	1,898	13.91	136
1988	4,560.74	2,896	3,395	1,393	13.99	100
1989	764.32	481	564	239	14.07	17
1991	2,286.26	1,411	1,654	746	14.23	52
1993	2,207.33	1,334	1,564	754	14.39	52
1994	2,491.24	1,488	1,745	871	14.47	60
1995	1,263.13	745	873	453	14.55	31
2004	5,248.32	2,652	3,109	2,401	15.25	157
2006	1,419.22	680	797	693	15.43	45
2007	14,890.91	6,922	8,116	7,520	15.52	485
2008	4,091.02	1,837	2,154	2,142	15.63	137
2009	14,854.91	6,422	7,529	8,068	15.73	513
2010	37,530.09	15,546	18,227	21,180	15.84	1,337
2011	15,182.34	5,991	7,024	8,917	15.96	559
2012	8,762.81	3,275	3,840	5,361	16.07	334
2013	39,003.52	13,674	16,032	24,922	16.20	1,538
2014	8,131.69	2,654	3,112	5,427	16.32	333
2015	22,846.27	6,839	8,018	15,970	16.45	971
2016	24,381.91	6,592	7,729	17,872	16.58	1,078
2017	57,870.77	13,843	16,230	44,534	16.71	2,665
2018	6,254.22	1,278	1,498	5,069	16.85	301
2019	41,463.13	6,922	8,116	35,421	16.98	2,086
2020	45,477.93	5,699	6,682	41,070	17.12	2,399
2021	11,599.10	919	1,077	11,102	17.27	643
2022	52,443.12	1,447	1,697	53,369	17.42	3,064
	698,635.16	293,256	343,829	389,738		24,452
	3,100,374.34	1,202,995	786,997	2,444,379		146,940

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 16.6 4.74

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 341.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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						
1961	164,604.79	159,377	101,078	79,987	5.39	14,840
1969	3,102.11	2,842	1,802	1,610	7.52	214
1970	992.73	902	572	520	7.84	66
1971	2,649.03	2,385	1,513	1,401	8.17	171
1974	197,132.10	172,223	109,225	107,620	9.26	11,622
1975	1,379.49	1,191	755	762	9.67	79
1978	20,585.77	17,119	10,857	11,787	10.98	1,073
1979	15,741.79	12,906	8,185	9,131	11.46	797
1980	3,431.26	2,771	1,757	2,017	11.96	169
1982	4,870.04	3,808	2,415	2,942	13.01	226
1991	80,859.28	52,221	33,119	55,826	18.58	3,005
1992	11,490.71	7,227	4,583	8,057	19.27	418
1993	13,826.29	8,460	5,365	9,844	19.97	493
1996	6,328.72	3,533	2,241	4,721	22.16	213
2001	24,360.10	11,302	7,168	19,628	26.02	754
2003	2,813.71	1,195	758	2,337	27.63	85
2006	7,636.49	2,778	1,762	6,638	30.12	220
2007	33,294.77	11,419	7,242	29,382	30.97	949
2010	16,193.24	4,524	2,869	14,944	33.57	445
2013	10,338,343.07	2,216,324	1,405,610	9,966,567	36.23	275,092
2014	323,114.88	62,161	39,423	316,003	37.13	8,511
2015	292,414.26	49,821	31,597	290,059	38.03	7,627
2016	533,519.37	78,899	50,039	536,832	38.95	13,783
2019	11,061.01	890	564	11,603	41.71	278
2020	106,372.95	6,110	3,875	113,135	42.65	2,653
2021	4,280.00	148	94	4,614	43.59	106
2022	22,946.61	264	167	25,074	44.53	563
	12,243,344.57	2,892,800	1,834,635	11,633,044		344,452

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 33.8 2.81

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 341.10 STRUCTURES AND IMPROVEMENTS - WIND

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
INTERIM SURVIVOR CURVE.. IOWA 45-R3						
PROBABLE RETIREMENT YEAR.. 8-2040						
NET SALVAGE PERCENT.. -1						
2015	14,557,823.03	4,417,637	4,393,943	10,309,458	17.23	598,343
	14,557,823.03	4,417,637	4,393,943	10,309,458		598,343
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					17.2	4.11

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 342.00 FUEL HOLDERS, PRODUCERS AND ACCESSORIES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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.. -10						
1961	17,352.78	16,129	14,961	4,127	7.75	533
1975	79,985.49	64,844	60,147	27,837	13.15	2,117
1978	298,519.55	231,633	214,853	113,519	14.73	7,707
1990	14,434.14	8,768	8,133	7,745	22.39	346
1991	15,592.76	9,224	8,556	8,596	23.11	372
1993	3,226.92	1,805	1,674	1,876	24.58	76
2009	995,455.23	270,684	251,075	843,926	37.64	22,421
2013	1,624,409.13	314,486	291,704	1,495,146	41.20	36,290
2015	7,445.60	1,143	1,060	7,130	43.02	166
2016	184,984.92	24,703	22,914	180,569	43.93	4,110
2019	130,607.98	9,453	8,768	134,901	46.71	2,888
2021	27,505.89	853	791	29,465	48.59	606
2022	8,706.77	90	83	9,494	49.53	192
	3,408,227.16	953,815	884,719	2,864,330		77,824

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 36.8 2.28

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 342.10 FUEL HOLDERS, PRODUCERS AND ACCESSORIES - PIPELINES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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-S1.5						
NET SALVAGE PERCENT.. -5						
2012	1,408,975.51	334,024	256,434	1,222,990	34.84	35,103
	1,408,975.51	334,024	256,434	1,222,990		35,103
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					34.8	2.49

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 342.20 FUEL HOLDERS, PRODUCERS AND ACCESSORIES - COMPRESSORS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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.. -5						
2012	487,130.49	99,228	125,184	386,303	40.30	9,586
	487,130.49	99,228	125,184	386,303		9,586

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 40.3 1.97

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 343.00 PRIME MOVERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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						
NET SALVAGE PERCENT.. -20						
1961	889,827.60	873,241	964,081	103,712	9.11	11,384
1962	540,299.77	525,560	580,232	68,128	9.47	7,194
1964	8,276.94	7,904	8,726	1,206	10.21	118
1969	209,911.00	190,230	210,019	41,874	12.24	3,421
1972	312,987.11	273,426	301,870	73,715	13.60	5,420
1975	1,615,285.51	1,354,514	1,495,419	442,923	15.06	29,411
1978	2,710,839.50	2,171,057	2,396,904	856,103	16.63	51,479
1983	1,410.75	1,033	1,140	552	19.48	28
1990	215,923.63	135,099	149,153	109,956	23.93	4,595
1991	331,115.70	201,848	222,846	174,493	24.60	7,093
1996	76,827.20	40,325	44,520	47,673	28.13	1,695
1998	26,959.47	13,199	14,572	17,779	29.60	601
2000	13,800.00	6,260	6,911	9,649	31.10	310
2001	132,692.52	57,737	63,743	95,488	31.87	2,996
2003	367,710.74	146,319	161,540	279,713	33.42	8,370
2004	397,477.96	150,628	166,297	310,676	34.21	9,081
2006	842,090.50	286,782	316,615	693,894	35.81	19,377
2008	1,166,908.41	351,753	388,345	1,011,946	37.44	27,028
2009	299,433.28	84,368	93,144	266,175	38.26	6,957
2010	564,899.04	147,913	163,300	514,579	39.09	13,164
2012	6,701.02	1,484	1,638	6,403	40.77	157
2013	23,854,719.40	4,791,936	5,290,424	23,335,240	41.63	560,539
2014	126,289.41	22,793	25,164	126,383	42.48	2,975
2015	253,951.35	40,531	44,747	259,994	43.35	5,998
2016	248,231.62	34,435	38,017	259,861	44.22	5,877
2017	180,085.74	21,221	23,429	192,674	45.09	4,273
2018	11,674.38	1,129	1,246	12,763	45.97	278
2019	99,750.96	7,517	8,299	111,402	46.86	2,377
2020	7,481,337.86	403,992	446,018	8,531,588	47.75	178,672
2021	1,937.42	63	70	2,255	48.65	46
	42,989,355.79	12,344,297	13,628,429	37,958,798		970,914

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 343.00 PRIME MOVERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
BOB GLANZER						
INTERIM SURVIVOR CURVE.. IOWA 50-R2						
PROBABLE RETIREMENT YEAR.. 6-2057						
NET SALVAGE PERCENT.. -4						
2022	85,629,724.55	1,292,187	1,426,609	87,628,305	31.93	2,744,388
	85,629,724.55	1,292,187	1,426,609	87,628,305		2,744,388
	128,619,080.34	13,636,484	15,055,038	125,587,103		3,715,302
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					33.8	2.89

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 344.00 GENERATORS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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-R2.5						
NET SALVAGE PERCENT.. -5						
2013	7,684,740.50	2,005,706	1,435,067	6,633,911	26.30	252,240
2016	2,697.91	487	348	2,485	28.98	86
2018	153,698.06	19,366	13,856	147,527	30.80	4,790
2020	95,233.01	6,714	4,804	95,191	32.65	2,915
	7,936,369.48	2,032,273	1,454,075	6,879,113		260,031
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					26.5	3.28

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 344.10 GENERATORS - WIND

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
INTERIM SURVIVOR CURVE.. IOWA 30-S1						
PROBABLE RETIREMENT YEAR.. 8-2040						
NET SALVAGE PERCENT.. -1						
2015	79,926,258.87	25,852,348	24,146,576	56,578,946	15.24	3,712,529
	79,926,258.87	25,852,348	24,146,576	56,578,946		3,712,529
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					15.2	4.64

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 345.00 ACCESSORY ELECTRIC EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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-R2.5						
NET SALVAGE PERCENT.. -5						
1975	18,000.00	16,594	11,273	7,627	4.27	1,786
1983	4,502.53	3,843	2,611	2,117	6.55	323
1991	44,468.05	33,191	22,548	24,143	10.12	2,386
1998	212,753.33	131,162	89,102	134,289	14.45	9,293
2004	33,065.05	16,030	10,890	23,828	18.84	1,265
2006	41,127.19	18,001	12,229	30,955	20.41	1,517
2007	36,706.50	15,174	10,308	28,234	21.22	1,331
2009	11,730.36	4,269	2,900	9,417	22.87	412
2012	18,581.67	5,335	3,624	15,887	25.43	625
2013	2,339,792.48	610,682	414,854	2,041,928	26.30	77,640
2015	11,918.38	2,474	1,681	10,833	28.08	386
2016	433,872.30	78,357	53,230	402,336	28.98	13,883
2017	37,635.41	5,781	3,927	35,590	29.88	1,191
2020	18,943.63	1,335	907	18,984	32.65	581
2022	4,078.68	58	39	4,243	34.53	123
	3,267,175.56	942,286	640,123	2,790,411		112,742

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 24.8 3.45

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 345.10 ACCESSORY ELECTRIC EQUIPMENT - WIND

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
INTERIM SURVIVOR CURVE.. IOWA 30-R2.5						
PROBABLE RETIREMENT YEAR.. 8-2040						
NET SALVAGE PERCENT.. -1						
2015	4,574,032.73	1,414,205	1,291,426	3,328,347	15.98	208,282
2019	74,792.42	12,685	11,583	63,957	16.60	3,853
	4,648,825.15	1,426,890	1,303,009	3,392,304		212,135
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					16.0	4.56

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 346.00 MISCELLANEOUS POWER PLANT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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-S1						
NET SALVAGE PERCENT.. 0						
1973	1,400.49	1,163	1,322	78	5.93	13
1974	877.98	721	820	58	6.25	9
1975	4,513.13	3,663	4,165	348	6.59	53
1977	1,734.32	1,374	1,562	172	7.27	24
1979	1,309.56	1,011	1,150	160	7.97	20
1984	10,487.06	7,542	8,576	1,911	9.83	194
1989	1,350.60	893	1,015	336	11.87	28
1990	3,190.60	2,068	2,351	840	12.31	68
1993	1,135.54	692	787	349	13.67	26
1995	1,140.00	663	754	386	14.64	26
2008	19,014.91	6,878	7,821	11,194	22.34	501
2009	8,283.51	2,826	3,213	5,071	23.06	220
2011	3,638.96	1,084	1,233	2,406	24.57	98
2013	541,629.19	136,491	155,200	386,429	26.18	14,760
2014	11,273.51	2,574	2,927	8,347	27.01	309
2015	83,227.94	16,931	19,252	63,976	27.88	2,295
2016	58,610.27	10,450	11,882	46,728	28.76	1,625
2017	14,820.36	2,257	2,566	12,254	29.67	413
2018	102,581.06	12,895	14,663	87,918	30.60	2,873
2019	17,444.49	1,720	1,956	15,488	31.55	491
2020	3,331,707.76	236,085	268,445	3,063,263	32.52	94,196
2021	2,867,228.72	122,058	138,789	2,728,440	33.51	81,422
2022	154,008.22	2,201	2,503	151,505	34.50	4,391
	7,240,608.18	574,240	652,952	6,587,656		204,055

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 32.3 2.82

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 346.10 MISCELLANEOUS POWER PLANT EQUIPMENT - WIND

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR	ORIGINAL COST	CALCULATED ACCRUED	ALLOC. BOOK RESERVE	FUTURE BOOK ACCRUALS	REM. LIFE	ANNUAL ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)
INTERIM SURVIVOR CURVE.. IOWA 35-S1						
PROBABLE RETIREMENT YEAR.. 8-2040						
NET SALVAGE PERCENT.. -1						
2015	15,232,863.08	4,812,796	4,472,106	10,913,086	15.97	683,349
2017	197,666.94	49,657	46,142	153,502	16.31	9,412
2020	32,745.83	4,276	3,973	29,100	16.77	1,735
	15,463,275.85	4,866,729	4,522,221	11,095,687		694,496
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					16.0	4.49

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 352.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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-R3						
NET SALVAGE PERCENT.. -10						
1936	53,914.50	54,005	56,046	3,260	5.81	561
1938	1,927.66	1,914	1,986	134	6.33	21
1950	43,504.09	40,500	42,030	5,824	9.99	583
1951	33,148.00	30,651	31,809	4,654	10.36	449
1956	524,823.65	466,908	484,550	92,756	12.43	7,462
1966	88,867.10	71,240	73,932	23,822	17.63	1,351
1968	8,816.13	6,887	7,147	2,551	18.84	135
1969	16,107.27	12,414	12,883	4,835	19.46	248
1971	40,000.00	29,954	31,086	12,914	20.75	622
1976	78,731.00	54,414	56,470	30,134	24.16	1,247
1981	6,408.49	4,032	4,184	2,865	27.82	103
1982	17,339.36	10,687	11,091	7,982	28.58	279
1983	40,000.00	24,132	25,044	18,956	29.35	646
1990	22,000.00	11,184	11,607	12,593	34.96	360
1994	188,671.17	85,122	88,338	119,200	38.34	3,109
2003	29,178.30	9,214	9,562	22,534	46.34	486
2004	43,564.65	13,079	13,573	34,348	47.26	727
2006	1,829.31	492	511	1,501	49.11	31
2009	244,986.06	54,188	56,236	213,249	51.93	4,106
2010	195,619.35	40,123	41,639	173,542	52.88	3,282
2011	764,014.32	144,425	149,882	690,534	53.83	12,828
2012	1,114,810.39	192,810	200,095	1,026,196	54.78	18,733
2013	41,280.45	6,469	6,713	38,695	55.74	694
2014	558,559.61	78,363	81,324	533,092	56.71	9,400
2015	2,564,934.02	318,172	330,195	2,491,232	57.67	43,198
2016	1,034,485.75	111,347	115,554	1,022,380	58.64	17,435
2017	1,054,862.72	96,216	99,852	1,060,497	59.61	17,791
2018	2,085,330.33	155,639	161,520	2,132,343	60.59	35,193
2020	338,266.36	14,084	14,616	357,477	62.54	5,716
2021	945,610.12	23,685	24,580	1,015,591	63.52	15,989
2022	211,900.14	1,757	1,823	231,267	64.51	3,585
	12,393,490.30	2,164,107	2,245,878	11,386,961		206,370

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 55.2 1.67

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 353.00 STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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 48-R2						
NET SALVAGE PERCENT.. -20						
1947	93.89	104	82	31	3.71	8
1956	150.00	156	123	57	6.34	9
1960	4,131.28	4,174	3,301	1,657	7.59	218
1962	47,768.78	47,470	37,538	19,785	8.25	2,398
1963	10,149.97	10,000	7,908	4,272	8.59	497
1964	14,747.82	14,401	11,388	6,309	8.94	706
1965	137,077.69	132,623	104,876	59,617	9.30	6,410
1966	287,183.17	275,193	217,618	127,002	9.67	13,134
1967	241,622.92	229,238	181,277	108,671	10.05	10,813
1968	142,120.05	133,451	105,531	65,013	10.44	6,227
1969	31,635.04	29,381	23,234	14,728	10.85	1,357
1970	8,496.00	7,804	6,171	4,024	11.26	357
1971	1,338,637.01	1,215,150	960,919	645,445	11.69	55,213
1972	251,696.92	225,709	178,487	123,549	12.13	10,185
1973	72,751.36	64,422	50,944	36,358	12.58	2,890
1974	80,289.84	70,173	55,492	40,856	13.04	3,133
1975	971,007.55	837,005	661,888	503,321	13.52	37,228
1976	1,032,194.00	877,101	693,596	545,037	14.01	38,903
1977	826,194.71	691,733	547,010	444,424	14.51	30,629
1978	286,832.63	236,492	187,014	157,185	15.02	10,465
1979	297,830.83	241,690	191,124	166,273	15.54	10,700
1980	520,407.46	415,285	328,400	296,089	16.08	18,413
1981	304,898.35	239,116	189,089	176,789	16.63	10,631
1982	729,420.23	561,840	444,293	431,011	17.19	25,073
1983	802,225.14	606,280	479,435	483,235	17.77	27,194
1984	181,381.17	134,449	106,320	111,337	18.35	6,067
1985	718,373.72	521,720	412,567	449,481	18.95	23,719
1986	3,889,826.65	2,765,667	2,187,039	2,480,753	19.56	126,828
1987	564,676.44	392,730	310,564	367,048	20.18	18,189
1988	665,201.75	452,172	357,569	440,673	20.81	21,176
1989	600,905.38	398,847	315,401	405,685	21.45	18,913
1990	1,501,753.79	972,019	768,655	1,033,450	22.11	46,741
1991	1,720,247.09	1,085,036	858,027	1,206,270	22.77	52,976
1992	658,159.74	404,113	319,565	470,227	23.44	20,061
1993	890,883.08	531,633	420,406	648,654	24.13	26,882
1994	1,473,928.27	854,147	675,444	1,093,270	24.82	44,048
1995	219,360.99	123,280	97,488	165,745	25.52	6,495
1996	295,922.43	161,055	127,359	227,748	26.23	8,683
1997	162,634.48	85,545	67,647	127,514	26.96	4,730
1998	678,854.72	344,684	272,570	542,056	27.69	19,576
1999	76,376.64	37,367	29,549	62,103	28.43	2,184

