BEFORE THE CORPORATION COMMISSION OF THE STATE OF OKLAHOMA

IN THE MATTER OF THE APPLICATION OF OKLAHOMA GAS AND ELECTRIC COMPANY FOR AN ORDER OF THE COMMISSION AUTHORIZING APPLICANT TO MODIFY ITS RATES, CHARGES, AND TARIFFS FOR RETAIL ELECTRIC SERVICE IN OKLAHOMA	)))))))	PUD 2023-000087

RESPONSIVE TESTIMONY OF BRIAN C. ANDREWS

ON BEHALF OF

THE FEDERAL EXECUTIVE AGENCIES

Ashley N. George, attorney for the Federal Executive Agencies ("FEA"), hereby submits the Responsive Testimony of Brian C. Andrews in the proceeding referenced above.

Respectfully submitted,

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BEFORE THE CORPORATION COMMISSION
OF THE STATE OF OKLAHOMA

IN THE MATTER OF THE APPLICATION OF OKLAHOMA GAS AND ELECTRIC COMPANY FOR AN ORDER OF THE COMMISSION AUTHORIZING APPLICANT TO MODIFY ITS RATES, CHARGES, AND TARIFFS FOR RETAIL ELECTRIC SERVICE IN OKLAHOMA	)	**CASE NO. PUD2023-000087**

Responsive Testimony and Exhibits of

Brian C. Andrews

for Revenue Requirement Issues

On behalf of

Federal Executive Agencies

April 26, 2024

BRUBAKER & ASSOCIATES, INC.

Project 11603

BEFORE THE CORPORATION COMMISSION
OF THE STATE OF OKLAHOMA

IN THE MATTER OF THE APPLICATION OF OKLAHOMA GAS AND ELECTRIC COMPANY FOR AN ORDER OF THE COMMISSION AUTHORIZING APPLICANT TO MODIFY ITS RATES, CHARGES, AND TARIFFS FOR RETAIL ELECTRIC SERVICE IN OKLAHOMA	)	**CASE NO. PUD2023-000087**

STATE OF MISSOURI)
) **SS**
COUNTY OF ST. LOUIS)

Affidavit of Brian C. Andrews

Brian C. Andrews, being first duly sworn, on his oath states:

1. My name is Brian C. Andrews. I am a consultant with Brubaker & Associates, Inc., having its principal place of business at 16690 Swingley Ridge Road, Suite 140, Chesterfield, Missouri 63017. We have been retained by the Federal Executive Agencies in this proceeding on their behalf.

2. Attached hereto and made a part hereof for all purposes are my responsive testimony and exhibits which were prepared in written form for introduction into evidence in the Corporation Commission of the State of Oklahoma Case No. PUD2023-000087.

3. I hereby swear and affirm that the testimony and exhibits are true and correct and that they show the matters and things that they purport to show.

Brian C. Andrews

Subscribed and sworn to before me this 26th day of April, 2024

ADRIENNE JEAN NAVARRO
Notary Public - Notary Seal
STATE OF MISSOURI
Jefferson County
My Commission Expires: Mar. 22, 2025
Commission # 21989987

Adrienne J Navarro
Notary Public

BEFORE THE CORPORATION COMMISSION
OF THE STATE OF OKLAHOMA

IN THE MATTER OF THE APPLICATION OF OKLAHOMA GAS AND ELECTRIC COMPANY FOR AN ORDER OF THE COMMISSION AUTHORIZING APPLICANT TO MODIFY ITS RATES, CHARGES, AND TARIFFS FOR RETAIL ELECTRIC SERVICE IN OKLAHOMA	)	**CASE NO. PUD2023-000087**

Table of Contents for the Responsive Testimony of Brian C. Andrews

BEFORE THE CORPORATION COMMISSION
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Responsive Testimony of Brian C. Andrews

I. INTRODUCTION AND SUMMARY

Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A Brian C. Andrews. My business address is 16690 Swingley Ridge Road, Suite 140, Chesterfield, MO 63017.

Q WHAT IS YOUR OCCUPATION?

A I am a consultant in the field of public utility regulation and a Principal with the firm of Brubaker & Associates, Inc. ("BAI"), energy, economic and regulatory consultants.