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 353.00 STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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 48-R2						
NET SALVAGE PERCENT.. -20						
2000	138,183.39	65,015	51,413	114,407	29.18	3,921
2001	400,920.70	181,117	143,224	337,881	29.93	11,289
2002	83,790.18	36,240	28,658	71,890	30.70	2,342
2003	447,924.91	185,108	146,380	391,130	31.47	12,429
2004	337,763.42	132,911	105,104	300,212	32.26	9,306
2005	48,454.27	18,110	14,321	43,824	33.05	1,326
2006	426,035.38	150,709	119,178	392,064	33.85	11,582
2007	209,344.83	69,868	55,250	195,964	34.65	5,656
2008	192,478.25	60,342	47,717	183,257	35.46	5,168
2009	1,282,880.70	375,889	297,246	1,242,211	36.28	34,240
2010	6,422,677.19	1,748,612	1,382,771	6,324,442	37.11	170,424
2011	5,751,800.13	1,445,174	1,142,817	5,759,343	37.95	151,761
2012	9,141,727.16	2,104,938	1,664,547	9,305,526	38.79	239,895
2013	1,157,756.03	241,976	191,350	1,197,957	39.64	30,221
2014	2,196,663.40	412,428	326,141	2,309,855	40.49	57,048
2015	12,873,138.30	2,140,133	1,692,379	13,755,387	41.35	332,657
2016	8,098,875.67	1,170,320	925,468	8,793,183	42.22	208,271
2017	6,335,251.64	777,639	614,943	6,987,359	43.09	162,157
2018	9,159,722.87	922,860	729,781	10,261,886	43.97	233,384
2019	2,193,058.18	172,164	136,144	2,495,526	44.86	55,629
2020	3,374,753.44	189,850	150,130	3,899,574	45.75	85,237
2021	7,102,016.11	239,650	189,510	8,332,909	46.65	178,626
2022	1,642,047.82	18,483	14,616	1,955,841	47.55	41,132
	101,755,312.95	29,289,991	23,161,996	98,944,379		2,813,760

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 35.2 2.77

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 355.00 POLES AND FIXTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R2.5						
NET SALVAGE PERCENT.. -120						
1969	1,759,705.92	2,734,453	3,048,514	822,839	17.62	46,699
1970	1,231,192.06	1,887,910	2,104,743	603,880	18.18	33,217
1971	469,995.12	710,868	792,513	241,476	18.75	12,879
1972	445,666.41	664,432	740,744	239,722	19.34	12,395
1973	216,651.33	318,310	354,869	121,764	19.93	6,110
1974	74,510.29	107,807	120,189	43,734	20.54	2,129
1975	525,794.37	748,797	834,799	321,949	21.16	15,215
1976	629,537.13	881,998	983,298	401,684	21.79	18,434
1977	294,035.57	404,946	451,455	195,423	22.44	8,709
1978	818,669.43	1,107,966	1,235,220	565,853	23.09	24,506
1979	1,318,815.49	1,752,442	1,953,716	947,678	23.76	39,885
1980	865,787.79	1,129,183	1,258,873	645,860	24.43	26,437
1981	447,017.04	571,869	637,550	345,887	25.11	13,775
1982	2,546,694.77	3,192,603	3,559,284	2,043,444	25.81	79,173
1983	792,838.74	973,585	1,085,404	658,841	26.51	24,853
1984	875,797.36	1,052,335	1,173,199	753,555	27.23	27,674
1985	324,083.30	380,854	424,596	288,387	27.95	10,318
1986	302,700.24	347,621	387,546	278,395	28.68	9,707
1987	881,844.01	988,789	1,102,355	837,702	29.42	28,474
1988	381,629.44	417,416	465,358	374,227	30.17	12,404
1989	178,653.72	190,494	212,373	180,665	30.92	5,843
1990	618,950.41	642,487	716,279	645,412	31.69	20,366
1991	588,344.95	594,111	662,347	632,012	32.46	19,470
1992	592,148.11	581,016	647,748	654,978	33.24	19,705
1993	473,959.32	451,316	503,151	539,560	34.03	15,855
1994	575,144.38	531,016	592,005	673,313	34.82	19,337
1995	477,229.24	426,440	475,418	574,486	35.63	16,124
1996	25,984.40	22,447	25,025	32,141	36.44	882
1997	135,381.62	112,932	125,903	171,937	37.25	4,616
1998	120,904.07	97,174	108,335	157,654	38.08	4,140
1999	130,062.21	100,577	112,129	174,008	38.91	4,472
2000	29,499.36	21,914	24,431	40,468	39.74	1,018
2002	33,204.64	22,597	25,192	47,858	41.44	1,155
2003	452,567.43	293,716	327,450	668,198	42.30	15,797
2004	324,689.88	200,488	223,515	490,803	43.16	11,372
2005	274,222.14	160,577	179,020	424,269	44.03	9,636
2006	3,334,608.41	1,846,286	2,058,338	5,277,801	44.90	117,546
2007	996,362.00	519,503	579,170	1,612,826	45.78	35,230
2008	1,360,185.31	664,823	741,180	2,251,228	46.67	48,237
2009	1,840,395.75	839,452	935,866	3,113,005	47.56	65,454
2010	1,275,617.06	540,224	602,270	2,204,088	48.45	45,492

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 355.00 POLES AND FIXTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R2.5						
NET SALVAGE PERCENT.. -120						
2011	2,897,033.35	1,131,292	1,261,224	5,112,249	49.35	103,592
2012	3,032,596.84	1,083,019	1,207,407	5,464,306	50.26	108,721
2013	1,265,724.19	409,809	456,877	2,327,716	51.17	45,490
2014	2,223,222.05	645,624	719,776	4,171,313	52.08	80,094
2015	3,417,029.11	877,063	977,796	6,539,668	53.00	123,390
2016	1,896,800.47	422,846	471,411	3,701,550	53.92	68,649
2017	1,938,716.74	366,080	408,125	3,857,052	54.85	70,320
2018	2,309,422.29	358,191	399,331	4,681,398	55.77	83,941
2019	1,975,556.00	238,303	265,673	4,080,550	56.71	71,955
2020	2,887,146.64	249,813	278,505	6,073,218	57.64	105,365
2021	3,888,212.65	202,475	225,730	8,328,338	58.58	142,170
2022	4,414,393.02	76,042	84,775	9,626,890	59.53	161,715
	61,186,933.57	35,294,331	39,348,000	95,263,254		2,100,142
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					45.4	3.43

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 356.00 OVERHEAD CONDUCTORS AND DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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 56-R1						
NET SALVAGE PERCENT.. -40						
1962	766,361.84	719,609	694,396	378,511	18.44	20,527
1964	4.14	4	4	2	19.37	
1966	192,898.72	172,065	166,036	104,022	20.32	5,119
1967	190,515.08	167,605	161,733	104,988	20.81	5,045
1968	334,260.19	289,969	279,809	188,155	21.30	8,834
1969	379,312.22	324,310	312,947	218,090	21.80	10,004
1970	833,148.71	701,933	677,339	489,069	22.30	21,931
1971	442,205.94	366,810	353,958	265,130	22.82	11,618
1972	376,390.89	307,416	296,645	230,302	23.33	9,871
1973	93,325.10	74,987	72,360	58,295	23.86	2,443
1974	47,430.57	37,494	36,180	30,223	24.38	1,240
1975	268,327.58	208,491	201,186	174,473	24.92	7,001
1976	341,810.93	260,974	251,830	226,705	25.46	8,904
1977	204,475.31	153,307	147,936	138,329	26.01	5,318
1978	769,489.79	566,340	546,497	530,789	26.56	19,985
1979	940,880.76	679,310	655,509	661,724	27.12	24,400
1980	771,200.76	545,822	526,698	552,983	27.69	19,970
1981	424,589.06	294,454	284,137	310,288	28.26	10,980
1982	2,146,694.60	1,457,606	1,406,535	1,598,837	28.84	55,438
1983	680,452.19	451,986	436,150	516,483	29.43	17,550
1984	759,824.21	493,507	476,216	587,538	30.02	19,572
1985	238,642.02	151,477	146,170	187,929	30.61	6,139
1986	249,764.55	154,729	149,308	200,362	31.22	6,418
1987	494,697.19	299,047	288,569	404,007	31.82	12,697
1988	296,157.77	174,435	168,323	246,298	32.44	7,592
1989	146,674.41	84,117	81,170	124,174	33.06	3,756
1990	145,617.22	81,254	78,407	125,457	33.68	3,725
1991	138,441.58	75,070	72,440	121,378	34.31	3,538
1992	139,371.09	73,379	70,808	124,312	34.94	3,558
1993	887.21	453	437	805	35.58	23
1994	66,962.49	33,097	31,937	61,810	36.23	1,706
1995	1,163.19	556	537	1,091	36.87	30
1996	566.69	262	253	540	37.53	14
1997	82,924.56	36,942	35,648	80,446	38.18	2,107
1998	94,591.20	40,580	39,158	93,270	38.84	2,401
1999	96,655.82	39,846	38,450	96,868	39.51	2,452
2000	2,791.24	1,105	1,066	2,842	40.17	71
2003	102,495.15	35,361	34,122	109,371	42.20	2,592
2004	161,349.88	52,962	51,106	174,784	42.87	4,077
2005	149,675.46	46,548	44,917	164,629	43.56	3,779
2006	1,828,086.38	537,457	518,626	2,040,695	44.24	46,128

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 356.00 OVERHEAD CONDUCTORS AND DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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 56-R1						
NET SALVAGE PERCENT.. -40						
2007	299,508.92	82,890	79,986	339,326	44.93	7,552
2008	730,818.95	189,650	183,005	840,142	45.62	18,416
2009	426,806.26	103,396	99,773	497,756	46.31	10,748
2010	583,838.61	131,221	126,623	690,751	47.01	14,694
2011	2,047,939.26	424,448	409,576	2,457,539	47.71	51,510
2012	3,391,571.54	643,571	621,022	4,127,178	48.41	85,255
2013	2,651,268.14	456,697	440,695	3,271,080	49.11	66,607
2014	188,401.48	29,109	28,089	235,673	49.82	4,730
2015	2,083,122.52	284,346	274,384	2,641,988	50.54	52,275
2016	364,211.56	43,249	41,734	468,162	51.25	9,135
2017	869,891.12	87,636	84,565	1,133,283	51.97	21,806
2018	928,655.69	76,616	73,932	1,226,186	52.70	23,267
2019	1,052,229.78	67,867	65,489	1,407,633	53.42	26,350
2020	146,808.07	6,791	6,553	198,978	54.15	3,675
2021	966,354.26	26,814	25,874	1,327,022	54.89	24,176
2022	1,071,536.20	9,916	9,569	1,490,582	55.63	26,795
	33,204,076.05	12,856,893	12,406,422	34,079,285		845,544

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 40.3 2.55

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 357.00 UNDERGROUND CONDUIT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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-R3						
NET SALVAGE PERCENT.. 0						
1995	5,411.53	2,500	2,700	2,712	29.59	92
1996	40,687.43	18,184	19,640	21,047	30.42	692
1997	42,931.34	18,531	20,015	22,916	31.26	733
1998	42,931.34	17,867	19,298	23,633	32.11	736
1999	42,931.34	17,196	18,573	24,358	32.97	739
2000	42,931.34	16,517	17,840	25,091	33.84	741
2001	42,931.32	15,830	17,098	25,833	34.72	744
2004	105,683.55	33,838	36,549	69,135	37.39	1,849
2010	11,361.29	2,493	2,693	8,668	42.93	202
2012	41,629.53	7,713	8,331	33,299	44.81	743
2015	142,128.18	18,890	20,402	121,726	47.69	2,552
2017	40,935.32	4,004	4,325	36,610	49.62	738
2018	11,075.53	888	959	10,117	50.59	200
2020	27,232.64	1,218	1,316	25,917	52.54	493
	640,801.68	175,669	189,739	451,063		11,254

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 40.1 1.76

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 358.00 UNDERGROUND CONDUCTORS AND DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 40-R4						
NET SALVAGE PERCENT.. -5						
1995	72,789.61	49,545	58,654	17,775	14.07	1,263
1996	25,303.89	16,692	19,761	6,808	14.87	458
1997	29,457.99	18,798	22,254	8,677	15.69	553
1998	29,457.99	18,156	21,494	9,437	16.52	571
1999	29,457.99	17,491	20,707	10,224	17.38	588
2000	29,457.99	16,826	19,919	11,012	18.24	604
2001	29,457.99	16,138	19,105	11,826	19.13	618
2004	930,228.01	442,951	524,388	452,351	21.86	20,693
2006	563,427.22	240,485	284,699	306,900	23.74	12,928
2010	488,422.42	158,981	188,210	324,634	27.60	11,762
2012	114,367.55	31,342	37,104	82,982	29.56	2,807
2015	406,646.74	79,845	94,525	332,454	32.52	10,223
2017	265,964.87	38,329	45,376	233,887	34.51	6,777
2018	245,780.40	28,968	34,294	223,775	35.51	6,302
2019	1,053,764.07	96,538	114,286	992,166	36.51	27,175
2020	81,697.85	5,361	6,347	79,436	37.50	2,118
2021	300,431.93	11,830	14,005	301,449	38.50	7,830
2022	9,509.71	125	148	9,838	39.50	249
	4,705,624.22	1,288,401	1,525,276	3,415,630		113,519

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 30.1 2.41

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 361.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R4						
NET SALVAGE PERCENT.. -5						
1975	5,555.95	4,237	5,322	512	16.42	31
1995	92,311.53	43,569	54,721	42,206	33.03	1,278
2002	148,171.34	52,664	66,144	89,436	39.69	2,253
2008	101,811.85	25,710	32,291	74,611	45.57	1,637
2010	180,581.17	39,344	49,414	140,196	47.55	2,948
2011	8,062.22	1,617	2,031	6,434	48.54	133
2012	121,861.09	22,328	28,043	99,911	49.53	2,017
2013	63,184.09	10,482	13,165	53,178	50.52	1,053
2014	114,722.54	17,024	21,382	99,077	51.52	1,923
2015	93,912.58	12,309	15,459	83,149	52.51	1,583
2018	90,431.58	7,105	8,924	86,029	55.51	1,550
2020	335,329.19	14,672	18,427	333,669	57.50	5,803
2022	128,092.19	1,120	1,407	133,090	59.50	2,237
	1,484,027.32	252,181	316,730	1,241,499		24,446

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 50.8 1.65

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 362.00 STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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 48-R2.5						
NET SALVAGE PERCENT.. -15						
1945	164.10	177	145	44	3.07	14
1947	530.60	565	463	147	3.53	42
1948	2,724.20	2,887	2,367	766	3.76	204
1950	2,166.30	2,274	1,864	627	4.19	150
1951	143.70	150	123	42	4.41	10
1952	183.46	191	157	54	4.63	12
1953	403.89	418	343	121	4.85	25
1954	6,118.44	6,292	5,159	1,877	5.08	369
1955	309.00	316	259	96	5.31	18
1956	15,193.80	15,456	12,673	4,800	5.54	866
1957	882.22	892	731	284	5.78	49
1958	318.72	321	263	104	6.02	17
1959	141.34	141	116	47	6.26	8
1960	16,924.94	16,824	13,794	5,670	6.51	871
1961	21,719.57	21,455	17,591	7,387	6.77	1,091
1962	8,256.25	8,102	6,643	2,852	7.04	405
1963	48,889.22	47,660	39,077	17,146	7.31	2,346
1964	31,182.33	30,182	24,747	11,113	7.60	1,462
1965	149,118.94	143,298	117,492	53,995	7.89	6,843
1966	75,845.85	72,322	59,298	27,925	8.20	3,405
1967	47,315.25	44,743	36,685	17,728	8.53	2,078
1968	76,814.94	72,032	59,060	29,277	8.86	3,304
1969	214,349.00	199,153	163,288	83,213	9.22	9,025
1970	94,726.27	87,171	71,472	37,463	9.59	3,906
1971	951,159.40	866,633	710,561	383,272	9.97	38,443
1972	189,920.97	171,178	140,351	78,058	10.38	7,520
1973	136,505.32	121,660	99,750	57,231	10.80	5,299
1974	203,446.03	179,176	146,908	87,055	11.24	7,745
1975	150,304.78	130,718	107,177	65,673	11.70	5,613
1976	438,463.48	376,284	308,519	195,714	12.18	16,068
1977	140,515.77	118,939	97,519	64,074	12.67	5,057
1978	297,163.75	247,832	203,200	138,538	13.19	10,503
1979	525,068.74	431,237	353,576	250,253	13.72	18,240
1980	377,088.67	304,732	249,853	183,799	14.27	12,880
1981	622,512.52	494,708	405,616	310,273	14.83	20,922
1982	255,317.80	199,353	163,452	130,163	15.41	8,447
1983	303,472.69	232,590	190,703	158,291	16.01	9,887
1984	331,619.25	249,315	204,416	176,946	16.62	10,647
1985	88,615.90	65,306	53,545	48,363	17.24	2,805
1986	635,679.78	458,722	376,111	354,921	17.88	19,850
1987	333,839.28	235,628	193,194	190,721	18.54	10,287

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 362.00 STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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 48-R2.5						
NET SALVAGE PERCENT.. -15						
1988	262,519.91	181,075	148,465	153,433	19.21	7,987
1989	1,173,578.45	790,362	648,026	701,589	19.89	35,273
1990	903,998.21	593,870	486,920	552,678	20.58	26,855
1991	739,676.52	473,519	388,243	462,385	21.28	21,729
1992	656,708.81	409,077	335,407	419,808	22.00	19,082
1993	318,947.61	193,177	158,388	208,402	22.72	9,173
1994	1,186,528.45	697,605	571,974	792,534	23.46	33,782
1995	609,638.44	347,471	284,895	416,189	24.21	17,191
1996	1,702,629.63	939,440	770,257	1,187,767	24.97	47,568
1997	84,225.40	44,918	36,829	60,030	25.74	2,332
1998	585,387.23	301,396	247,118	426,077	26.51	16,072
1999	176,577.46	87,571	71,800	131,264	27.30	4,808
2000	451,309.06	215,169	176,419	342,586	28.10	12,192
2001	369,017.50	168,865	138,454	285,916	28.90	9,893
2002	1,260,964.44	552,245	452,792	997,317	29.72	33,557
2003	319,191.27	133,522	109,476	257,594	30.54	8,435
2004	707,682.93	281,790	231,043	582,792	31.38	18,572
2005	14,686.04	5,552	4,552	12,337	32.22	383
2006	139,550.80	49,917	40,927	119,556	33.07	3,615
2007	259,891.73	87,669	71,881	226,994	33.92	6,692
2008	1,690,958.01	535,174	438,795	1,505,807	34.79	43,283
2009	564,188.79	166,798	136,759	512,058	35.66	14,359
2010	1,332,709.43	365,912	300,015	1,232,601	36.54	33,733
2011	1,676,202.68	424,889	348,371	1,579,262	37.42	42,204
2012	1,781,888.83	413,687	339,186	1,709,986	38.31	44,635
2013	939,955.04	197,943	162,296	918,652	39.21	23,429
2014	633,520.95	119,759	98,192	630,357	40.11	15,716
2015	946,964.73	158,364	129,844	959,165	41.02	23,383
2016	540,806.67	78,518	64,378	557,550	41.94	13,294
2017	368,086.21	45,327	37,164	386,135	42.86	9,009
2018	2,164,159.56	218,814	179,408	2,309,375	43.78	52,750
2019	2,197,220.62	173,187	141,998	2,384,806	44.71	53,339
2020	4,083,914.96	229,941	188,531	4,507,971	45.65	98,751
2021	7,140,792.12	241,266	197,816	8,014,095	46.59	172,013
2022	2,363,224.34	26,606	21,815	2,695,893	47.53	56,720
	47,142,419.29	15,607,428	12,796,695	41,417,088		1,278,542