Q PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A This information is included in Appendix A to my testimony.

Q DO YOU BELONG TO ANY PROFESSIONAL SOCIETIES?

A Yes. I am a member and a former President of the Society of Depreciation Professionals ("SDP").

Q DO YOU HOLD ANY CERTIFICATIONS AS A DEPRECIATION EXPERT?

A Yes. SDP has awarded me the designation of Certified Depreciation Professional ("CDP"). This certification is based upon my education, experience, and successful completion of the CDP Exam.

Q ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?

A I am testifying on behalf of the Federal Executive Agencies ("FEA"), consisting of certain agencies of the United States government which have offices, facilities, and/or installations in the service area of Oklahoma Gas and Electric Company ("OG&E" or "Company"), from whom they purchase electricity and energy services.

Q WHAT IS THE SUBJECT MATTER OF YOUR RESPONSIVE TESTIMONY?

A My testimony will address OG&E's proposed depreciation rates and expense. I will propose adjustments to OG&E's proposed depreciation rates for its Wind Production, Transmission, and Distribution Accounts. I present FEA's proposed depreciation rates in Exhibit BCA-12. There are two main areas of differences between the FEA's proposed depreciation rates and those in OG&E's 2022 depreciation study; the estimated life span of the wind facilities and the Average Service Lives ("ASL") for the Transmission and Distribution ("T&D") Plant Accounts.

It is important to note that some of the parameters shown in my exhibits are based on OG&E's assumptions on which I have not taken a position. My silence in

regard to any of OG&E's assumptions or any issues should not be construed as an endorsement of OG&E's position. Although I do not take a position on assumptions for some accounts, Exhibit BCA-12 presents depreciation rates for all of OG&E's accounts to allow for a complete set of depreciation rates to be approved by the Corporation Commission of the State of Oklahoma ("Commission").

Q HAVE YOU PREVIOUSLY FILED TESTIMONY BEFORE THE COMMISSION REGARDING DEPRECIATION ISSUES?

A Yes. I filed testimony in OG&E's last four rate cases, Cause Nos. PUD 201500273, PUD 201700496, PUD 201800140, and PUD 202100164 regarding OG&E's depreciation rates. In addition, I have filed depreciation-related testimony in Arizona, Arkansas, California, Colorado, Florida, Illinois, Indiana, Kansas, Kentucky, Louisiana, Michigan, Minnesota, Missouri, Montana, New Mexico, Oklahoma, South Carolina, Texas, and Washington DC.

Q PLEASE SUMMARIZE YOUR CONCLUSIONS AND RECOMMENDATIONS.

A My conclusions and recommendations are summarized as follows:

1. OG&E has proposed a new set of depreciation rates which would result in a $103.5 million increase to its depreciation expense based on pro forma plant balances as of September 30, 2023.[1] This increase is based on overstated depreciation rates. These rates produce an excessive amount of depreciation expense, thus, overstating the test year revenue requirement.

2. OG&E's proposal to assume a 25-year life for its wind farms does not reflect recent industry trends. Now, 30 years is the most common expectation for the life of a wind farm and should be the basis for the depreciation rates for OG&E's wind assets.

3. The ASLs that OG&E, through its witness Mr. Dane A. Watson, is recommending for several Transmission and Distribution Accounts should be lengthened.

[1]Exhibit BCA-14.

Statistical fitting methods indicate that survivor curves with longer ASLs fit OG&E's historic retirement data better than what is being proposed by Mr. Watson.

4. I present FEA's recommended depreciation rates in Exhibit BCA-12. These rates include all adjustments I propose regarding the wind farm lifespan and the Transmission and Distribution Plant Account survivor curves. These depreciation rates should be approved by the Commission.

5. My recommended adjustments to OG&E's depreciation rates reduces OG&E's total company test year depreciation expense by $30.3 million. I provide a comparison of my proposed test year depreciation expense with OG&E's in Exhibit BCA-14.

6. The Oklahoma jurisdictional share of my proposed $30.3 million reduction is $28.0 million.

II. BOOK DEPRECIATION CONCEPTS

Q PLEASE EXPLAIN THE PURPOSE OF BOOK DEPRECIATION ACCOUNTING.