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 32.4 2.71

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 364.00 POLES, TOWERS AND FIXTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 40-R3						
NET SALVAGE PERCENT.. -80						
1976	3,061,732.78	4,753,340	4,754,538	756,581	5.50	137,560
1977	139,961.67	215,212	215,266	36,665	5.83	6,289
1978	218,366.90	332,234	332,318	60,742	6.19	9,813
1979	287,354.87	432,282	432,391	84,848	6.57	12,914
1980	343,729.31	510,902	511,031	107,682	6.97	15,449
1981	376,319.46	552,230	552,369	125,006	7.39	16,916
1982	388,356.06	562,029	562,171	136,870	7.84	17,458
1983	391,701.75	558,586	558,727	146,336	8.31	17,610
1984	391,815.09	550,108	550,247	155,020	8.80	17,616
1985	407,855.53	563,085	563,227	170,913	9.32	18,338
1986	431,286.23	584,954	585,101	191,214	9.86	19,393
1987	447,251.10	595,336	595,486	209,566	10.42	20,112
1988	456,530.75	595,567	595,717	226,038	11.01	20,530
1989	441,155.78	563,400	563,542	230,538	11.62	19,840
1990	459,628.70	573,961	574,106	253,226	12.25	20,672
1991	464,451.29	566,607	566,750	269,262	12.89	20,889
1992	515,836.22	613,742	613,897	314,608	13.56	23,201
1993	524,453.23	607,710	607,863	336,153	14.25	23,590
1994	540,956.71	609,793	609,947	363,775	14.95	24,333
1995	499,763.01	547,166	547,304	352,269	15.67	22,480
1996	404,187.49	429,247	429,355	298,182	16.40	18,182
1997	404,419.40	415,844	415,949	312,006	17.15	18,193
1998	396,369.88	394,011	394,110	319,356	17.91	17,831
1999	382,989.37	367,268	367,360	322,021	18.69	17,230
2000	389,167.48	359,357	359,447	341,054	19.48	17,508
2001	392,367.80	348,011	348,099	358,163	20.29	17,652
2002	2,106,471.35	1,791,554	1,792,005	1,999,643	21.10	94,770
2003	533,370.89	433,711	433,820	526,248	21.93	23,997
2004	802,041.18	621,502	621,659	822,015	22.78	36,085
2005	839,252.43	618,235	618,391	892,263	23.63	37,760
2006	2,655,885.81	1,853,676	1,854,143	2,926,451	24.49	119,496
2007	688,292.27	453,137	453,251	785,675	25.37	30,969
2008	1,632,938.13	1,009,646	1,009,900	1,929,389	26.26	73,473
2009	647,631.07	374,493	374,587	791,149	27.15	29,140
2010	1,346,908.56	723,694	723,876	1,700,559	28.06	60,604
2011	1,046,424.72	518,922	519,053	1,364,511	28.98	47,085
2012	1,812,940.46	823,981	824,188	2,439,105	29.90	81,575
2013	1,462,055.38	603,317	603,469	2,028,231	30.83	65,788
2014	2,126,918.02	787,704	787,902	3,040,550	31.77	95,705
2015	1,803,970.35	590,981	591,130	2,656,017	32.72	81,174
2016	2,337,151.51	664,686	664,853	3,542,020	33.68	105,167

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 364.00 POLES, TOWERS AND FIXTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 40-R3						
NET SALVAGE PERCENT.. -80						
2017	2,982,497.21	719,378	719,559	4,648,936	34.64	134,207
2018	3,487,699.64	690,565	690,739	5,587,120	35.60	156,942
2019	4,819,733.32	743,926	744,114	7,931,406	36.57	216,883
2020	4,955,427.42	546,336	546,473	8,373,296	37.55	222,991
2021	3,046,979.82	201,558	201,609	5,282,955	38.53	137,113
2022	4,638,821.25	102,286	102,312	8,247,566	39.51	208,746
	58,931,418.65	32,075,270	32,083,351	73,993,203		2,651,269
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					27.9	4.50

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 365.00 OVERHEAD CONDUCTORS AND DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 30-R0.5						
NET SALVAGE PERCENT.. -25						
1971	1,269,148.29	1,380,722	569,679	1,016,756	3.89	261,377
1972	25,320.67	27,114	11,187	20,464	4.30	4,759
1973	28,331.82	29,866	12,323	23,092	4.70	4,913
1974	32,646.50	33,871	13,975	26,833	5.10	5,261
1975	39,299.41	40,118	16,552	32,572	5.50	5,922
1976	41,565.05	41,738	17,221	34,735	5.90	5,887
1977	43,108.54	42,587	17,571	36,315	6.29	5,773
1978	47,127.01	45,772	18,885	40,024	6.69	5,983
1979	49,526.82	47,278	19,507	42,402	7.09	5,981
1980	72,952.94	68,423	28,231	62,960	7.49	8,406
1981	81,161.76	74,737	30,836	70,616	7.90	8,939
1982	85,393.92	77,210	31,856	74,886	8.30	9,022
1983	87,621.39	77,691	32,055	77,472	8.72	8,884
1984	91,251.52	79,312	32,724	81,340	9.14	8,899
1985	118,362.04	100,805	41,592	106,361	9.56	11,126
1986	122,219.27	101,900	42,043	110,731	9.99	11,084
1987	126,024.55	102,762	42,399	115,132	10.43	11,039
1988	127,647.79	101,746	41,980	117,580	10.87	10,817
1989	131,863.38	102,634	42,346	122,483	11.32	10,820
1990	138,002.76	104,767	43,226	129,277	11.78	10,974
1991	114,257.58	84,551	34,885	107,937	12.24	8,818
1992	126,984.87	91,481	37,745	120,986	12.71	9,519
1993	140,893.26	98,683	40,716	135,401	13.19	10,265
1994	146,354.14	99,521	41,062	141,881	13.68	10,371
1995	132,032.07	87,031	35,909	129,131	14.18	9,107
1996	104,884.25	66,952	27,624	103,481	14.68	7,049
1997	104,990.53	64,788	26,731	104,507	15.19	6,880
1998	107,549.38	64,036	26,421	108,016	15.71	6,876
1999	102,136.59	58,601	24,179	103,492	16.23	6,377
2000	105,452.07	58,130	23,984	107,831	16.77	6,430
2001	98,663.59	52,168	21,524	101,805	17.31	5,881
2002	840,619.02	425,563	175,585	875,189	17.85	49,030
2003	298,600.76	144,198	59,495	313,756	18.41	17,043
2004	247,900.71	113,932	47,008	262,868	18.97	13,857
2005	269,637.21	117,629	48,533	288,514	19.53	14,773
2006	1,061,797.99	437,992	180,714	1,146,533	20.10	57,041
2007	299,213.73	116,196	47,942	326,075	20.68	15,768
2008	800,763.34	291,608	120,316	880,638	21.26	41,422
2009	264,156.18	89,813	37,056	293,139	21.84	13,422
2010	619,599.91	195,430	80,634	693,866	22.43	30,935
2011	226,632.18	65,913	27,195	256,095	23.02	11,125

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 365.00 OVERHEAD CONDUCTORS AND DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 30-R0.5						
NET SALVAGE PERCENT.. -25						
2012	688,098.11	182,922	75,473	784,650	23.62	33,220
2013	629,813.86	151,683	62,584	724,683	24.22	29,921
2014	913,670.46	197,581	81,521	1,060,567	24.81	42,748
2015	532,646.79	101,869	42,031	623,777	25.41	24,548
2016	813,784.38	134,956	55,682	961,548	26.02	36,954
2017	666,223.83	93,829	38,714	794,066	26.62	29,830
2018	1,114,160.02	128,588	53,055	1,339,645	27.23	49,197
2019	1,622,933.14	146,064	60,265	1,968,401	27.84	70,704
2020	2,274,158.43	146,882	60,603	2,782,095	28.45	97,789
2021	1,555,295.73	60,268	24,866	1,919,254	29.07	66,022
2022	2,008,927.49	25,940	10,703	2,500,456	29.69	84,219
	21,791,407.03	6,875,851	2,836,943	24,402,316		1,333,007

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 18.3 6.12

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 366.00 UNDERGROUND CONDUIT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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.. -10						
1962	6,258.70	6,041	5,895	990	6.13	162
1963	12,342.75	11,831	11,545	2,032	6.43	316
1964	12,312.89	11,716	11,433	2,111	6.75	313
1965	12,312.90	11,626	11,345	2,199	7.08	311
1966	12,342.07	11,562	11,283	2,293	7.42	309
1967	12,371.25	11,488	11,211	2,397	7.79	308
1968	23,013.48	21,183	20,671	4,644	8.16	569
1969	45,532.59	41,511	40,509	9,577	8.56	1,119
1970	46,727.96	42,179	41,160	10,241	8.97	1,142
1971	54,308.92	48,509	47,338	12,402	9.40	1,319
1972	55,038.29	48,615	47,441	13,101	9.85	1,330
1973	54,396.28	47,486	46,339	13,497	10.32	1,308
1974	54,833.20	47,276	46,134	14,183	10.81	1,312
1975	54,599.68	46,462	45,340	14,720	11.32	1,300
1976	54,833.17	46,021	44,910	15,406	11.85	1,300
1977	54,687.20	45,249	44,156	16,000	12.39	1,291
1978	55,008.21	44,825	43,742	16,767	12.96	1,294
1979	55,095.78	44,193	43,126	17,479	13.54	1,291
1980	54,719.24	43,169	42,126	18,065	14.14	1,278
1981	55,215.08	42,819	41,785	18,952	14.75	1,285
1982	55,098.31	41,953	40,940	19,668	15.39	1,278
1983	55,244.29	41,286	40,289	20,480	16.03	1,278
1984	55,127.37	40,386	39,411	21,229	16.70	1,271
1985	55,273.42	39,666	38,708	22,093	17.38	1,271
1986	55,535.77	39,012	38,070	23,019	18.07	1,274
1987	55,360.70	38,036	37,117	23,780	18.77	1,267
1988	55,565.07	37,296	36,395	24,727	19.49	1,269
1989	55,623.23	36,442	35,562	25,624	20.22	1,267
1990	55,477.34	35,431	34,575	26,450	20.97	1,261
1991	55,769.13	34,697	33,859	27,487	21.72	1,266
1992	55,710.52	33,717	32,903	28,379	22.49	1,262
1993	55,798.27	32,825	32,032	29,346	23.26	1,262
1994	55,973.23	31,955	31,183	30,388	24.05	1,264
1995	55,940.83	30,952	30,205	31,330	24.85	1,261
1996	56,145.19	30,065	29,339	32,421	25.66	1,263
1997	56,262.25	29,112	28,409	33,479	26.48	1,264
1998	56,291.19	28,099	27,420	34,500	27.31	1,263
1999	58,833.61	28,281	27,598	37,119	28.15	1,319
2000	58,716.81	27,127	26,472	38,116	29.00	1,314
2001	59,417.07	26,327	25,691	39,668	29.86	1,328
2002	1,417,169.75	600,795	586,286	972,601	30.73	31,650

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 366.00 UNDERGROUND CONDUIT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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.. -10						
2003	1,226,563.58	496,513	484,522	864,698	31.60	27,364
2004	1,057,818.97	407,493	397,652	765,949	32.49	23,575
2005	226,661.34	82,876	80,875	168,452	33.38	5,046
2006	413,212.60	142,905	139,454	315,080	34.28	9,191
2007	198,761.32	64,760	63,196	155,441	35.19	4,417
2008	394,546.46	120,566	117,654	316,347	36.11	8,761
2009	220,852.49	63,018	61,496	181,442	37.03	4,900
2010	322,656.64	85,465	83,401	271,521	37.96	7,153
2011	262,164.77	64,078	62,531	225,850	38.89	5,807
2012	323,793.20	72,374	70,626	285,547	39.84	7,167
2013	74,890.75	15,191	14,824	67,556	40.78	1,657
2014	99,319.44	18,048	17,612	91,639	41.74	2,195
2015	162,965.45	26,208	25,575	153,687	42.69	3,600
2016	245,410.01	34,230	33,404	236,547	43.66	5,418
2017	406,825.69	48,152	46,989	400,519	44.62	8,976
2018	299,398.75	29,048	28,347	300,992	45.59	6,602
2019	407,975.38	30,786	30,042	418,731	46.57	8,991
2020	390,623.05	21,141	20,631	409,054	47.54	8,604
2021	272,028.01	8,857	8,643	290,588	48.52	5,989
2022	727,735.42	7,845	7,655	792,853	49.51	16,014
	11,060,486.31	3,796,775	3,705,082	8,461,452		247,436

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 34.2 2.24

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 367.00 UNDERGROUND CONDUCTORS AND DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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-R2						
NET SALVAGE PERCENT.. -20						
1977	464,602.60	468,955	402,454	155,069	5.56	27,890
1978	236,098.71	235,721	202,294	81,024	5.88	13,780
1979	317,621.27	313,412	268,968	112,178	6.22	18,035
1980	344,018.04	335,331	287,779	125,043	6.57	19,032
1981	347,573.45	334,384	286,966	130,122	6.94	18,750
1982	355,197.12	337,093	289,291	136,946	7.32	18,708
1983	360,744.86	337,532	289,667	143,227	7.71	18,577
1984	366,025.76	337,329	289,493	149,738	8.12	18,441
1985	371,348.50	336,758	289,003	156,615	8.55	18,318
1986	374,782.07	334,219	286,824	162,914	8.99	18,122
1987	381,687.81	334,359	286,944	171,081	9.45	18,104
1988	386,857.28	332,652	285,479	178,750	9.92	18,019
1989	390,162.69	328,940	282,294	185,901	10.41	17,858
1990	396,683.76	327,502	281,060	194,961	10.92	17,854
1991	401,592.82	324,259	278,277	203,634	11.45	17,785
1992	404,920.43	319,448	274,148	211,757	11.99	17,661
1993	411,131.26	316,311	271,456	221,902	12.56	17,667
1994	414,442.12	310,762	266,694	230,637	13.13	17,566
1995	407,668.29	297,435	255,256	233,946	13.72	17,051
1996	421,983.47	299,053	256,645	249,735	14.33	17,427
1997	427,995.63	294,069	252,368	261,227	14.96	17,462
1998	431,858.62	287,250	246,516	271,714	15.60	17,418
1999	472,753.60	303,911	260,814	306,490	16.25	18,861
2000	494,589.86	306,588	263,112	330,396	16.92	19,527
2001	510,953.67	304,819	261,593	351,551	17.60	19,974
2002	1,680,213.13	962,621	826,114	1,190,142	18.29	65,071
2003	458,251.11	251,382	215,734	334,167	19.00	17,588
2004	1,009,496.29	528,859	453,863	757,533	19.72	38,414
2005	1,264,164.87	630,206	540,838	976,160	20.46	47,711
2006	2,236,446.11	1,058,170	908,114	1,775,621	21.20	83,756
2007	1,613,969.91	721,580	619,255	1,317,509	21.96	59,996
2008	2,042,485.88	859,241	737,394	1,713,589	22.73	75,389
2009	1,949,478.03	767,993	659,086	1,680,288	23.51	71,471
2010	2,123,447.50	778,991	668,524	1,879,613	24.30	77,350
2011	1,797,741.18	609,585	523,141	1,634,148	25.11	65,080
2012	3,044,202.85	947,709	813,317	2,839,726	25.92	109,557
2013	2,077,957.47	588,478	505,027	1,988,522	26.74	74,365
2014	2,836,375.27	722,561	620,096	2,783,554	27.57	100,963
2015	3,047,719.35	687,565	590,063	3,067,200	28.42	107,924
2016	3,030,600.85	595,368	510,940	3,125,781	29.27	106,791
2017	4,019,106.89	671,062	575,901	4,247,027	30.13	140,957

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 367.00 UNDERGROUND CONDUCTORS AND DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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-R2						
NET SALVAGE PERCENT.. -20						
2018	2,886,981.58	396,914	340,629	3,123,749	30.99	100,799
2019	3,776,468.33	405,275	347,804	4,183,958	31.87	131,282
2020	4,862,421.38	373,434	320,478	5,514,428	32.76	168,328
2021	3,373,364.92	156,133	133,992	3,914,046	33.65	116,316
2022	4,412,759.90	68,098	58,441	5,236,871	34.55	151,574
	63,436,946.49	20,839,317	17,884,146	58,240,190		2,370,569
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					24.6	3.74

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 368.00 LINE TRANSFORMERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R2.5						
NET SALVAGE PERCENT.. -5						
1970	850.99	738	586	308	7.84	39
1973	245,392.92	206,818	164,208	93,455	8.88	10,524
1974	221,348.59	184,589	146,559	85,857	9.26	9,272
1975	110,013.44	90,691	72,006	43,508	9.67	4,499
1976	229,683.07	187,093	148,547	92,620	10.09	9,179
1977	239,903.15	192,954	153,200	98,698	10.53	9,373
1978	423,717.53	336,347	267,051	177,852	10.98	16,198
1979	322,189.90	252,145	200,196	138,103	11.46	12,051
1980	331,358.48	255,455	202,825	145,101	11.96	12,132
1981	453,068.47	343,790	272,960	202,762	12.48	16,247
1982	298,604.78	222,889	176,968	136,567	13.01	10,497
1983	147,126.41	107,897	85,667	68,816	13.57	5,071
1984	335,966.32	241,919	192,077	160,688	14.14	11,364
1985	400,710.60	283,023	224,713	196,033	14.73	13,308
1986	324,276.56	224,496	178,244	162,246	15.33	10,584
1987	359,240.10	243,507	193,338	183,864	15.95	11,528
1988	470,123.13	311,643	247,436	246,193	16.59	14,840
1989	463,207.68	300,036	238,221	248,147	17.24	14,394
1990	575,802.71	364,098	289,084	315,509	17.90	17,626
1991	709,107.22	437,140	347,078	397,485	18.58	21,393
1992	635,716.62	381,665	303,032	364,470	19.27	18,914
1993	508,147.62	296,774	235,631	297,924	19.97	14,919
1994	656,515.40	372,396	295,673	393,668	20.69	19,027
1995	485,142.66	266,925	211,931	297,469	21.42	13,887
1996	1,037,482.55	552,914	438,999	650,358	22.16	29,348
1997	306,667.31	158,067	125,501	196,500	22.91	8,577
1998	325,209.49	161,857	128,510	212,960	23.67	8,997
1999	418,290.09	200,668	159,325	279,880	24.44	11,452
2000	422,801.27	195,139	154,935	289,006	25.22	11,459
2001	226,454.58	100,290	79,628	158,149	26.02	6,078
2002	1,057,340.32	448,524	356,116	754,091	26.82	28,117
2003	753,901.25	305,556	242,603	548,993	27.63	19,869
2004	853,839.24	329,726	261,794	634,737	28.45	22,311
2005	848,779.45	311,329	247,187	644,031	29.28	21,996
2006	600,983.71	208,664	165,674	465,359	30.12	15,450
2007	1,346,947.27	440,949	350,102	1,064,193	30.97	34,362
2008	1,951,075.10	599,572	476,044	1,572,585	31.83	49,406
2009	1,938,837.68	556,908	442,170	1,593,610	32.69	48,749
2010	1,886,523.56	503,136	399,477	1,581,373	33.57	47,107
2011	2,423,083.86	596,471	473,582	2,070,656	34.45	60,106
2012	2,530,192.48	570,899	453,279	2,203,423	35.33	62,367

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 368.00 LINE TRANSFORMERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 45-R2.5						
NET SALVAGE PERCENT.. -5						
2013	1,677,557.90	343,286	272,560	1,488,876	36.23	41,095
2014	1,271,697.74	233,528	185,415	1,149,868	37.13	30,969
2015	1,519,404.03	247,108	196,197	1,399,177	38.03	36,791
2016	1,288,706.17	181,916	144,437	1,208,704	38.95	31,032
2017	1,474,160.58	176,798	140,373	1,407,496	39.86	35,311
2018	1,512,825.10	148,617	117,998	1,470,468	40.79	36,050
2019	1,511,396.48	116,023	92,119	1,494,847	41.71	35,839
2020	1,930,027.85	105,825	84,023	1,942,506	42.65	45,545
2021	1,541,874.98	50,722	40,272	1,578,697	43.59	36,217
2022	1,708,307.93	18,726	14,868	1,778,855	44.53	39,947
	43,311,582.32	13,968,246	11,090,419	34,386,743		1,151,413

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 29.9 2.66

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 369.10 OVERHEAD SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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 42-R2						
NET SALVAGE PERCENT.. -50						
1977	303,394.48	346,302	365,331	89,761	10.04	8,940
1978	61,858.38	69,657	73,485	19,303	10.47	1,844
1979	39,656.41	44,019	46,438	13,047	10.92	1,195
1980	54,537.99	59,641	62,918	18,889	11.38	1,660
1981	77,127.30	83,022	87,584	28,107	11.86	2,370
1982	66,697.17	70,627	74,508	25,538	12.35	2,068
1983	18,562.77	19,325	20,387	7,457	12.85	580
1984	29,271.30	29,930	31,575	12,332	13.37	922
1985	156,360.43	156,919	165,542	68,999	13.90	4,964
1986	141,552.26	139,277	146,930	65,398	14.45	4,526
1987	237,121.57	228,569	241,129	114,553	15.01	7,632
1988	444,277.20	419,209	442,244	224,172	15.58	14,388
1989	499,036.27	460,361	485,657	262,897	16.17	16,258
1990	399,729.08	360,182	379,974	219,620	16.77	13,096
1991	336,216.19	295,630	311,875	192,449	17.38	11,073
1992	481,553.84	412,588	435,259	287,072	18.01	15,940
1993	393,660.25	328,283	346,322	244,168	18.65	13,092
1994	901,103.71	730,543	770,685	580,971	19.30	30,102
1995	1,039,767.44	818,443	863,415	696,236	19.96	34,882
1996	974,092.48	743,091	783,923	677,216	20.64	32,811
1997	793,330.90	585,645	617,825	572,171	21.33	26,825
1998	482,963.60	344,626	363,563	360,882	22.02	16,389
1999	540,558.28	372,020	392,462	418,375	22.73	18,406
2000	462,776.58	306,592	323,439	370,726	23.45	15,809
2001	381,387.60	242,728	256,066	316,015	24.18	13,069
2002	1,053,848.38	642,853	678,177	902,596	24.92	36,220
2003	387,627.95	226,070	238,492	342,950	25.67	13,360
2004	281,165.29	156,346	164,937	256,811	26.43	9,717
2005	599,275.31	316,759	334,165	564,748	27.20	20,763
2006	700,091.73	350,546	369,808	680,330	27.98	24,315
2007	630,471.51	297,898	314,267	631,440	28.77	21,948
2008	847,193.38	376,395	397,077	873,713	29.56	29,557
2009	648,268.56	269,258	284,054	688,349	30.37	22,665
2010	789,253.72	304,991	321,750	862,131	31.18	27,650
2011	234,669.80	83,728	88,329	263,676	32.01	8,237
2012	63,522.70	20,781	21,923	73,361	32.84	2,234
2013	57,656.33	17,133	18,074	68,410	33.68	2,031
2014	50,078.60	13,378	14,113	61,005	34.52	1,767
2015	69,997.97	16,550	17,459	87,538	35.38	2,474
2016	34,554.90	7,108	7,499	44,333	36.24	1,223
2017	125,888.57	21,986	23,194	165,639	37.11	4,463

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 369.10 OVERHEAD SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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 42-R2						
NET SALVAGE PERCENT.. -50						
2018	40,684.31	5,841	6,162	54,864	37.98	1,445
2019	69,635.30	7,809	8,238	96,215	38.86	2,476
2020	82,215.72	6,606	6,969	116,355	39.75	2,927
2021	87,061.33	4,197	4,428	126,164	40.65	3,104
2022	136,920.31	2,200	2,320	203,060	41.55	4,887
	16,306,675.15	10,815,662	11,409,971	13,050,041		552,304
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					23.6	3.39

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 369.20 UNDERGROUND SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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 42-R2						
NET SALVAGE PERCENT.. -50						
2011	72,149.71	25,742	5,298	102,927	32.01	3,215
2012	235,524.65	77,052	15,858	337,429	32.84	10,275
2013	271,446.12	80,660	16,600	390,569	33.68	11,596
2014	363,756.98	97,178	20,000	525,635	34.52	15,227
2015	397,200.76	93,910	19,327	576,474	35.38	16,294
2016	407,348.71	83,796	17,246	593,777	36.24	16,385
2017	602,262.23	105,182	21,647	881,746	37.11	23,760
2018	551,045.78	79,111	16,282	810,287	37.98	21,335
2019	624,251.47	70,004	14,408	921,969	38.86	23,725
2020	680,047.49	54,645	11,246	1,008,825	39.75	25,379
2021	779,350.64	37,572	7,733	1,161,293	40.65	28,568
2022	1,127,394.08	18,112	3,728	1,687,364	41.55	40,610
	6,111,778.62	822,964	169,373	8,998,295		236,369

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 38.1 3.87

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 370.00 METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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 14-L1						
NET SALVAGE PERCENT.. -10						
1974	7.19	8	8			
1981	14.05	15	15			
1987	22.78	22	9	16	1.59	10
1993	5,071.92	4,503	1,889	3,690	2.70	1,367
2001	17,180.89	12,865	5,396	13,503	4.47	3,021
2002	42,725.91	31,153	13,068	33,931	4.72	7,189
2003	94.11	67	28	76	4.98	15
2004	288.37	198	83	234	5.24	45
2010	110.53	60	25	97	7.04	14
2011	263.15	137	57	232	7.38	31
2013	698.39	324	136	632	8.10	78
2014	1,483.87	644	270	1,362	8.48	161
2015	39,539.82	15,906	6,672	36,822	8.88	4,147
2016	82,792.72	30,444	12,771	78,301	9.32	8,401
2017	116,446.70	38,153	16,004	112,087	9.83	11,403
2018	207,119.62	58,585	24,575	203,256	10.40	19,544
	513,860.02	193,084	81,006	484,240		55,426

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 8.7 10.79

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 370.30 METERS - AMI

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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.. -10						
2019	12,403,241.56	3,165,307	2,727,138	10,916,428	11.52	947,607
2021	538,102.80	59,191	50,997	540,916	13.50	40,068
2022	549,724.01	20,155	17,365	587,332	14.50	40,506
	13,491,068.37	3,244,653	2,795,500	12,044,675		1,028,181
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					11.7	7.62

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 371.00 INSTALLATIONS ON CUSTOMERS' PREMISES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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 10-L0.5						
NET SALVAGE PERCENT.. -10						
2009	323.11	204	56	299	4.26	70
2010	136.02	82	23	127	4.51	28
2011	509.88	293	81	480	4.78	100
2012	1,202.20	653	180	1,142	5.06	226
2013	1,668.52	852	235	1,600	5.36	299
2014	1,701.67	809	223	1,649	5.68	290
2015	4,540.75	1,993	549	4,446	6.01	740
2016	2,957.21	1,184	326	2,927	6.36	460
2017	8,707.00	3,122	860	8,718	6.74	1,293
2018	3,539.58	1,110	306	3,588	7.15	502
2019	11,071.01	2,886	795	11,383	7.63	1,492
2020	9,660.36	1,934	533	10,093	8.18	1,234
2021	16,626.91	2,140	590	17,700	8.83	2,005
2022	29,177.80	1,380	380	31,715	9.57	3,314
	91,822.02	18,642	5,137	95,867		12,053

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 8.0 13.13

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 371.50 LED YARD LIGHTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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-L2.5						
NET SALVAGE PERCENT.. -10						
2022	654,265.64	17,992		719,692	19.50	36,907
	654,265.64	17,992		719,692		36,907

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 19.5 5.64

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 373.00 STREET LIGHTING AND SIGNAL SYSTEM

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 40-R4						
NET SALVAGE PERCENT.. -60						
1977	23,974.98	34,725	30,600	7,760	3.79	2,047
1978	81,625.89	117,182	103,263	27,338	4.11	6,652
1979	109,043.92	155,104	136,680	37,790	4.44	8,511
1980	189,284.75	266,437	234,789	68,067	4.81	14,151
1981	202,210.78	281,477	248,042	75,495	5.20	14,518
1982	174,499.47	239,902	211,406	67,793	5.63	12,041
1983	238,945.29	324,105	285,607	96,705	6.09	15,879
1984	191,786.16	256,226	225,791	81,067	6.60	12,283
1985	207,244.86	272,403	240,046	91,546	7.14	12,822
1986	139,385.96	179,919	158,548	64,470	7.73	8,340
1987	150,061.73	189,978	167,412	72,687	8.35	8,705
1988	110,057.77	136,472	120,261	55,831	9.00	6,203
1989	59,482.58	72,164	63,592	31,580	9.67	3,266
1990	64,068.79	75,960	66,937	35,573	10.36	3,434
1991	67,961.21	78,645	69,303	39,435	11.07	3,562
1992	72,716.95	82,054	72,307	44,040	11.79	3,735
1993	77,521.27	85,180	75,062	48,972	12.53	3,908
1994	79,689.12	85,140	75,027	52,476	13.29	3,949
1995	87,441.15	90,694	79,921	59,985	14.07	4,263
1996	92,536.33	93,018	81,969	66,089	14.87	4,444
1997	95,620.75	92,982	81,937	71,056	15.69	4,529
1998	97,517.99	91,589	80,710	75,319	16.52	4,559
1999	103,826.43	93,942	82,783	83,339	17.38	4,795
2000	107,889.00	93,907	82,753	89,869	18.24	4,927
2001	111,119.27	92,762	81,744	96,047	19.13	5,021
2002	452,555.15	361,501	318,561	405,527	20.03	20,246
2003	464,835.34	354,390	312,295	431,442	20.94	20,604
2004	331,858.12	240,796	212,194	318,779	21.86	14,583
2005	231,061.99	158,971	140,088	229,611	22.80	10,071
2006	316,970.00	206,157	181,669	325,483	23.74	13,710
2007	306,159.73	187,492	165,221	324,635	24.69	13,148
2008	279,191.47	160,256	141,220	305,486	25.65	11,910
2009	282,198.24	151,032	133,092	318,425	26.62	11,962
2010	529,830.88	262,796	231,580	616,149	27.60	22,324
2011	296,781.89	135,689	119,572	355,279	28.57	12,435
2012	374,268.42	156,294	137,729	461,100	29.56	15,599
2013	164,857.65	62,382	54,972	208,800	30.54	6,837
2014	292,786.46	99,196	87,413	381,045	31.53	12,085
2015	446,628.43	133,631	117,758	596,847	32.52	18,353
2016	260,671.75	67,566	59,540	357,535	33.52	10,666
2017	247,746.32	54,405	47,943	348,451	34.51	10,097

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 373.00 STREET LIGHTING AND SIGNAL SYSTEM

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 40-R4						
NET SALVAGE PERCENT.. -60						
2018	308,249.08	55,362	48,786	444,413	35.51	12,515
2019	125,476.12	17,516	15,435	185,327	36.51	5,076
2020	257,179.23	25,718	22,663	388,824	37.50	10,369
2021	257,830.58	15,470	13,633	398,896	38.50	10,361
2022	220,947.02	4,419	3,894	349,621	39.50	8,851
	9,383,596.27	6,493,006	5,721,748	9,292,006		448,346
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					20.7	4.78

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 373.50 LED STREET LIGHTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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-L2.5						
NET SALVAGE PERCENT.. -60						
2022	77,488.60	3,100		123,982	19.50	6,358
	77,488.60	3,100		123,982		6,358
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					19.5	8.21

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 390.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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-S0.5						
NET SALVAGE PERCENT.. -5						
1948	5,975.35	4,884	6,274			
1961	94,619.95	68,462	99,351			
1966	67,901.86	46,498	71,297			
1973	13,366.56	8,378	14,035			
1983	265,424.35	142,085	278,696			
1990	1,664.53	772	1,748			
1991	29,147.12	13,199	30,604			
1992	37,551.76	16,596	38,825	604	31.85	19
1996	41,951.68	16,618	38,877	5,172	34.25	151
2002	26,247.02	8,443	19,752	7,807	38.15	205
2007	35,918.04	9,113	21,319	16,395	41.71	393
2010	230,243.65	48,351	113,113	128,643	44.00	2,924
2011	8,946.68	1,744	4,080	5,314	44.79	119
2012	40,250.54	7,231	16,916	25,347	45.59	556
2013	330,469.44	54,193	126,781	220,212	46.41	4,745
2014	78,041.42	11,547	27,013	54,930	47.25	1,163
2015	27,337.99	3,601	8,424	20,281	48.10	422
2016	8,257.47	952	2,227	6,443	48.96	132
2017	266,257.22	26,229	61,361	218,209	49.84	4,378
2018	100,437.12	8,168	19,108	86,351	50.74	1,702
2019	46,331.49	2,963	6,932	41,716	51.65	808
2020	4,327.26	200	468	4,076	52.58	78
2022	83,285.02	779	1,823	85,627	54.51	1,571
	1,843,953.52	501,006	1,009,024	927,128		19,366

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 47.9 1.05

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 391.00 OFFICE FURNITURE AND EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2012	4,503.46	2,364	2,760	1,743	9.50	183
2013	2,566.05	1,219	1,424	1,142	10.50	109
	7,069.51	3,583	4,184	2,886		292

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 9.9 4.13

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 392.20 TRANSPORTATION EQUIPMENT - TRAILERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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-L2						
NET SALVAGE PERCENT.. +10						
1968	2,818.12	2,475	2,536			
1972	3,078.00	2,611	2,770			
1982	1,875.50	1,435	1,688			
1986	3,210.28	2,337	2,889			
1988	66,558.18	47,143	59,902			
1989	116,534.10	81,335	104,881			
1990	11,076.14	7,616	9,969			
1991	67,670.11	45,830	60,903			
1992	42,388.69	28,250	38,150			
1993	22,188.64	14,538	19,852	118	5.44	22
1994	28,358.49	18,274	24,954	569	5.68	100
1995	11,571.51	7,321	9,997	417	5.94	70
2010	3,650.00	1,631	2,227	1,058	10.07	105
2011	48,675.20	20,721	28,295	15,513	10.54	1,472
2012	23,705.00	9,505	12,979	8,356	11.09	753
2013	28,000.00	10,445	14,263	10,937	11.71	934
2014	88,796.81	30,369	41,470	38,447	12.40	3,101
2016	47,367.00	12,874	17,580	25,050	13.96	1,794
2017	91,177.00	21,294	29,077	52,982	14.81	3,577
2018	48,648.00	9,457	12,914	30,869	15.68	1,969
2019	89,756.00	13,733	18,753	62,027	16.60	3,737
2020	56,240.06	6,226	8,501	42,115	17.54	2,401
2021	14,276.01	957	1,307	11,541	18.51	624
	917,618.84	396,377	525,857	300,000		20,659

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 14.5 2.25

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 392.30 TRANSPORTATION EQUIPMENT - AUTOMOBILES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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 8-L2.5						
NET SALVAGE PERCENT.. +5						
2015	32,265.00	19,694	26,254	4,398	2.86	1,538
2016	27,768.00	16,158	21,540	4,840	3.10	1,561
2017	25,381.00	13,623	18,161	5,951	3.48	1,710
	85,414.00	49,475	65,955	15,189		4,809

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 3.2 5.63

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 392.40 TRANSPORTATION EQUIPMENT - HEAVY TRUCKS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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 16-L2.5						
NET SALVAGE PERCENT.. +10						
2004	142,917.12	88,108	70,593	58,032	5.04	11,514
2005	329,897.19	199,670	159,977	136,930	5.24	26,132
2006	366,566.72	217,945	174,619	155,291	5.43	28,599
2008	160,068.00	91,750	73,511	70,550	5.81	12,143
2009	326,469.71	182,722	146,398	147,425	6.05	24,368
2010	310,602.70	168,598	135,082	144,460	6.35	22,750
2011	1,110,702.12	579,167	464,033	535,599	6.73	79,584
2012	517,175.56	256,002	205,110	260,348	7.20	36,159
2013	967,168.04	448,822	359,599	510,852	7.75	65,916
2014	202,642.00	86,629	69,408	112,970	8.40	13,449
2015	1,541,355.98	595,645	477,235	909,985	9.13	99,670
2016	1,405,379.95	480,640	385,092	879,750	9.92	88,684
2017	1,309,903.69	385,363	308,755	870,158	10.77	80,795
2018	1,243,274.46	304,219	243,742	875,205	11.65	75,125
2019	866,857.15	166,762	133,611	646,560	12.58	51,396
2020	1,225,640.01	170,293	136,440	966,636	13.53	71,444
2021	1,138,643.51	95,427	76,457	948,322	14.51	65,356
2022	315,375.16	8,870	7,107	276,731	15.50	17,854
	13,480,639.07	4,526,632	3,626,769	8,505,806		870,938

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 9.8 6.46

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 392.50 TRANSPORTATION EQUIPMENT - LIGHT TRUCKS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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 14-L2.5						
NET SALVAGE PERCENT.. +10						
1988	21,948.14	18,399	19,753			
1995	24,608.47	18,857	22,148			
1997	24,967.33	18,635	22,471			
2007	80,880.61	49,135	72,793			
2008	65,392.94	38,928	58,854			
2011	103,207.96	57,192	92,887			
2012	77,414.94	41,256	69,673			
2013	264,963.90	133,883	238,468			
2014	445,877.26	210,103	401,290			
2015	143,041.38	61,518	128,737			
2016	278,554.00	106,905	250,699			
2017	58,879.98	19,569	52,992			
2018	282,938.04	78,395	254,644			
2019	138,984.27	30,378	100,247	24,839	10.60	2,343
2020	334,526.21	52,902	174,577	126,497	11.54	10,962
2021	129,731.63	12,427	41,009	75,749	12.51	6,055
2022	107,405.55	3,452	11,392	85,273	13.50	6,317
	2,583,322.61	951,934	2,012,634	312,356		25,677

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 12.2 0.99

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 394.00 TOOLS, SHOP AND GARAGE EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2008	81,741.28	79,017	78,261	3,480	0.50	3,480
2009	143,901.16	129,511	128,272	15,629	1.50	10,419
2010	134,822.62	112,352	111,277	23,546	2.50	9,418
2011	102,687.49	78,727	77,973	24,714	3.50	7,061
2012	147,629.01	103,340	102,351	45,278	4.50	10,062
2013	93,062.24	58,939	58,375	34,687	5.50	6,307
2014	147,460.03	83,561	82,761	64,699	6.50	9,954
2015	219,291.57	109,646	108,597	110,695	7.50	14,759
2016	111,453.01	48,296	47,834	63,619	8.50	7,485
2017	141,062.38	51,723	51,228	89,834	9.50	9,456
2018	239,325.45	71,798	71,111	168,214	10.50	16,020
2019	110,448.52	25,771	25,524	84,925	11.50	7,385
2020	140,508.49	23,419	23,195	117,313	12.50	9,385
2021	89,019.02	8,902	8,816	80,203	13.50	5,941
2022	113,643.17	3,788	3,752	109,891	14.50	7,579
	2,016,055.44	988,790	979,327	1,036,728		134,711

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 7.7 6.68

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 396.00 POWER OPERATED EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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-S0.5						
NET SALVAGE PERCENT.. +5						
1986	12,573.75	9,742	11,052	893	4.61	194
1989	36,018.93	26,457	30,013	4,205	5.67	742
1990	35,718.82	25,735	29,194	4,739	6.04	785
1991	41,695.70	29,455	33,414	6,197	6.41	967
1992	1,126.24	780	885	185	6.78	27
1993	20,776.44	14,077	15,969	3,769	7.17	526
1994	5,198.96	3,447	3,910	1,029	7.55	136
2013	164,943.93	48,764	55,319	101,378	17.22	5,887
2014	116,417.45	31,365	35,581	75,016	17.91	4,188
2016	95,400.48	20,410	23,154	67,476	19.37	3,484
2017	171,246.68	31,626	35,878	126,806	20.14	6,296
2020	92,964.92	8,266	9,377	78,940	22.66	3,484
2021	54,954.00	3,007	3,411	48,795	23.56	2,071
	849,036.30	253,131	287,157	519,427		28,787

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 18.0 3.39

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 397.00 COMMUNICATION EQUIPMENT - 10-YEAR

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 10-SQUARE						
NET SALVAGE PERCENT.. 0						
2013	702,630.12	667,499	643,103	59,527	0.50	59,527
2014	158,914.13	135,077	130,140	28,774	1.50	19,183
2015	649,463.26	487,097	469,294	180,169	2.50	72,068
2016	65,107.29	42,320	40,773	24,334	3.50	6,953
2017	84,387.28	46,413	44,717	39,670	4.50	8,816
2018	502,332.53	226,050	217,788	284,545	5.50	51,735
2019	662,530.45	231,886	223,411	439,119	6.50	67,557
2020	106,892.25	26,723	25,747	81,145	7.50	10,819
2021	104,199.00	15,630	15,059	89,140	8.50	10,487
2022	48,155.31	2,408	2,320	45,836	9.50	4,825
	3,084,611.62	1,881,103	1,812,352	1,272,260		311,970