A Book depreciation is the recognition in a utility's income statement of the consumption or use of assets to provide utility service. Book depreciation is recorded as an expense and is included in the ratemaking formula to calculate the utility's overall revenue requirement.

The basic underlying principle of utility depreciation accounting is intergenerational equity, where the customers/ratepayers who benefit from the generated service of assets pay all the costs for those assets during the benefit period, which is over the life of those assets.[2] This concept of intergenerational equity can be achieved through depreciation by allocating costs to customers in a systematic and rational manner that is consistent with the period of time in which customers receive the service value.[3]

[2]Edison Electric Institute, Introduction to Depreciation for Public Utilities and Other Industries, April 2013, page viii.
[3]*Id.* at 22.

Book depreciation provides for the recovery of the original cost of the utility's assets that are currently providing service. Book depreciation expense is not intended to provide for replacement of the current assets, but provides for capital recovery or return of current investment. Generally, this capital recovery occurs over the ASL of the investment or assets. As a result, it is critical that appropriate ASLs be used to develop the depreciation rates so no generation of ratepayers is disadvantaged.

In addition to capital recovery, depreciation rates also contain a provision for net salvage. Net salvage is simply the scrap or reuse value less the removal cost of the asset being depreciated. Accordingly, a utility will also recover the net salvage costs over the useful life of the asset.

Q ARE THERE ANY DEFINITIONS OF DEPRECIATION ACCOUNTING THAT ARE UTILIZED FOR RATEMAKING PURPOSES?

A Yes. One of the most quoted definitions of depreciation accounting is the one contained in the Code of Federal Regulations:

> Depreciation, as applied to depreciable electric plant, means the loss in service value not restored by current maintenance, incurred in connection with the consumption of prospective retirement of electric 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 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 requirements of public authorities.[4]

Effectively, depreciation accounting provides for the recovery of the original cost of an asset, adjusted for net salvage, over its useful life.

[4]Electronic Code of Federal Regulations, Title 18, Chapter 1, Subchapter C, Part 101.

Q HOW ARE DEPRECIATION RATES DETERMINED?

A Depreciation rates are determined using a depreciation system. There are three components, each with a number of variations, used to determine a depreciation system, which is then used to estimate depreciation rates. The three basic components are methods, procedures, and techniques. The choice of a depreciation system can significantly affect the resulting depreciation rates.

Q PLEASE FURTHER DESCRIBE THE METHODS THAT ARE USED WITHIN A DEPRECIATION SYSTEM.

A There generally are three types of methods of spreading the depreciation expense over the life of property. These are the Straight Line Method, Accelerated Methods, and Deferred Methods. The Straight Line Method is the method most widely used by utility companies for accounting and ratemaking purposes as it is easy to apply and does not create intergenerational inequities, because it spreads an equal portion of the plant cost across each accounting period. Accelerated Methods result in higher depreciation rates earlier in an asset's life, and lower depreciation rates later. Deferred Methods have increasing rates over an asset's life.

Q PLEASE FURTHER DESCRIBE THE GROUPING PROCEDURES THAT ARE USED WITHIN A DEPRECIATION SYSTEM.

A There are three main grouping procedures used within a depreciation system. These four procedures are the Broad Group (more commonly known as the Average Life Group ("ALG")), the Vintage Group, and the Equal Life Group ("ELG").

In the ALG Procedure, all units within a particular account or category are assumed to be part of a single group that exhibits the same life and retirement characteristics. This is the most common utilized procedure.

The Vintage Group and the ELG Procedure assume that sub-groups within a particular account or category may exhibit unique life characteristics. As an example of the Vintage Group Procedure, it may assume that all poles installed in 1985 have a 50-year life, while all poles installed in year 1995 have a 45-year life. With the ELG Procedure, it may assume that all poles that are expected to have a life of 50 years should have one depreciation rate, while poles that are expected to only attain life spans of 40 years would have a different depreciation rate. The overall group depreciation rate would be a composite of the ELG depreciation rates.

Q PLEASE FURTHER DESCRIBE THE TECHNIQUES THAT ARE USED WITHIN A DEPRECIATION SYSTEM.