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 4.1 10.11

NORTHWESTERN ENERGY
ELECTRIC PLANT

ACCOUNT 397.20 COMMUNICATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 13-L3						
NET SALVAGE PERCENT.. 0						
2012	15,978.99	10,485	7,442	8,537	4.47	1,910
2014	4,344.90	2,540	1,803	2,542	5.40	471
	20,323.89	13,025	9,245	11,079		2,381
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					4.7	11.72

GAS PLANT

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 311.00 LIQUEFIED PETROLEUM GAS EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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 25-L2.5						
NET SALVAGE PERCENT.. +10						
2001	3,999.86	2,254	25,736	22,136-		
	3,999.86	2,254	25,736	22,136-		
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					0.0	0.00

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 367.00 MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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-R3						
NET SALVAGE PERCENT.. -20						
2011	3,961,087.47	816,855	577,790	4,175,515	53.83	77,569
2022	4,908,982.69	44,416	31,417	5,859,362	64.51	90,829
	8,870,070.16	861,271	609,207	10,034,877		168,398
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					59.6	1.90

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 375.00 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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.. -5						
1941	4,815.37	4,981	5,056			
1949	1,627.80	1,618	1,709			
1957	13,750.70	13,069	14,438			
1958	11,452.86	10,823	12,026			
1959	3,606.27	3,387	3,787			
1961	18,991.27	17,616	19,941			
1963	1,748.17	1,600	1,836			
1967	16,710.50	14,812	17,546			
1970	1,627.79	1,403	1,709			
1982	1,689.09	1,228	1,774			
1987	1,727.09	1,133	1,813			
1989	1,627.80	1,018	1,709			
1997	1,438.94	711	1,337	174	26.48	7
1999	1,379.09	633	1,190	258	28.15	9
2008	35,803.00	10,443	19,637	17,956	36.11	497
2010	14,432.56	3,649	6,862	8,292	37.96	218
2011	223,351.97	52,110	97,990	136,530	38.89	3,511
2012	20,090.68	4,287	8,061	13,034	39.84	327
2013	80,097.38	15,508	29,162	54,940	40.78	1,347
2015	7,500.00	1,151	2,165	5,710	42.69	134
2019	5,002.66	360	677	4,576	46.57	98
2021	10,000.00	311	584	9,916	48.52	204
	478,470.99	161,851	251,009	251,385		6,352

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 39.6 1.33

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 376.11 MAINS - STEEL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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.. -40						
1971	4,439,053.29	4,025,183	6,214,675			
1976	1,896,819.99	1,586,796	2,505,677	149,871	26.16	5,729
1981	3,928,533.48	2,991,971	4,724,560	775,387	29.64	26,160
1986	1,083,810.36	739,063	1,167,039	350,296	33.34	10,507
1991	3,735,434.18	2,234,245	3,528,051	1,701,557	37.23	45,704
1996	5,108,279.01	2,609,758	4,121,016	3,030,575	41.28	73,415
2001	54,771.08	23,004	36,325	40,355	45.50	887
2002	673,682.51	270,469	427,092	516,064	46.36	11,132
2003	1,421,474.60	544,362	859,591	1,130,473	47.22	23,941
2004	591,490.73	215,303	339,981	488,106	48.10	10,148
2005	169,951.34	58,679	92,659	145,273	48.97	2,967
2006	1,729,561.20	564,377	891,196	1,530,190	49.85	30,696
2007	10,172,177.90	3,124,201	4,933,362	9,307,687	50.74	183,439
2008	7,620,434.30	2,194,426	3,465,173	7,203,435	51.63	139,520
2009	194,461.92	52,231	82,477	189,770	52.53	3,613
2010	1,418,448.65	353,477	558,168	1,427,660	53.43	26,720
2011	539,430.15	123,966	195,752	559,450	54.33	10,297
2012	3,192,108.90	671,013	1,059,583	3,409,369	55.24	61,719
2013	728,175.42	138,798	219,173	800,273	56.15	14,252
2014	574,509.47	98,126	154,949	649,364	57.07	11,378
2015	276,752.03	41,787	65,985	321,468	57.99	5,544
2016	382,086.03	50,117	79,139	455,781	58.91	7,737
2017	997,183.58	110,819	174,992	1,221,065	59.84	20,405
2018	1,128,602.00	102,829	162,375	1,417,668	60.77	23,328
2019	556,213.99	39,418	62,244	716,456	61.71	11,610
2020	1,186,956.50	60,338	95,279	1,566,460	62.64	25,007
2021	3,391,285.12	103,739	163,812	4,583,987	63.58	72,098
2022	1,682,799.97	17,033	26,896	2,329,024	64.53	36,092
	58,874,487.70	23,145,528	36,407,221	46,017,061		894,045

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 51.5 1.52

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 376.30 MAINS - PLASTIC

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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-R3						
NET SALVAGE PERCENT.. -50						
1971	14,423.42	14,729	16,783	4,852	20.75	234
1976	669,700.21	631,169	719,199	285,351	24.16	11,811
1981	819,310.65	702,969	801,014	427,952	27.82	15,383
1986	1,462,627.32	1,123,627	1,280,342	913,599	31.71	28,811
1991	7,050,989.16	4,751,274	5,413,944	5,162,540	35.80	144,205
1996	5,254,967.07	3,021,974	3,443,455	4,438,996	40.08	110,753
2001	542,777.17	256,527	292,305	521,861	44.52	11,722
2002	2,093,576.96	945,501	1,077,372	2,062,993	45.43	45,410
2003	1,873,096.85	806,593	919,090	1,890,555	46.34	40,797
2004	683,254.34	279,711	318,723	706,159	47.26	14,942
2005	888,562.99	344,900	393,004	939,840	48.18	19,507
2006	758,350.93	278,080	316,864	820,662	49.11	16,711
2007	970,805.77	334,928	381,641	1,074,568	50.05	21,470
2008	1,649,755.25	533,382	607,774	1,866,859	50.99	36,612
2009	595,279.62	179,548	204,590	688,329	51.93	13,255
2010	1,579,630.58	441,807	503,427	1,866,019	52.88	35,288
2011	646,770.11	166,721	189,974	780,181	53.83	14,493
2012	1,064,567.25	251,073	286,091	1,310,760	54.78	23,928
2013	1,359,720.32	290,559	331,084	1,708,496	55.74	30,651
2014	983,665.20	188,185	214,431	1,261,067	56.71	22,237
2015	2,480,685.40	419,620	478,145	3,242,883	57.67	56,232
2016	1,014,444.52	148,895	169,662	1,352,005	58.64	23,056
2017	2,236,072.16	278,123	316,913	3,037,195	59.61	50,951
2018	2,603,259.58	264,947	301,899	3,602,990	60.59	59,465
2019	3,332,879.39	264,564	301,463	4,697,856	61.56	76,313
2020	3,796,786.23	215,563	245,628	5,449,551	62.54	87,137
2021	2,532,998.51	86,515	98,582	3,700,916	63.52	58,264
2022	2,863,318.11	32,384	36,900	4,258,077	64.51	66,006
	51,822,275.07	17,253,868	19,660,299	58,073,113		1,135,644

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 51.1 2.19

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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 52-R2						
NET SALVAGE PERCENT.. -30						
1956	2,132.23	2,313	2,772			
1970	792.01	749	1,030			
1972	2,565.79	2,366	3,336			
1973	7,030.97	6,396	9,140			
1974	4,325.77	3,880	5,624			
1975	11,032.17	9,752	14,342			
1976	10,106.35	8,800	13,138			
1977	1,642.90	1,408	2,136			
1978	4,099.21	3,457	5,329			
1979	8,074.65	6,694	10,497			
1980	32,111.32	26,155	41,745			
1981	4,170.57	3,335	5,422			
1982	8,077.43	6,339	10,501			
1983	5,337.70	4,109	6,939			
1984	22,232.89	16,769	28,903			
1985	3,947.08	2,914	5,131			
1986	7,821.60	5,649	10,168			
1987	58,257.52	41,130	75,583	152	23.76	6
1988	620,295.26	427,690	785,953	20,431	24.42	837
1990	28,283.75	18,554	34,096	2,673	25.76	104
1992	23,203.57	14,415	26,490	3,675	27.15	135
1993	15,381.94	9,283	17,059	2,938	27.86	105
1994	10,006.08	5,861	10,771	2,237	28.57	78
1995	35,985.62	20,431	37,545	9,236	29.29	315
1996	19,646.00	10,791	19,830	5,710	30.03	190
1997	11,306.81	6,001	11,028	3,671	30.77	119
1998	157,705.19	80,785	148,456	56,561	31.51	1,795
1999	59,949.09	29,570	54,340	23,594	32.27	731
2000	54,006.10	25,613	47,068	23,140	33.03	701
2001	179,350.99	81,560	149,880	83,276	33.81	2,463
2002	89,199.22	38,824	71,346	44,613	34.59	1,290
2003	78,296.55	32,552	59,820	41,966	35.37	1,186
2004	104,268.81	41,264	75,830	59,719	36.17	1,651
2005	35,595.58	13,375	24,579	21,695	36.97	587
2006	459,835.05	163,470	300,404	297,382	37.78	7,871
2007	1,472,611.01	493,684	907,228	1,007,166	38.59	26,099
2008	909,891.61	286,394	526,298	656,561	39.41	16,660
2009	3,297.80	970	1,783	2,504	40.24	62
2010	298,866.77	81,664	150,071	238,456	41.07	5,806
2011	59,955.98	15,109	27,765	50,178	41.92	1,197
2012	351,720.72	81,246	149,303	307,934	42.76	7,201

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 378.00 MEASURING AND REGULATING STATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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 52-R2						
NET SALVAGE PERCENT.. -30						
2013	147,170.08	30,831	56,657	134,664	43.62	3,087
2014	49,565.41	9,319	17,125	47,310	44.48	1,064
2015	394,923.53	65,756	120,838	392,563	45.34	8,658
2016	331,078.42	47,925	88,071	342,331	46.21	7,408
2017	149,709.22	18,376	33,769	160,853	47.09	3,416
2018	680,869.42	68,598	126,061	759,069	47.97	15,824
2019	303,068.16	23,789	43,716	350,273	48.86	7,169
2020	230,778.80	12,982	23,857	276,155	49.75	5,551
2021	1,303,126.69	43,978	80,817	1,613,248	50.65	31,851
2022	598,032.01	6,725	12,358	765,084	51.55	14,842
	9,460,739.40	2,459,600	4,491,948	7,807,013		176,059

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 44.3 1.86

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 379.00 MEASURING AND REGULATING STATION EQUIPMENT - CITY GATE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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-S1						
NET SALVAGE PERCENT.. -30						
1956	2,457.99	2,719	3,195			
1957	7,157.24	7,853	9,304			
1958	129.40	141	168			
1959	739.63	798	962			
1961	3,509.12	3,717	4,562			
1962	489.21	514	636			
1970	5,124.62	4,961	6,662			
1971	25,729.32	24,625	33,448			
1982	2,495.65	2,062	2,857	387	16.40	24
1983	22,260.41	18,103	25,082	3,857	16.85	229
1984	10,586.40	8,468	11,733	2,029	17.31	117
1987	16,132.25	12,234	16,951	4,021	18.75	214
1988	14,017.49	10,427	14,447	3,776	19.25	196
1989	9,604.61	7,006	9,707	2,779	19.75	141
1991	38,385.87	26,836	37,182	12,720	20.80	612
1992	68,836.16	47,050	65,190	24,297	21.34	1,139
1993	62,736.62	41,885	58,033	23,525	21.89	1,075
1994	191,774.68	124,930	173,095	76,212	22.45	3,395
1995	6,913.62	4,388	6,080	2,908	23.03	126
1996	11,789.63	7,282	10,089	5,238	23.62	222
1997	2,971.19	1,784	2,472	1,391	24.22	57
1998	221,958.90	129,332	179,194	109,353	24.83	4,404
1999	312,390.34	176,340	244,326	161,781	25.46	6,354
2000	28,748.71	15,697	21,749	15,624	26.10	599
2001	39,367.19	20,744	28,742	22,435	26.76	838
2003	384,377.46	187,439	259,704	239,987	28.12	8,534
2004	5,292.94	2,472	3,425	3,456	28.83	120
2005	6,087.30	2,717	3,765	4,148	29.55	140
2007	100,120.14	40,377	55,944	74,212	31.04	2,391
2008	537,338.52	204,595	283,473	415,067	31.82	13,044
2009	84,353.38	30,193	41,833	67,826	32.61	2,080
2010	237,642.82	79,498	110,147	198,789	33.42	5,948
2011	370,337.55	115,011	159,352	322,087	34.25	9,404
2012	92,446.39	26,440	36,634	83,546	35.10	2,380
2013	140,552.79	36,666	50,802	131,917	35.97	3,667
2015	144,461.46	30,256	41,921	145,879	37.75	3,864
2016	180,381.06	32,933	45,630	188,865	38.68	4,883
2017	79,222.10	12,336	17,092	85,897	39.61	2,169
2018	11,934.03	1,527	2,116	13,398	40.57	330
2019	181,307.64	18,175	25,182	210,518	41.53	5,069

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 379.00 MEASURING AND REGULATING STATION EQUIPMENT - CITY GATE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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-S1						
NET SALVAGE PERCENT.. -30						
2020	234,515.21	16,868	23,371	281,499	42.51	6,622
2021	1,257,298.86	54,478	75,481	1,559,008	43.50	35,839
2022	499,485.30	7,214	9,995	639,336	44.50	14,367
	5,653,461.20	1,599,091	2,211,733	5,137,766		140,593

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 36.5 2.49

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 380.00 SERVICES - STEEL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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 42-R2						
NET SALVAGE PERCENT.. -120						
1971	432,894.25	777,541	711,219	241,148	7.71	31,277
1976	606,577.88	1,028,811	941,056	393,415	9.62	40,896
1981	501,180.33	791,245	723,754	378,843	11.86	31,943
1986	295,664.26	426,670	390,276	260,185	14.45	18,006
1991	454,798.31	586,516	536,487	464,069	17.38	26,701
1996	1,207,935.79	1,351,504	1,236,224	1,421,235	20.64	68,858
2002	11,892.79	10,640	9,732	16,432	24.92	659
2003	1,682.15	1,439	1,316	2,385	25.67	93
2010	558,565.24	316,575	289,572	939,272	31.18	30,124
2011	49,616.54	25,964	23,749	85,407	32.01	2,668
2012	36,693.12	17,606	16,104	64,621	32.84	1,968
2013	13,903.97	6,060	5,543	25,046	33.68	744
2014	26,172.50	10,255	9,381	48,198	34.52	1,396
2015	10,189.61	3,533	3,232	19,185	35.38	542
2016	5,447.76	1,644	1,504	10,481	36.24	289
2018	4,543.70	957	875	9,121	37.98	240
2019	105,312.64	17,321	15,844	215,844	38.86	5,554
2021	6,545.05	463	423	13,976	40.65	344
2022	1,860.89	44	40	4,054	41.55	98
	4,331,476.78	5,374,788	4,916,331	4,612,918		262,400

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 17.6 6.06

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 380.10 SERVICES - PLASTIC

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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-R3						
NET SALVAGE PERCENT.. -100						
1971	5,655.33	8,668	5,916	5,395	12.85	420
1976	855,313.58	1,222,004	834,029	876,598	15.71	55,799
1981	788,562.98	1,034,027	705,733	871,393	18.94	46,008
1986	795,984.13	940,710	642,043	949,925	22.50	42,219
1991	3,714,703.39	3,871,390	2,642,258	4,787,149	26.34	181,744
1996	6,854,702.78	6,126,870	4,181,644	9,527,762	30.42	313,207
2001	1,656,084.43	1,221,296	833,546	2,478,623	34.72	71,389
2002	2,839,544.46	2,003,185	1,367,192	4,311,897	35.60	121,121
2003	2,638,609.69	1,776,048	1,212,169	4,065,050	36.49	111,402
2004	1,336,055.52	855,557	583,925	2,088,186	37.39	55,849
2005	1,317,294.55	799,967	545,985	2,088,604	38.30	54,533
2006	660,297.67	379,130	258,760	1,061,835	39.21	27,081
2007	868,417.80	469,571	320,486	1,416,350	40.13	35,294
2008	844,378.56	428,015	292,124	1,396,633	41.06	34,014
2009	709,850.16	335,830	229,207	1,190,493	41.99	28,352
2010	551,649.84	242,119	165,248	938,052	42.93	21,851
2011	797,519.19	322,772	220,295	1,374,743	43.87	31,337
2012	1,088,606.09	403,372	275,305	1,901,907	44.81	42,444
2013	1,649,652.58	553,689	377,898	2,921,407	45.77	63,828
2014	1,675,432.88	504,473	344,307	3,006,559	46.72	64,353
2015	2,236,657.21	594,548	405,784	4,067,530	47.69	85,291
2016	2,157,191.97	498,096	339,955	3,974,429	48.65	81,694
2017	3,287,829.52	643,231	439,011	6,136,648	49.62	123,673
2018	2,369,654.26	379,998	259,352	4,479,957	50.59	88,554
2019	3,400,094.83	424,060	289,425	6,510,765	51.57	126,251
2020	4,286,402.04	383,462	261,716	8,311,088	52.54	158,186
2021	4,391,515.24	236,351	161,312	8,621,718	53.52	161,093
2022	4,187,157.51	74,615	50,925	8,323,390	54.51	152,695
	57,964,818.19	26,733,054	18,245,550	97,684,086		2,379,682

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 41.0 4.11

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 381.00 METERS AND REGULATORS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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-R3						
NET SALVAGE PERCENT.. -20						
1962	400,583.56	404,053	457,526	23,174	8.77	2,642
1963	30,575.29	30,580	34,627	2,063	9.16	225
1964	42,137.08	41,775	47,304	3,260	9.56	341
1965	51,160.34	50,253	56,904	4,488	9.98	450
1966	45,799.87	44,558	50,455	4,505	10.41	433
1967	52,167.32	50,240	56,889	5,712	10.86	526
1968	48,700.78	46,402	52,543	5,898	11.33	521
1969	71,078.59	66,964	75,826	9,468	11.82	801
1970	51,650.71	48,086	54,450	7,531	12.33	611
1971	869,083.11	799,237	905,010	137,890	12.85	10,731
1972	159,450.83	144,759	163,917	27,424	13.39	2,048
1973	156,479.64	140,184	158,736	29,040	13.94	2,083
1974	84,156.37	74,345	84,184	16,804	14.51	1,158
1975	51,179.63	44,554	50,450	10,966	15.10	726
1976	87,726.25	75,202	85,154	20,118	15.71	1,281
1977	101,924.42	86,016	97,400	24,909	16.32	1,526
1978	155,226.92	128,833	145,883	40,389	16.96	2,381
1979	243,034.27	198,263	224,502	67,139	17.61	3,813
1980	315,524.85	252,857	286,321	92,309	18.27	5,052
1981	278,796.57	219,348	248,377	86,179	18.94	4,550
1982	86,154.24	66,486	75,285	28,100	19.63	1,431
1983	38,669.89	29,251	33,122	13,282	20.33	653
1984	81,205.19	60,168	68,131	29,315	21.04	1,393
1985	81,473.76	59,070	66,887	30,882	21.77	1,419
1986	236,319.04	167,572	189,749	93,834	22.50	4,170
1987	181,495.05	125,726	142,365	75,429	23.25	3,244
1988	172,409.41	116,573	132,001	74,890	24.01	3,119
1989	425,523.52	280,662	317,805	192,823	24.77	7,785
1990	228,066.91	146,542	165,936	107,744	25.55	4,217
1991	783,194.56	489,738	554,551	385,282	26.34	14,627
1992	1,173,849.53	713,536	807,967	600,652	27.14	22,132
1993	829,220.67	489,572	554,363	440,702	27.94	15,773
1994	912,381.72	522,346	591,474	503,384	28.76	17,503
1995	640,654.99	355,179	402,184	366,602	29.59	12,389
1996	541,111.16	290,194	328,599	320,734	30.42	10,544
1997	808,222.81	418,634	474,037	495,830	31.26	15,861
1998	442,831.99	221,157	250,425	280,973	32.11	8,750
1999	452,370.59	217,436	246,212	296,633	32.97	8,997
2000	209,498.86	96,721	109,521	141,878	33.84	4,193
2001	216,283.00	95,700	108,365	151,175	34.72	4,354
2002	1,176,408.92	497,946	563,845	847,846	35.60	23,816

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 381.00 METERS AND REGULATORS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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-R3						
NET SALVAGE PERCENT.. -20						
2003	372,610.72	150,483	170,398	276,735	36.49	7,584
2004	668,811.95	256,968	290,976	511,598	37.39	13,683
2005	880,572.99	320,853	363,316	693,372	38.30	18,104
2006	1,093,464.64	376,707	426,561	885,597	39.21	22,586
2007	945,934.97	306,892	347,507	787,615	40.13	19,627
2008	990,631.32	301,291	341,165	847,593	41.06	20,643
2009	853,331.65	242,227	274,284	749,714	41.99	17,855
2010	827,023.06	217,788	246,611	745,817	42.93	17,373
2011	501,612.07	121,807	137,927	464,007	43.87	10,577
2012	760,016.62	168,970	191,332	720,688	44.81	16,083
2013	298,629.12	60,139	68,098	290,257	45.77	6,342
2014	440,564.71	79,592	90,125	438,553	46.72	9,387
2015	374,775.70	59,774	67,685	382,046	47.69	8,011
2016	568,827.38	78,805	89,234	593,359	48.65	12,196
2017	376,451.48	44,189	50,037	401,705	49.62	8,096
2018	531,129.31	51,103	57,866	579,489	50.59	11,455
2019	464,515.63	34,761	39,361	518,058	51.57	10,046
2020	784,827.87	42,126	47,701	894,092	52.54	17,017
2021	465,452.17	15,030	17,019	541,524	53.52	10,118
2022	938,949.68	10,039	11,368	1,115,372	54.51	20,462
	26,151,915.25	11,346,262	12,847,853	18,534,445		505,514

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 36.7 1.93

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 381.10 METERS - AMI

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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						
2019	9,209,085.02	2,136,508	1,784,834	7,424,251	11.52	644,466
2021	7,081.37	708	591	6,490	13.50	481
	9,216,166.39	2,137,216	1,785,425	7,430,741		644,947
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					11.5	7.00

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 390.10 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 40-R1						
NET SALVAGE PERCENT.. -10						
1923	14,590.95	16,050	16,050			
1941	32,807.01	36,088	36,088			
1967	106,586.78	93,503	117,245			
1969	12,382.13	10,607	13,620			
1971	30,549.66	25,514	33,605			
1972	107,682.63	88,749	118,451			
1984	55,250.06	37,331	57,331	3,444	15.43	223
1986	43,162.54	27,965	42,947	4,532	16.44	276
1993	58,547.01	31,766	48,785	15,617	20.27	770
2003	4,724.38	1,763	2,708	2,489	26.43	94
2005	1,708.67	576	885	995	27.75	36
2006	5,035.60	1,605	2,465	3,074	28.41	108
2007	492,422.38	147,874	227,097	314,568	29.08	10,817
2008	154,230.37	43,474	66,765	102,888	29.75	3,458
2009	549,218.23	144,541	221,978	382,162	30.43	12,559
2010	26,446.16	6,465	9,929	19,162	31.11	616
2011	233,542.18	52,664	80,878	176,018	31.80	5,535
2012	3,785.80	782	1,201	2,963	32.49	91
2013	109,844.60	20,601	31,638	89,191	33.18	2,688
2015	380,079.69	56,651	87,001	331,087	34.58	9,575
2016	78,502.11	10,190	15,649	70,703	35.28	2,004
2017	168,198.02	18,502	28,414	156,604	36.00	4,350
2018	141,707.24	12,821	19,690	136,188	36.71	3,710
2019	903,882.87	63,882	98,106	896,165	37.43	23,942
2020	39,360.45	1,992	3,059	40,237	38.16	1,054
2021	31,313.46	956	1,468	32,977	38.89	848
2022	50,234.68	511	785	54,473	39.63	1,375
	3,835,795.66	953,423	1,383,838	2,835,537		84,129

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 33.7 2.19

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 391.00 OFFICE FURNITURE AND EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2013	2,444.92	1,161	475	1,970	10.50	188
2018	17,511.82	3,940	1,613	15,899	15.50	1,026
2019	64,529.23	11,293	4,624	59,905	16.50	3,631
	84,485.97	16,394	6,712	77,774		4,845

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 16.1 5.73

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 391.50 OFFICE FURNITURE AND EQUIPMENT - COMPUTERS - 5-YEAR

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR	ORIGINAL COST	CALCULATED ACCRUED	ALLOC. BOOK RESERVE	FUTURE BOOK ACCRUALS	REM. LIFE	ANNUAL ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)
SURVIVOR CURVE.. 5-SQUARE						
NET SALVAGE PERCENT.. 0						
2018	10,060.94	9,055	7,956	2,105	0.50	2,105
2019	27,655.39	19,359	17,009	10,646	1.50	7,097
	37,716.33	28,414	24,965	12,751		9,202

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 1.4 24.40

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 392.30 TRANSPORTATION EQUIPMENT - AUTOMOBILES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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 8-L2.5						
NET SALVAGE PERCENT.. +5						
2009	20,217.67	15,461	15,811	3,396	1.56	2,177
2010	22,474.73	16,627	17,003	4,348	1.77	2,456
2013	24,655.84	16,220	16,587	6,836	2.46	2,779
2022	26,681.34	1,584	1,620	23,728	7.50	3,164
	94,029.58	49,892	51,021	38,307		10,576

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 3.6 11.25

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 392.40 TRANSPORTATION EQUIPMENT - HEAVY TRUCKS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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 16-L2.5						
NET SALVAGE PERCENT.. +10						
1954	315.78	284	284			
1960	268.35	242	242			
1967	1,451.03	1,306	1,306			
1981	3,537.53	3,037	3,184			
1982	7,673.87	6,514	6,906			
1985	5,183.00	4,248	4,665			
1989	725.00	568	652			
1990	12,157.55	9,424	10,942			
1991	7,967.18	6,113	7,170			
1992	2,467.50	1,872	2,221			
1993	1,493.35	1,120	1,344			
1994	14,851.13	10,985	13,366			
1995	12,168.90	8,878	10,952			
1996	6,921.72	4,976	6,230			
1998	9,455.59	6,569	8,510			
2001	1,846.25	1,210	1,662			
2004	9,321.43	5,747	8,389			
2006	3,775.00	2,244	3,398			
2007	47,989.00	28,047	43,190			
2008	2,950.00	1,691	2,655			
2009	13,021.09	7,288	11,719			
2010	920.53	500	828			
2011	28,682.00	14,956	25,814			
2012	10,787.20	5,340	9,708			
2013	13,554.00	6,290	11,462	737	7.75	95
2015	72,762.42	28,118	51,238	14,248	9.13	1,561
2016	25,350.00	8,670	15,799	7,016	9.92	707
2017	48,320.46	14,215	25,903	17,585	10.77	1,633
2018	29,745.00	7,278	13,262	13,508	11.65	1,159
2019	24,045.00	4,626	8,430	13,210	12.58	1,050
2020	55,798.57	7,753	14,127	36,092	13.53	2,668
2021	13,600.00	1,140	2,077	10,163	14.51	700
	489,105.43	211,249	327,635	112,559		9,573

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 11.8 1.96

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 392.50 TRANSPORTATION EQUIPMENT - LIGHT TRUCKS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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 14-L2.5						
NET SALVAGE PERCENT.. +10						
2004	31,188.50	20,290	28,070			
2006	231,973.42	144,055	208,776			
2008	74,573.59	44,393	67,116			
2009	110,470.10	64,483	99,423			
2010	118,580.33	67,616	106,722			
2011	122,270.50	67,755	110,043			
2012	213,645.42	113,857	192,281			
2013	549,660.62	277,736	494,695			
2014	215,923.53	101,746	194,331			
2016	249,202.65	95,641	224,282			
2017	297,678.33	98,937	267,910			
2018	293,008.10	81,185	263,707			
2019	369,798.43	80,828	302,099	30,720	10.60	2,898
2020	542,131.57	85,732	320,428	167,490	11.54	14,514
2021	331,068.87	31,712	118,525	179,437	12.51	14,343
	3,751,173.96	1,375,966	2,998,408	377,649		31,755

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 11.9 0.85

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 394.00 TOOLS, SHOP AND GARAGE EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2008	67,170.67	64,932	64,343	2,828	0.50	2,828
2009	39,058.39	35,153	34,834	4,224	1.50	2,816
2010	79,119.57	65,933	65,335	13,785	2.50	5,514
2011	178,992.96	137,229	135,985	43,008	3.50	12,288
2012	82,780.38	57,946	57,421	25,359	4.50	5,635
2013	157,510.68	99,756	98,851	58,660	5.50	10,665
2014	66,348.71	37,598	37,257	29,092	6.50	4,476
2015	101,301.36	50,651	50,192	51,109	7.50	6,815
2016	82,112.21	35,582	35,259	46,853	8.50	5,512
2017	66,893.54	24,528	24,306	42,588	9.50	4,483
2018	118,968.75	35,691	35,367	83,602	10.50	7,962
2019	101,852.69	23,765	23,550	78,303	11.50	6,809
2020	134,954.73	22,493	22,289	112,666	12.50	9,013
2021	130,486.08	13,049	12,931	117,555	13.50	8,708
2022	113,136.02	3,771	3,736	109,400	14.50	7,545
	1,520,686.74	708,077	701,656	819,030		101,069

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 8.1 6.65

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 396.00 POWER OPERATED EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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-S0.5						
NET SALVAGE PERCENT.. +5						
1983	8,176.50	6,655	7,074	694	3.58	194
1987	64,326.56	48,986	52,070	9,040	4.96	1,823
1989	60,687.03	44,577	47,384	10,269	5.67	1,811
1990	56,044.32	40,379	42,922	10,320	6.04	1,709
1991	43,626.71	30,819	32,760	8,685	6.41	1,355
1992	17,914.00	12,403	13,184	3,834	6.78	565
1993	8,691.89	5,889	6,260	1,997	7.17	279
1994	79,401.70	52,651	55,966	19,466	7.55	2,578
1995	26,879.88	17,415	18,512	7,024	7.95	884
1996	91,728.35	58,002	61,654	25,488	8.36	3,049
1997	68,865.23	42,472	45,146	20,276	8.77	2,312
2004	56,292.50	27,851	29,605	23,873	11.98	1,993
2006	82,911.08	37,776	40,155	38,611	13.01	2,968
2007	34,642.31	15,073	16,022	16,888	13.55	1,246
2008	70,072.74	28,998	30,824	35,745	14.11	2,533
2009	113,225.09	44,359	47,152	60,412	14.69	4,112
2010	141,503.14	52,212	55,499	78,929	15.29	5,162
2012	216,945.84	69,661	74,047	132,052	16.55	7,979
2013	45,719.92	13,517	14,368	29,066	17.22	1,688
2014	56,357.46	15,184	16,140	37,400	17.91	2,088
2015	110,040.99	26,678	28,358	76,181	18.62	4,091
2016	245,898.29	52,607	55,919	177,684	19.37	9,173
2017	167,421.38	30,919	32,866	126,184	20.14	6,265
2018	217,166.90	33,422	35,526	170,783	20.95	8,152
2019	165,563.64	20,258	21,534	135,751	21.78	6,233
2020	80,525.81	7,160	7,611	68,889	22.66	3,040
2021	135,986.76	7,441	7,909	121,278	23.56	5,148
2022	241,263.80	4,492	4,775	224,426	24.51	9,157
	2,707,879.82	847,856	901,242	1,671,244		97,587

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 17.1 3.60

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 397.20 COMMUNICATION EQUIPMENT - NEBRASKA

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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 21-R3						
NET SALVAGE PERCENT.. 0						
2002	24,929.44	19,611	24,929			
2006	2,521.67	1,706	2,522			
2008	9,457.28	5,773	9,457			
2012	6,681.05	3,086	6,681			
	43,589.44	30,176	43,589			

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

NORTHWESTERN ENERGY
GAS PLANT

ACCOUNT 397.45 COMMUNICATION EQUIPMENT - 10-YEAR

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 10-SQUARE						
NET SALVAGE PERCENT.. 0						
2015	19,677.87	14,758	15,753	3,925	2.50	1,570
2018	3,669.22	1,651	1,762	1,907	5.50	347
2019	1,309,425.22	458,299	489,196	820,229	6.50	126,189
2022	29,815.42	1,491	1,591	28,224	9.50	2,971
	1,362,587.73	476,199	508,302	854,285		131,077

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 6.5 9.62

COMMON PLANT

NORTHWESTERN ENERGY
COMMON PLANT

ACCOUNT 303.10 INTANGIBLE PLANT - 10-YEAR

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 10-SQUARE						
NET SALVAGE PERCENT.. 0						
2013	2,054,680.58	1,951,947	1,975,577	79,104	0.50	79,104
2015	599,427.99	449,571	455,013	144,415	2.50	57,766
2019	2,929,587.83	1,025,356	1,037,769	1,891,819	6.50	291,049
2022	4,185,384.39	209,269	211,803	3,973,582	9.50	418,272
	9,769,080.79	3,636,143	3,680,162	6,088,919		846,191
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					7.2	8.66

NORTHWESTERN ENERGY
COMMON PLANT

ACCOUNT 303.50 INTANGIBLE PLANT - 5-YEAR

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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						
2018	304,228.96	273,806	295,984	8,245	0.50	8,245
2019	661,352.14	462,946	500,444	160,908	1.50	107,272
2020	514,394.14	257,197	278,029	236,365	2.50	94,546
2021	683,965.67	205,190	221,810	462,156	3.50	132,045
2022	1,205,881.80	120,588	130,355	1,075,527	4.50	239,006
	3,369,822.71	1,319,727	1,426,622	1,943,201		581,114
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					3.3	17.24

NORTHWESTERN ENERGY
COMMON PLANT

ACCOUNT 390.10 STRUCTURES AND IMPROVEMENTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 40-S1.5						
NET SALVAGE PERCENT.. -20						
1929	45,419.55	54,503	54,503			
1952	72,579.72	81,739	42,218	44,878	2.46	18,243
1974	1,371.87	1,298	670	976	8.46	115
1977	42,258.74	38,717	19,997	30,713	9.46	3,247
1987	262,818.51	209,808	108,365	207,017	13.39	15,461
1989	60,372.99	46,511	24,023	48,425	14.32	3,382
1990	220,558.06	166,676	86,088	178,582	14.81	12,058
1993	62,928.93	44,648	23,061	52,454	16.35	3,208
1995	14,670,838.58	9,920,421	5,123,872	12,481,134	17.46	714,842
1996	2,882.01	1,899	981	2,477	18.04	137
2002	123,777.83	67,174	34,695	113,838	21.91	5,196
2006	21,466.64	9,737	5,029	20,731	24.88	833
2007	166,710.90	71,669	37,017	163,036	25.67	6,351
2008	32,126.18	13,021	6,725	31,826	26.49	1,201
2009	109,049.41	41,482	21,425	109,434	27.32	4,006
2010	69,471.63	24,655	12,734	70,632	28.17	2,507
2011	4,024,417.98	1,324,436	684,068	4,145,234	29.03	142,791
2012	442,949.26	133,948	69,184	462,355	29.92	15,453
2013	435,835.52	120,029	61,995	461,008	30.82	14,958
2014	661,522.49	163,925	84,667	709,160	31.74	22,343
2015	4,650,980.05	1,022,751	528,248	5,052,928	32.67	154,666
2016	445,809.11	85,462	44,141	490,830	33.61	14,604
2017	3,077,262.87	501,286	258,913	3,433,802	34.57	99,329
2018	2,030,302.38	271,654	140,309	2,296,054	35.54	64,605
2019	157,994.60	16,495	8,520	181,074	36.52	4,958
2020	567,973.07	42,428	21,914	659,654	37.51	17,586
2021	5,353,834.99	240,923	124,435	6,300,167	38.50	163,641
2022	156,626.00	2,349	1,214	186,737	39.50	4,728
	37,970,139.87	14,719,644	7,629,011	37,935,157		1,510,449

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 25.1 3.98

NORTHWESTERN ENERGY
COMMON PLANT

ACCOUNT 391.00 OFFICE FURNITURE AND EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2004	58,694.26	54,292	58,694			
2005	2,387.07	2,089	2,387			
2009	24,809.08	16,746	20,464	4,345	6.50	668
2012	23,255.89	12,209	14,920	8,336	9.50	877
2014	132,016.71	56,107	68,565	63,452	11.50	5,518
2015	5,948.33	2,231	2,726	3,222	12.50	258
2016	5,005.39	1,627	1,988	3,017	13.50	223
2017	164,734.78	45,302	55,361	109,374	14.50	7,543
2018	3,508.30	789	964	2,544	15.50	164
2020	2,385.58	298	364	2,022	17.50	116
2021	107,649.07	8,074	9,867	97,782	18.50	5,286
2022	3,001.86	75	92	2,910	19.50	149
	533,396.32	199,839	236,392	297,004		20,802

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 14.3 3.90

NORTHWESTERN ENERGY
COMMON PLANT

ACCOUNT 391.10 OFFICE FURNITURE AND EQUIPMENT - COMPUTERS - 10-YEAR

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR	ORIGINAL COST	CALCULATED ACCRUED	ALLOC. BOOK RESERVE	FUTURE BOOK ACCRUALS	REM. LIFE	ANNUAL ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)
SURVIVOR CURVE.. 10-SQUARE						
NET SALVAGE PERCENT.. 0						
2013	1,505,651.46	1,430,369	1,280,728	224,923	0.50	224,923
2014	202,352.22	171,999	154,005	48,347	1.50	32,231
2015	878,923.81	659,193	590,230	288,694	2.50	115,478
2019	518,165.98	181,358	162,385	355,781	6.50	54,736
2022	128,700.14	6,435	5,762	122,938	9.50	12,941
	3,233,793.61	2,449,354	2,193,110	1,040,684		440,309

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 2.4 13.62

NORTHWESTERN ENERGY
COMMON PLANT

ACCOUNT 391.50 OFFICE FURNITURE AND EQUIPMENT - COMPUTERS - 5-YEAR

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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						
2018	1,338,930.64	1,205,038	879,021	459,910	0.50	459,910
2019	1,549,577.55	1,084,704	791,243	758,335	1.50	505,557
2020	535,426.68	267,713	195,285	340,142	2.50	136,057
2021	935,866.30	280,760	204,801	731,065	3.50	208,876
2022	946,853.27	94,685	69,069	877,784	4.50	195,063
	5,306,654.44	2,932,900	2,139,419	3,167,236		1,505,463

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 2.1 28.37

NORTHWESTERN ENERGY
COMMON PLANT

ACCOUNT 392.00 TRANSPORTATION EQUIPMENT - AUTOMOBILES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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 8-L2.5						
NET SALVAGE PERCENT.. +5						
2010	42,584.55	31,505	31,625	8,830	1.77	4,989
2011	22,585.55	16,119	16,181	5,275	1.99	2,651
2012	73,581.77	50,417	50,610	19,293	2.23	8,652
2013	44,822.68	29,488	29,601	12,981	2.46	5,277
2014	25,910.08	16,399	16,462	8,153	2.67	3,054
2017	55,473.10	29,775	29,888	22,811	3.48	6,555
2018	56,253.26	26,520	26,621	26,820	4.03	6,655
2019	89,762.13	34,536	34,668	50,606	4.76	10,632
2020	32,344.96	9,218	9,253	21,475	5.60	3,835
2022	26,681.34	1,584	1,590	23,757	7.50	3,168
	469,999.42	245,561	246,499	200,000		55,468

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 3.6 11.80

NORTHWESTERN ENERGY
COMMON PLANT

ACCOUNT 392.10 TRANSPORTATION EQUIPMENT - HEAVY TRUCKS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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 16-L2.5						
NET SALVAGE PERCENT.. +10						
1958	2,166.21	1,950	1,950			
1960	579.50	522	522			
1963	1,188.33	1,069	1,069			
1964	309.97	279	279			
1967	1,855.53	1,670	1,670			
1970	15,035.54	13,532	13,532			
1971	4,223.17	3,801	3,801			
1972	5,626.40	5,064	5,064			
1973	2,102.50	1,892	1,892			
1974	6,858.06	6,172	6,172			
1979	9,962.12	8,736	8,966			
1980	1,966.27	1,707	1,770			
1982	412.53	350	371			
1984	7,527.49	6,241	6,775			
1992	14,462.90	10,975	12,365	652	2.51	260
1994	12,174.58	9,005	10,145	812	2.85	285
1995	2,782.50	2,030	2,287	217	3.03	72
1997	1,600.00	1,131	1,274	166	3.43	48
1998	6,170.00	4,286	4,829	724	3.65	198
2005	16,460.00	9,962	11,224	3,590	5.24	685
2006	14,333.76	8,522	9,601	3,299	5.43	608
2007	129,965.52	75,957	85,577	31,392	5.61	5,596
2008	65,471.50	37,528	42,281	16,643	5.81	2,865
2009	30,711.46	17,189	19,366	8,274	6.05	1,368
2010	83,111.18	45,113	50,826	23,974	6.35	3,775
2011	135,651.97	70,735	79,693	42,394	6.73	6,299
2012	17,655.00	8,739	9,846	6,044	7.20	839
2014	142,890.00	61,085	68,821	59,780	8.40	7,117
2019	32,642.55	6,280	7,076	22,303	12.58	1,773
	765,896.54	421,522	469,044	220,263		31,788

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 6.9 4.15

NORTHWESTERN ENERGY
COMMON PLANT

ACCOUNT 392.20 TRANSPORTATION EQUIPMENT - LIGHT TRUCKS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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 14-L2.5						
NET SALVAGE PERCENT.. +10						
2003	16,140.00	10,749	12,525	2,001	3.64	550
2004	21,976.52	14,297	16,659	3,120	3.88	804
2006	28,686.42	17,814	20,757	5,061	4.34	1,166
2007	21,146.45	12,846	14,968	4,064	4.55	893
2008	123,005.84	73,224	85,321	25,384	4.74	5,355
2009	154,597.15	90,240	105,148	33,989	4.92	6,908
2010	199,980.82	114,032	132,871	47,112	5.13	9,184
2011	79,626.68	44,124	51,414	20,250	5.38	3,764
2015	10,944.50	4,707	5,485	4,365	7.31	597
2016	26,390.00	10,128	11,801	11,950	8.03	1,488
2017	1,545.00	513	598	792	8.83	90
2018	151,096.73	41,865	48,781	87,206	9.69	9,000
2020	147,020.59	23,250	27,090	105,229	11.54	9,119
2022	57,362.14	1,844	2,149	49,477	13.50	3,665
	1,039,518.84	459,633	535,567	400,000		52,583

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 7.6 5.06

NORTHWESTERN ENERGY
COMMON PLANT

ACCOUNT 392.60 TRANSPORTATION EQUIPMENT - AIRCRAFT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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 8-L3						
NET SALVAGE PERCENT.. +50						
2018	1,511,788.53	394,955	144,923	610,971	3.82	159,940
	1,511,788.53	394,955	144,923	610,971		159,940
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					3.8	10.58

NORTHWESTERN ENERGY
COMMON PLANT

ACCOUNT 393.00 STORES EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2018	35,559.18	8,001	7,112	28,448	15.50	1,835
	35,559.18	8,001	7,112	28,448		1,835

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 15.5 5.16

NORTHWESTERN ENERGY
COMMON PLANT

ACCOUNT 394.00 TOOLS, SHOP AND GARAGE EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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						
2009	14,648.94	13,184	12,436	2,213	1.50	1,475
2011	38,771.85	29,725	28,039	10,733	3.50	3,067
2016	12,518.78	5,425	5,117	7,402	8.50	871
2017	17,200.34	6,307	5,949	11,251	9.50	1,184
2018	36,482.88	10,945	10,324	26,159	10.50	2,491
2019	23,562.06	5,498	5,187	18,375	11.50	1,598
2021	16,206.70	1,621	1,529	14,678	13.50	1,087
2022	43,900.26	1,463	1,380	42,520	14.50	2,932
	203,291.81	74,168	69,961	133,331		14,705

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 9.1 7.23

NORTHWESTERN ENERGY
COMMON PLANT

ACCOUNT 396.00 POWER OPERATED EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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-S0.5						
NET SALVAGE PERCENT.. +5						
1983	14,800.15	12,047	14,060			
1984	23,606.60	18,910	22,426			
1997	90,845.51	56,028	77,854	8,449	8.77	963
1998	33,427.01	20,070	27,888	3,868	9.20	420
1999	73,491.05	42,923	59,644	10,172	9.63	1,056
2004	60,652.69	30,009	41,699	15,921	11.98	1,329
2005	139,141.77	66,145	91,912	40,273	12.49	3,224
2006	92,990.60	42,368	58,872	29,469	13.01	2,265
2007	67,764.20	29,484	40,969	23,407	13.55	1,727
2008	201,063.51	83,204	115,616	75,394	14.11	5,343
2009	132,211.76	51,798	71,976	53,625	14.69	3,650
2010	245,792.38	90,692	126,021	107,482	15.29	7,030
2011	32,860.00	11,351	15,773	15,444	15.91	971
2012	178,985.71	57,472	79,860	90,176	16.55	5,449
2013	15,200.40	4,494	6,245	8,195	17.22	476
2014	28,712.22	7,736	10,750	16,527	17.91	923
2015	63,832.98	15,476	21,505	39,136	18.62	2,102
2017	78,084.59	14,421	20,039	54,141	20.14	2,688
2019	323,599.67	39,596	55,020	252,400	21.78	11,589
2020	201,884.61	17,952	24,945	166,845	22.66	7,363
2021	7,455.00	408	567	6,515	23.56	277
2022	192,653.82	3,587	4,984	178,037	24.51	7,264
	2,299,056.23	716,171	988,625	1,195,478		66,109

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 18.1 2.88

NORTHWESTERN ENERGY
COMMON PLANT

ACCOUNT 397.10 COMMUNICATION EQUIPMENT - MICROWAVE AND FIBER OPTIC

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

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 18-S3						
NET SALVAGE PERCENT.. 0						
2002	316,595.36	268,929	283,126	33,469	2.71	12,350
2004	11,797.50	9,589	10,095	1,702	3.37	505
2005	18,045.64	14,286	15,040	3,006	3.75	802
2007	15,186.82	11,264	11,859	3,328	4.65	716
2008	504,984.20	359,660	378,647	126,337	5.18	24,389
2009	906,811.43	616,124	648,650	258,161	5.77	44,742
2011	4,193.24	2,530	2,664	1,529	7.14	214
2012	2,099,326.51	1,176,798	1,238,922	860,405	7.91	108,774
2013	262,047.54	134,664	141,773	120,275	8.75	13,746
	4,138,988.24	2,593,844	2,730,776	1,408,213		206,238

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 6.8 4.98

NORTHWESTERN ENERGY
COMMON PLANT

ACCOUNT 397.30 COMMUNICATION EQUIPMENT - 10-YEAR

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 10-SQUARE						
NET SALVAGE PERCENT.. 0						
2013	41,786.71	39,697	40,661	1,126	0.50	1,126
2014	356,949.14	303,407	310,776	46,173	1.50	30,782
2019	2,004.30	702	719	1,286	6.50	198
	400,740.15	343,806	352,156	48,584		32,106
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					1.5	8.01

NORTHWESTERN ENERGY
COMMON PLANT

ACCOUNT 398.00 MISCELLANEOUS EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED ORIGINAL COST AS OF DECEMBER 31, 2022

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2009	14,688.74	9,915	6,257	8,432	6.50	1,297
2020	11,126.26	1,391	878	10,248	17.50	586
	25,815.00	11,306	7,135	18,680		1,883
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					9.9	7.29

Pre-filed Direct Testimony and Exhibits
Jeffrey J. Decker

In the Matter of the Application of
NorthWestern Energy Public Service Corporation, d/b/a NorthWestern Energy

For Authority to Increase Natural Gas Utility Rates
in South Dakota

Docket No. NG24-_____

June 21, 2024

TABLE OF CONTENTS

EXHIBITS

Witness Information

Q. Please state your name and business address.

A. My name is Jeffrey J. Decker and my business address is 600 Market St W., Huron, South Dakota 57350.

Q. By whom are you employed and in what position?

A. I am employed by NorthWestern Energy Public Service Corporation d/b/a NorthWestern Energy ("NorthWestern" or "Company") as a Lead Regulatory Specialist.

Q. Please describe your education and business experience and business credentials.

A. I graduated in 1986 from Dakota Wesleyan University with a Bachelor of Arts degree in Business Administration. I joined NorthWestern Public Service in 1988 as a corporate accountant working with financial reporting. Starting in 1993, I worked with NorthWestern Growth Corporation. My responsibilities included financial analysis of potential acquisitions. In 1995, I became the director of rates. I was promoted to Manager of Financial Services – NEC in 1998. In 2004, my title was changed to Specialist Regulatory for NorthWestern Energy. In 2023, I was promoted to Lead Regulatory Specialist. Since 1996, I have been responsible for developing the NorthWestern's natural gas revenue budgets for South Dakota and Nebraska. I also maintain and analyze heating degree day data for both states on a monthly basis.

Q. What is the purpose of your testimony in this proceeding?

A. I support the revenue adjustments, revenue requirement, cost of service study, and the rate design changes to the applicable tariff schedules. In addition, I explain a proposed new Rate 89 tariff to serve the large transport customers and support some minor changes to the Rate 87 transportation general terms.

Pro Forma Adjustments – Operating Income Statement

Q. Please refer back to Statement M-1. Would you please explain each individual pro forma adjustment to the operating income statement?

A. I will address adjustments 1 through 6. Witness Jeffrey B. Berzina will address the remaining adjustments in his testimony.

Adjustment No. 1 – Weather Normalization

Details and calculation of this adjustment are shown on Statement I-1, pages 1 and 2. The adjustment is the total of column f, rows 17 and 25 on page 2. This adjustment decreases the revenue requirement by $60,773. As shown on Schedule M-1, the natural gas costs associated with this adjustment total $49,020, resulting in a margin impact of $11,753. This adjustment determines the natural gas supply cost adjustments using weather normalized sales requirements and the cost component of each rate schedule. The Purchased Gas Cost rate used in this filing was the average natural gas cost rate for the test period.

NorthWestern has made certain adjustments to base year volumes in

determining test year volumes. The upward adjustment to base year volumes delivered to retail customers is primarily the result of slightly warmer than normal weather in the base year. Heating degree days during the base year were approximately 99.87 percent of normal, as shown on Exhibit JJD-1. In summary, NorthWestern divided actual base year volumes into temperature sensitive and non-temperature sensitive volumes. The non-temperature sensitive volume was determined using the July and August 2023 volumes in the base period. NorthWestern then calculated the temperature sensitive volume for the year by subtracting the non-temperature sensitive volume from the total volume. The temperature sensitive volumes are normalized in a linear manner adjusting the base period temperature sensitive volumes by the ratio of historical normal heating degree days to the actual heating degree days matched to billing cycles during the twelve months ended December 31, 2023.

This method calculates a normalization factor by taking the sum of the monthly heating degree-day normals and dividing them by the sum of the monthly degree-day actuals. NorthWestern calculated heating degree-days for actual and normal on a billing cycle basis to provide a better match with revenues. NorthWestern then applied this normalization factor to actual annual sales (less base load sales) to either decrease actual sales if it is colder than normal or increase sales if it is warmer than normal. The National Oceanic and Atmospheric Administration reported the normal and actual heating degree-days. The monthly normal heating degree days are based on a thirty-year average for the period of 1991-2020, and the adjustment uses the Huron weather service

actual and normal heating degree data. Huron is located close to the center of our service territory and represents a reasonable average of the weather affecting our customers.

Adjustment No. 2 – Book to Bill

NorthWestern made this adjustment to the actual revenues booked during the test year to account for the variance between booked revenues and billed revenues in the test year. The reason that the booked and billed revenues differ is because of situations where there are pro-rated billing cycles, account close-outs, meter misreads, and out-of-period adjustments that ultimately affect the amount of revenues booked by the Company versus the revenues billed. This is a test year revenue adjustment that decreases test year revenues to the billed revenue amount at current rates, and thus eliminates the need for the booked-to-billed revenue ratio in rate design. The billed revenues were determined based on the test year billing determinants for each rate element multiplied by the tariff rates in effect during the test year. This adjustment decreases operating revenues by approximately $37,820, as shown on Schedule I-1, page 3.

Adjustment No. 3 – Remove Management Fee Income

Adjustment 3 represents the removal of the annual management fee income that NorthWestern received from several large transport customers. The management fee income is based on the Federal Energy Regulatory Commission ("FERC") method of calculating a return for a large customer whose rate base dollars have been previously recovered. NorthWestern has referenced this method in multiple

contract with deviation filings that it has made with the South Dakota Public Utilities Commission ("SDPUC") over the last 10 years. The management fee represents the return to NorthWestern for serving this group of customers. Without the removal of the fee income, NorthWestern would give back all returns from these customers to the existing customer base through the cost of service and NorthWestern's shareholders would be left without a return for serving these customers. Removing this income provides the intended return to the Company from this group of customers. The calculation for the adjustment of $89,045 is shown on Exhibit JJD-2 Confidential.

Adjustment No. 4 – Contract Renewal Revenue Change

Adjustment 4 reduces revenue for changes in contracted rates for the test year compared to the base year. Revised rates from contracts that went into effect during the test year of 2023 make up this adjustment. NorthWestern filed each adjustment as a contract with deviation filing in 2023. Row 39 of Exhibit JJD-3 Confidential, Sch 2.1a, pages 3, 4, 5 and row 40 of page 10 provide the detailed changes (test year revenue at present rates less base year revenue) that total this $32,366 revenue reduction. The lines on pages 3, 4 and 10 stated above also include management fee income reduction of $35,888. This should be subtracted from the differences on pages 3, 4 and 10 in order to represent the contract renewal revenue change.

Adjustment No. 5 – New Customer Revenue

Adjustment 5 increases revenue for new customers served under Contract with

Deviation who began service or increased usage during 2023. Row 40 of Exhibit JJD-3 Confidential, Sch 2.1a, page 13 provides the detail change for the adjustment of an increase to revenue of $40,549.

Adjustment No. 6 – Manufactured Gas Plant ("MGP") Cost Reduction

In Docket No. NG11-003, the SDPUC approved base rates that included the recovery of costs associated with the MGP site in Aberdeen. Since that time, system sales volumes have increased, resulting in higher recoveries. Additionally, remediation costs for this site have substantially declined. In 2016, the Company sought approval for a refund plan, which the SDPUC granted in Docket No. NG16-010. This allows the Company to refund the amount collected in base rates for remediation costs above what it spent. The SDPUC has approved this refund plan annually since 2016. During the 2023 test year, revenue recoveries totaled $2,174,459, which NorthWestern offset in full by regulatory amortization of $2,174,459.

Statement I-1 provides a comparison of the 5-year historical expense and the 5-year forecasted expense for the Aberdeen site. Arcadis, whom the Company has hired to monitor the MGP sites and estimate future costs, provided the forecast numbers. The 2024 forecast amount was not included due to it being significantly higher than the forecast for the years that new rates will be in effect. Based on the 2025 – 2029 forecasted annual expense of $355,000, the annual reduction to revenue and regulatory debits/credits is $1,819,459. Statement I-1, page 5, provides the detail behind this adjustment.

The Company previously had an MGP tracker, as ordered in Docket No. NG96-015. NorthWestern recovered the remediation costs via a separate charge in the tariff and the recovery of such costs was not included in base rates. In Docket No. NG07-013, the costs were moved into base rates, with the stipulation that costs and recovery continue to be tracked with the over-recovered balance owed to customers, with interest. As part of this filing, NorthWestern is proposing to move the MGP recovery out of base rates and again into its own tracker. The current process of collecting revenue in base rates, tracking actual expenditures, and then refunding the difference is functioning as a tracker, but with the limitations of having a locked in recovery amount through base rates that is significantly higher than necessary, resulting in significant over-recovered balances. Given the changes in recovery since the 2011 rate review, establishing a separate tracker rate will be a prudent means of recovering this cost from customers while eliminating the administrative burden on the SDPUC and the Company with annual refund filings.

To accomplish this change, a separate tariff sheet will contain the recovery rate applicable to customers. NorthWestern will continue to track monthly the actual costs and recoveries with interest applied to the over- or under-collected position at a rate equal to the approved return on rate base from this proceeding. There will be a separate line item on the bill for MGP recovery. NorthWestern will revise the rate each month and filed alongside the Purchased Gas Adjustment and Ad Valorem tracker recovery filings. The actual costs tracked will include all South Dakota MGP sites, in addition to the Aberdeen site, that NorthWestern is

monitoring. As of this date, sites in Woonsocket, Mitchell, and Yankton have incurred remediation costs totaling $94,929. With this filing, NorthWestern asks for the approval to recover those costs as part of the recovery tracking of MGP site costs. NorthWestern is proposing the balance be moved into the MGP recovery/expense account. NorthWestern also seeks clarity on whether future costs can automatically be recovered through the MGP recovery mechanism.

Class Cost of Service Study

Q. What is the basis for the class cost of service study contained in the required Statement N?

A. NorthWestern based the study on South Dakota jurisdictional operations for the twelve-month period ending December 31, 2023, as adjusted for known and measurable changes. The revenue requirement study previously mentioned provides the operating income and rate base numbers used in the cost of service study.

Q. What is the purpose of a class cost of service study?

A. A class cost of service study is an allocation to each rate schedule or class of customers of all revenues and costs relative to furnishing the utility service, including appropriate assignment of revenues, operations and maintenance ("O&M") expenses, depreciation, and other cost elements.

Q. Would you briefly describe the steps involved in preparing a class cost of service study?

A. NorthWestern examined the utility plant, revenue, and expense accounts and, where possible, amounts are assigned directly to certain classes of service or customers, based on details derived from the books and records of the utility or by special analysis and studies. Amounts not directly assigned are analyzed by functional responsibility and groupings of accounts, such as production and distribution, and then NorthWestern allocated on the basis of demand, energy use, and the number of customers associated with the various functional responsibilities.

Q. How would you describe your overall approach to the cost allocation study?

A. This cost allocation study utilizes the methods employed in Docket Nos. NG99-002, NG07-013, and NG11-003. As a result, the 2023 study applies cost allocation principles in a manner consistent with previous studies approved by the SDPUC.

Q. How did NorthWestern define classes for the purpose of the class cost of service study?

A. There are three service classes used for this class cost of service study: residential (Rate No. 81 – Residential Gas Service); small commercial (Rate No. 82 – General Gas Service); and large commercial (Rate Nos. 84 & 85 for sales service, Rate No. 86 customers, and Rate No. 87 for transportation service). Rates for large commercial accounts are offered under either an Option A or B. Option A service is currently chosen by large commercial accounts generally

using less than 80,000 therms per year. This service rate option carries a smaller customer charge than Option B service; however, the non-gas commodity charge is approximately $0.03 per therm higher.

Q. Discuss the principal classification and allocations used in Statement O.

A. Pages 5 and 6 contain the development of the classification ratios of cost for customer, demand or commodity, while the allocation ratios to customer class are shown on pages 7 and 8. Demand-related costs are those that relate to the utility's ability to meet and sustain the maximum gas flow required by customers. On NorthWestern's system, these days occur when it is extremely cold. Demand-related costs relate to the capacity that NorthWestern must build into the system to meet peak operating conditions. NorthWestern allocates the demand-related costs on the basis of the January 2023 volumetric requirements for each of the classes.

Q. How were most of the other distribution costs allocated?

A. NorthWestern allocated the costs associated with meters, services, and regulators based on the number of customers, adjusted to account for differences in cost for the size of customer. In general, NorthWestern allocated expenses based on the plant to which they relate. NorthWestern allocated supervision and engineering expenses on the basis of the other related O&M accounts while customer accounting expenses were allocated on the basis of weighted customer counts. NorthWestern generally allocated administrative and general costs, including common plant investment, in proportion to the allocation

of distribution and production plant investment and expenses.

Q. What are the results of the class cost of service study?

A. Statement O, pages 2 and 3 summarize the results. Page 3 of the study shows, based on pro forma results at present rates, the following rates of return by class of customer:

Residential	3.35%
Small Commercial	2.73%
Large Commercial	1.80%

The level of revenue requirement needed by each customer class to attain the overall rate of return of 7.75% requested by NorthWestern in this filing is shown on page 2 of the study.

Q. What are the principle conclusions you reach from your study?

A. Based on results of this study, I find that existing natural gas revenues fail to cover South Dakota natural gas jurisdictional revenue requirements by just over $6 million.

Q. What are the revenue deficiency amounts by class of customer and the percentage increase in non-gas cost revenue required?

A. These amounts and percentage increases are as follows:

Residential	$2,826,425	or	26.69% Increase
Small Commercial	1,153,133	or	35.07% Increase
Large Commercial	2,063,665	or	32.89% Increase
Total	$6,043,223	or	29.99% Increase

Q. What are the revenue deficiency amounts by class of customer and the percentage increase in non-gas cost revenue required, when comparing to the total billed revenue?

A. The amount of revenue deficiencies by class of customers are the same as reflected in the prior answer. The percentage increases compared to total billed revenue are as follows:

Residential	7.95% Increase
Small Commercial	6.29% Increase
Large Commercial	16.76% Increase
Total	9.13% Increase

Rate Design and Proposed Rates

Q. Please explain NorthWestern's rate design goals in this docket.

A. NorthWestern's primary goal is that its prices for natural gas delivery service be cost-based and competitively priced to alternate fuel choices for customers. The revenues to be recovered by proposed rates are consistent with the class cost of service study results. The class cost of service study indicates that the small and large commercial classes have the lowest rates of return and should therefore

receive the greatest percentage increases. As a basic approach to apportioning the total requested increase of approximately $6.0 million, the goal is to move every class to the system average return of 7.75%.

Q. Are you recommending a change to the current rate structure of NorthWestern's rate schedules?

A. No, NorthWestern is not recommending any changes in rate structure. The only recommended changes are increases to the customer and non-gas cost delivery service charge component of rates.

Q. Are you recommending any changes to purchased natural gas cost recovery?

A. Yes. NorthWestern recommends one change to the Released Capacity and Balancing Service Surcharge. This surcharge is part of tariff rates 84, 85 and 86.

Q. What is the change you are recommending?

A. The change proposed is to increase the rate from $0.017 to $0.0327 per therm. Exhibit JJD-5 Confidential Surcharge Cost shows the calculation of this rate. Costs have increased since the last review in 2011 and this will update the rate to be current with the costs NorthWestern experiences from the upstream pipelines. Section 3, Sheets 3.2, 5.1 and 9b of the tariff show the revised rate. The rate of $0.017 shown in tariff section 3, sheet 6.1. NorthWestern based that rate originally on the balancing service surcharge. However, an update to that rate is not appropriate as NorthWestern considered the charge to the customer

within the calculation of the rate for the Milbank pipeline recovery rate discussed within this testimony.

Q. Will this change result in additional revenue margin for NorthWestern?

A. No. NorthWestern passes the revenue received from this surcharge back to customers through the purchased gas adjustment that is filed each month with the SDPUC.

Q. Please describe your proposed rate change for residential Rate 81.

A. Overall, proposed revenue increases for residential customers are consistent with revenue levels required in the class cost of service study. NorthWestern is proposing to increase its monthly customer charge for residential customers by $2.00 to $10.00. The class cost of service study indicates that a fully loaded customer charge for this type of account should be approximately $17 per month. NorthWestern included the remaining increase, not collected via the proposed customer charge increase, in the distribution delivery commodity charge. More of the increase was put into the first rate block to compensate for the entire customer-related costs not being collected in the monthly customer charge.

Q. Please describe your proposed rate change for the small commercial class (Rate No. 82 or General Gas Service).

A. Overall, proposed revenue increases for small commercial customers are consistent with revenue levels required in the class cost of service study. NorthWestern is proposing to increase its monthly customer charge for small

commercial customers by $2.00 to $12.00. The class cost of service study indicates that a fully loaded customer charge for this type of account should be approximately $19 per month. NorthWestern included the remaining increase, not collected via the proposed customer charge increase, in the distribution delivery commodity charge. The remaining increase was put into the first rate block to compensate for the entire customer-related costs not being collected in the monthly customer charge.

Q. Please describe your proposed rate change for the large commercial class (Rate Nos. 84 and 85 – Sales, Rate No. 86 Contract Sales, and Rate No. 87 - Transportation).

A. Again, overall, proposed revenue increases for large commercial customers are consistent with revenue levels required in the class cost of service study. NorthWestern is proposing the customer charge for both the “A” and “B” customers increase $20 per month. The “A” customer monthly charge is $100 per month compared to the cost of service recovery that shows the customer charge should be just over $140. For the “B” customers, the current monthly customer charge is $300 per month compared to the cost of service number of $377. NorthWestern is proposing a $20 increase to the current monthly $100 charge for Rates 84A and 85A. Rates 86A and 87A monthly charges will remain at $150. For Rates 84B and 85B, NorthWestern proposes to increase the current monthly charge of $300 to $320, and for Rate 86B and 87B, NorthWestern proposes to increase the current monthly charge of $350 to $370. The remaining increase not collected through the fixed charge is included in the distribution

delivery rate.

Q. Are you proposing to update demand charges in Rate 87 for the Milbank line?

A. Yes. The rates for recovery of this line were originally established under Contract with Deviation in Docket No. NG11-001. In the rate review in Docket No. NG11-003, the rates were established in tariff rate 87. NorthWestern currently charges four large customers for this service. The current rate in the tariff is $1.08. As shown on Exhibit JJD-4 Confidential, page 1, the proposed rate is $1.20. The underlying calculations for this rate are shown on pages 1 and 2 of this exhibit. The annual proposed increase to revenue is $65,141. This is shown on row 39 of page 2.

Q. On page 2, why is the Net Book Value higher than the original purchase cost?

A. The South Dakota Department of Transportation performed work on Highway 15 that required this pipeline to be moved. This occurred in 2022 and the project costs were charged to the Milbank Pipeline.

Q. Are you proposing any new tariff rates in this filing?

A. Yes we are proposing to add Rate 89, High Volume Transport Customers.

Q. What customers will be subject to this rate?

A. This tariff rate will apply to customers whose annual volumes exceed 10,000,000

therms, who have a direct connect to an upstream pipeline, and whose pipeline installation costs were recovered through a contract with deviation.

Q. Why are you requesting a separate rate for this group of customers?

A. NorthWestern serves this group of customers under Contracts with Deviation. This requires updated filings every five years for each customer. Currently, NorthWestern calculates the customers' rates as a class that it updates annually. As a customer's five-year contract expires, the customer moves to the new rate, requiring a new contract with the customer and a SDPUC filing. By serving this group of customers under a tariff rate, the time and work required by the current approval process will be eliminated.

Q. Will there be a change to the current method of cost recovery calculation?

A. No. NorthWestern will continue the same method of cost recovery, including the calculation of the management fee based on FERC methodology. Docket No. NG23-021, Exhibit B, shows the most recently approved method of calculating the rate.

Q. Are you proposing new tariff sheets for this rate?

A. Yes. Section 3, Sheets 7 and 7.1 contain the proposed tariff. The tariff includes the provisions of Section 5, general terms and conditions, and the conditions of Rate 87 that begins with section 3, sheet 6.1, with the exceptions noted for rate 89 in section 3, sheets 7 and 7.1. The tariff includes language to recover construction project costs through a surcharge for pipeline upgrades or pipeline

moves. NorthWestern included the security for construction costs and take or pay volumes to ensure the cost recovery and protection of customers.

Changes to the General Terms and Conditions

Q. Please explain the rate-related changes made to NorthWestern's General Terms and Conditions as part of this filing.

A. NorthWestern is proposing several updates to the general terms and conditions and two additional changes to tariff sheets as described below. The changes include an increase to the non-sufficient funds charge amount and updates to general terms tariff language, transportation tariff language, and updates to the community list and service map.

Q. Please describe the update to the non-sufficient funds charge.

A. We are proposing to increase the non-sufficient funds charge from $15.00 to $30.00. This change will increase the charge to the current amount used in NorthWestern's electric tariff approved by the SDPUC. Statement H-13 shows the proposed revenue impact of this adjustment and Section 5, Sheet 4 of the proposed natural gas tariff shows the revised language for this charge.

Q. Please describe the change to natural gas imbalance charges for Rate 87.

A. In Section No. 3, Sheet No 6.4A of the tariff, NorthWestern is proposing to remove the language "Daily charges on imbalance will be waived if the customer's daily imbalance is in the opposite direction of the Company's daily net system pipeline imbalance, as determined by the Gas Control personnel." This

change will align NorthWestern's tariff with upstream pipeline tariffs and make it more consistent for customers. Given the fact that our transporters are unaware of NorthWestern's overall position until the following month's bill, this should not change the way transport customers nominate or purchase gas, and will likely help transporters estimate their total costs more accurately since they will no longer be impacted by NorthWestern's overall position. NorthWestern believes the tariff's current 10% tolerance calculation is adequate and also aligns with the parameters that NorthWestern follows. Marketers will continue to have the option to buy daily imbalance services, as there is no proposed change to that tariff language. There are times when NorthWestern operationally makes a decision to go long or short on a pipeline, and in these instances, it would not be a benefit to NorthWestern or its retail customers for a marketer's imbalance to be in the opposite position. In order to strive to maintain excellent service with our customers and in keeping with our desire to be transparent, NorthWestern contacted the marketers that represent our transportation customers about the desired change. NorthWestern has had good discussion with three marketers regarding this change and has received no concerns from our transportation customers.

Q. What other changes to the tariff are you proposing?

A. NorthWestern is updating Section 2, Sheets 1 and 2. NorthWestern has added the towns of Harrisburg, Sioux Falls, and Tea to the communities served listing and map as it has obtained franchises to serve natural gas in these communities.

Q. Why is NorthWestern proposing to delete language in Section 3, Sheets 3.3, 4.2 and 5.2 of the tariff?

A. The Company no longer provides propane peaking gas. In addition, the availability of propane gas from an upstream service provider for an individual customer during a curtailment period is very unlikely. No customer has utilized this surcharge provision for at least the past 10 years and therefore, this change will not affect any customer.

Q. Why are you updating Section 5, Sheet 1b?

A. The intent of this change is to decrease the number of Contract with Deviation filings. The current tariff allows for security requirements for project costs and references projects that "term longer than one year". The additional language will clarify that NorthWestern's tariff allows take or pay volumes and construction surcharges for construction cost recovery.

Q. Does this complete your pre-filed direct testimony?

A. Yes, it does.

NorthWestern Energy Public Service Corporation, d/b/a NorthWestern Energy
Normalization of Billing Units - Heating Degree Days
Huron, South Dakota

Line No.	Month	Actual Month	Actual 12 Month	Normal Month	Normal 12 Month	% of Normal
	(a)	(b)	(c)	(d)	(e)	(f)
1	Nov-21	511		604		
2	Dec-21	946		1,162		
3	Jan-22	1,487		1,519		
4	Feb-22	1,333		1,383		
5	Mar-22	1,275		1,205		
6	Apr-22	920		891		
7	May-22	515		449		
8	Jun-22	158		166		
9	Jul-22	9		27		
10	Aug-22	1		1		
11	Sep-22	14		49		
12	Oct-22	192	7,361	254	7,710	95.47%
13	Nov-22	610	7,460	639	7,745	96.32%
14	Dec-22	1,173	7,687	1,111	7,694	99.91%
15	Jan-23	1,620	7,820	1,495	7,670	101.96%
16	Feb-23	1,385	7,872	1,413	7,700	102.23%
17	Mar-23	1,339	7,936	1,201	7,696	103.12%
18	Apr-23	1,099	8,115	856	7,661	105.93%
19	May-23	454	8,054	462	7,674	104.95%
20	Jun-23	60	7,956	176	7,684	103.54%
21	Jul-23	6	7,953	26	7,683	103.51%
22	Aug-23	4	7,956	1	7,683	103.55%
23	Sep-23	15	7,957	51	7,685	103.54%
24	Oct-23	148	7,913	258	7,689	102.91%
25	Nov-23	603	7,906	645	7,695	102.74%
26	Dec-23	932	7,665	1,091	7,675	99.87%

Pre-filed Direct Testimony
Bradley S. Wenande

In the Matter of the Application of
NorthWestern Energy Public Service Corporation, d/b/a NorthWestern Energy

For Authority to Increase Natural Gas Utility Rates
in South Dakota

Docket No. NG24-_____

June 21, 2024

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Witness Information

Q. Please state your name and business address.

A. My name is Bradley S. Wenande. My business address is 3210 Douglas Ave, Yankton, South Dakota 57078.

Q. By whom are you employed and in what capacity?

A. I am the Director of SD/NE Operations for NorthWestern Energy Public Service Corporation d/b/a NorthWestern Energy ("NorthWestern" or "Company").

Q. Please summarize your education and employment experience.

A. I am a 1993 graduate of South Dakota School of Mines and Technology. I hold a Bachelor of Science degree in Electrical Engineering. My experience is primarily in the areas of distribution, transmission, and substation engineering/operations/maintenance, business unit management (including personnel, financial accountability, safe work performance, reliability performance), and labor relations/negotiations.

Q. What are your responsibilities as Director of SD/NE Operations?

A. I am responsible for all aspects of NorthWestern's electric and natural gas distribution systems in South Dakota and Nebraska, including the systems' safe, reliable, and efficient operation; operations planning, engineering, and maintenance.

Purpose of Testimony

Q. What is the purpose of your testimony in this proceeding?

A. My testimony:

- Provides an overview of NorthWestern's South Dakota natural gas distribution system; and
- Provides an overview of major system improvements made in South Dakota to ensure reliability of natural gas service to customers.

Overview of South Dakota Natural Gas Operations

Q. Please provide an overview of the South Dakota natural gas distribution system.

A. NorthWestern provides natural gas to approximately 49,800 customers in 63 communities in South Dakota. We also transport natural gas for nine gas-marketing firms and three large end-user accounts. We have approximately 1,747 miles of distribution main in South Dakota and 55 miles of intrastate transmission pipeline. Since the last natural gas rate review in 2010, NorthWestern has invested over $82 million in our South Dakota natural gas infrastructure to continue our commitment to providing reliable natural gas service at the most affordable rates possible for our customers.

Natural Gas Distribution System Upgrades

Q. Please describe how NorthWestern determines and addresses capital system needs.

A. NorthWestern maintains a five-year capital investment plan. Capital projects are introduced to this plan from a number of sources. Distribution Operations employees with local situational awareness may submit project ideas. Other sources include our Asset Management team who often bring forward projects.

Each project brought forward for consideration is assigned a ranking using criteria such as safety, regulatory requirement, customer need, outage restoration time, division priority, and equipment condition. Projects are then prioritized by ranking total score. Those falling within the funded priority level are considered for approval in the budget cycle. Those with rankings outside of the funded priority level are moved out in the five-year plan.

Each Division is assigned oversight of an annual capital budget and projects are managed at that level. Local resources are heavily involved in the engineering and project management phases of projects. The overall capital budget and budget process is managed by our Central Construction department.

Q. Please provide a summary of major capital natural gas projects completed during the past five years, including a discussion of why they were needed.

A. Projects completed for our South Dakota natural gas operations include:

- Automated Meter Reading ("AMR") – This multi-year project touched all natural gas meters in South Dakota. The AMR platform established two-way communication with meters that were formerly manually read. The

ability to capture meter data on an immediate basis has provided impactful benefits to customers. These include situational awareness from meter data and reduced expenses from meter reading labor and fewer truck rolls. Customer experience will be heightened through expanded use of the AMR platform in the future.

- Milbank DOT Transmission Work – This investment was part of a South Dakota Department of Transportation ("SDDOT") project to widen four miles of State Highway 15 south of Milbank. NorthWestern had a 6" line in conflict in this section that needed to be rerouted. We obtained private right-of–way easements due to the excavation designs provided. The project included approximately five miles of 6" steel pipe installation and several farm tap removals with distribution main installed to serve the customers.
- Tea Area Expansion – NorthWestern has been working hard to bring commercial and residential natural gas service to the quickly developing areas of South Sioux Falls, Tea, and Harrisburg. As part of our long-term commitment to this area, NorthWestern obtained franchises to serve customers in the cities of Tea, Harrisburg, and Sioux Falls as well as Lincoln County. Over the last several years, NorthWestern has focused on building relationships with local and regional developers and builders doing business in the area. These partnerships are driving success as we are being invited to build our natural gas system into many new commercial and residential developments. Today this is one of the fastest

growing areas in NorthWestern's footprint. Our efforts have positioned us well to capture additional growth both in the near term and long term as this area of our state continues to expand. We anticipate customer counts to accelerate well into the future.

- Station Monitoring through SCADA – NorthWestern installed SCADA (Supervisory Control and Data Acquisition) equipment at several regulating stations throughout South Dakota to provide continuous pressure monitoring at these locations. This allows NorthWestern Energy's Gas Controllers to better monitor the system and help local resources respond to abnormal operating conditions.
- Menno – We relocated and rebuilt 7.8 miles of natural gas pipeline along US Highway 18 from Olivet to Menno. The SDDOT's road improvement project regraded the ditches, and our existing 3" steel gas line was in conflict with their construction plans.
- Altamont – NorthWestern had a farm tap serving the small community of Altamont which was converted to a city gate. We installed a pre-fabricated control house that included a Town Border Station piping design to replace the farm tap. This project enhanced system integrity to customers in the area.
- Lake Madison – NorthWestern completed a capacity project to correct a pressure issue by installing a 4" plastic main on the west side of Lake Madison to complete a loop feed.

- Revillo Town Border Station ("TBS") to Labolt TBS – The Labolt regulator station had 1" threaded pipe that was strained by frost heave. NorthWestern upgraded the Revillo TBS and installed two miles of 4" main back to Labolt. The Labolt TBS was retired.
- Territory-wide projects – NorthWestern continuously invested in new and upgraded infrastructure to ensure safe and reliable service to customers. Several regulator stations were rebuilt to address capacity and reliability. Internal standardized operational programs are in place to help us identify and replace outdated piping and equipment such as threaded services and Century gas pipe. Many odorizers (equipment utilized to add odorant to the gas) have been replaced. First cut regulators and farm tap customers, once fed from higher-pressure lines, have been converted to the distribution system, removing exposed, above-ground equipment.

Q. Please provide a summary of major capital natural gas projects completed during the test year for which a normalizing entry has been proposed as part of Witness Jeffrey B. Berzina's Exhibit JBB-1.

A. NorthWestern is normalizing three non-revenue producing projects that were placed into service during the test year. These projects include:

- Goodwin – This project converted a farm tap to a city gate near Goodwin, South Dakota. This project included the retirement of the Tunerville farm tap. NorthWestern used the same solution for this farm tap replacement

as the Altamont design, resulting in enhanced system integrity for customers.

- Brookings – The City of Brookings has a 4-year plan to replace their water and sewer pipes and widen 22nd Avenue. NorthWestern relocated 3400' of main and upgraded the pipe from 4" steel to 8" steel.
- Huron – The City of Huron completed a sewer and water main upgrade project along Dakota Avenue that required NorthWestern to relocate 8" and 6" steel main.

Q. Does this complete your pre-filed direct testimony?

A. Yes, it does.