A There are two techniques used to calculate depreciation rates: Whole Life and Remaining Life. The Whole Life Technique spreads the original cost less net salvage of the account over the average life of the account. This technique requires that separate amortizations be made to correct for over- and under-accumulations due to changes in an account's ASL.

The Remaining Life Technique spreads the unrecovered cost less net salvage over the remaining life of the account. The Remaining Life Technique is the most common technique used and it has a self-correcting nature that spreads any over- or under-accumulations over the remaining life.

Q IN YOUR EXPERIENCE, WHAT DEPRECIATION SYSTEM IS MOST COMMONLY UTILIZED TO DETERMINE UTILITY DEPRECIATION RATES FOR RATEMAKING PURPOSES?

A The most common depreciation system is one that consists of the Straight Line Method, the ALG Procedure, and the Remaining Life Technique.

Q PLEASE DESCRIBE THE ACTUARIAL LIFE ANALYSIS THAT IS PERFORMED TO EVALUATE HISTORICAL ASSET RETIREMENT DATA.

A I will first provide the description of actuarial life analysis (retirement rate method) that is contained in the National Association of Regulatory Utility Commissioners' ("NARUC") Public Utility Depreciation Practices Manual ("NARUC Manual"):

> Actuarial analysis is the process of using statistics and probability to describe the retirement history of property. The process may be used as a basis for estimating the probable future life characteristics of a group of property.
>
> Actuarial analysis requires information in greater detail than do other life analysis models (e.g., turnover, simulation) and, as a result, may be impractical to implement for certain accounts (see Chapter VII). However, for accounts for which application of actuarial analysis is practical; **it is a powerful analytical tool and, therefore, is generally considered the preferred approach**.
>
> Actuarial analysis objectively measures how the company has retired its investment. The analyst must then judge whether this historical view depicts the future life of the property in service. The analyst takes into consideration various factors, such as changes in technology, services provided, or, capital budgets.
>
> (NARUC Manual, 1996, Page 111, Emphasis Added).

As explained by the NARUC Manual, when the required data exists, a database that contains the year of installation and the year of retirements for each vintage of property, actuarial life analysis is the preferred method of determining the life, and thus, retirement characteristics of a group of property. In this type of analysis, there are three major steps. The first step is to gather and use available aged data from the Company's

continuing plant records to create an observed life table. The observed life table provides the percent surviving for each age interval of property.

The second step is to conduct a fitting analysis to match the actual survivor data from the observed life table to a standard set of mortality or survivor curves. Typically, the observed life table data is matched to Iowa Curves. The fitting process is a mathematical fitting process, which minimizes the Sum of Squared Differences ("SSD") between the actual data and the Iowa Curves.

The third step is to select the best fitting curve while using informed judgment to determine the curve that best represents the property being studied. This includes the use of a visual matching process. Although the mathematical fitting process provides a curve that is theoretically possible, the visual matching process will allow the trained depreciation professional to use informed judgment in the determination of the best fitting survivor curve.

Q PLEASE PROVIDE FURTHER EXPLANATION OF THE SSD STATISTICAL MEASUREMENT.

A In the Actuarial Life Analysis section of the NARUC Manual, it describes SSD as follows:

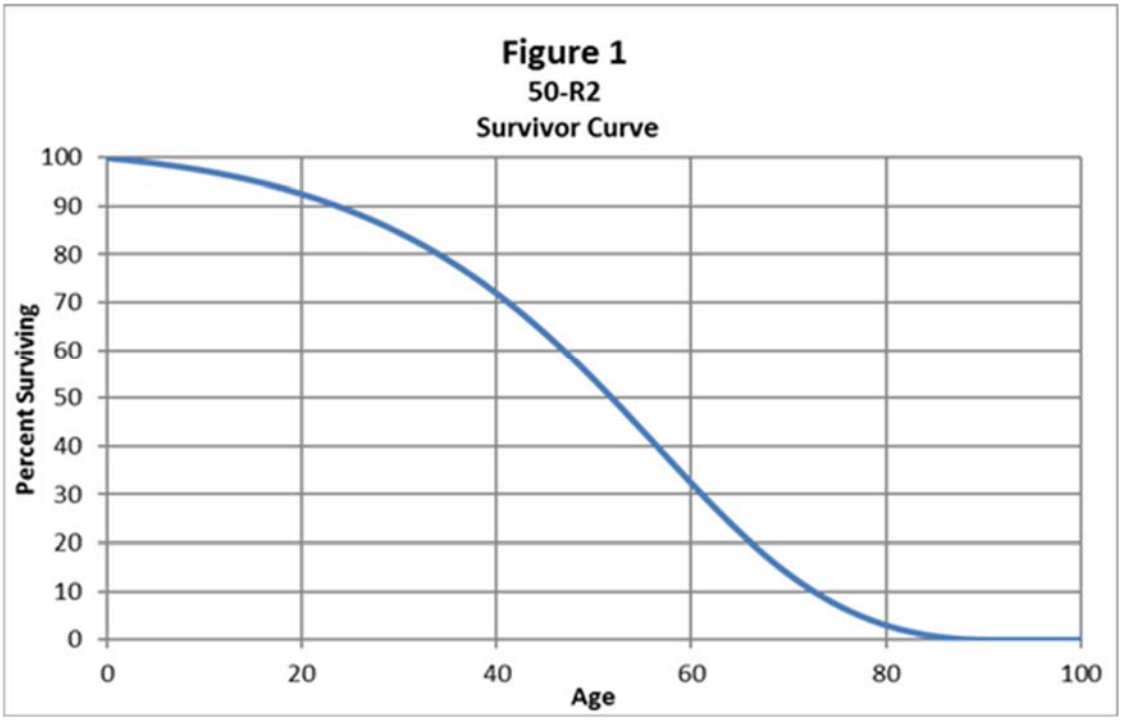
> Generally, the goodness of fit criterion is the least sum of squared deviations. The difference between the observed and projected data is calculated for each data point in the observed data. This difference is squared, and the resulting amounts are summed to provide a single statistic that represents the quality of the fit between the observed and projected curves.
>
> The difference between the observed and projected data points is squared for two reasons: (1) the importance of large differences is increased, and (2) the result is a positive number, hence the squared differences can be summed to generate a measure of the total absolute difference between the two curves. The curves with the least sum of squared deviations are considered the best fits.
>
> (NARUC Manual, 1996, Pages 124-125).

Q PLEASE EXPLAIN SURVIVOR CURVES AND THE NOTATION USED TO REFERENCE THEM.

A The selection of the survivor curve is one of the most important aspects in conducting a depreciation study. A survivor curve is a visual representation of the amount of property existing at each age interval throughout the life of a group of property. From the survivor curve, parameters required to calculate depreciation rates can be determined, such as the ASL of the group of property and the composite remaining life. For assets with an assumed lifespan or retirement date, the survivor curve is used to estimate the interim retirements that will occur between the study date and the estimated year of final retirement. These parameters directly affect the depreciation rate calculations, therefore, informed judgment should be used in their selection.

In this proceeding, as well as the majority of utility regulatory rate case proceedings throughout the U.S. and Canada, the Iowa Curves are the general survivor curves utilized to describe the mortality characteristics of a group of property. There are four types of Iowa Curves: right-moded, left-moded, symmetrical-moded, and origin-moded. Each type describes where the greatest frequency of retirements occur relative to the ASL.

A survivor curve consists of an ASL and Iowa Curve type combination. For example, when describing property with a 50-year ASL that has mortality characteristics of the R2 Iowa Curve, the survivor curve would simply be notated as “50-R2.” I present the 50-R2 survivor curve in Figure 1.



III. OG&E DEPRECIATION STUDY RESULTS

Q HAS OG&E FILED A NEW DEPRECIATION STUDY IN THIS CASE?

A Yes. OG&E filed a depreciation study as Direct Exhibit DAW-2. OG&E's witness, Mr. Dane A. Watson of Alliance Consulting Group, supports this study which was conducted on plant balances as of December 31, 2022. The resulting depreciation rates presented in Direct Exhibit DAW-2 provide the basis for OG&E's depreciation expense component of its revenue requirement.

Q WHAT DEPRECIATION SYSTEM DID OG&E UTILIZE IN THE CALCULATION OF DEPRECIATION RATES PRESENTED IN EXHIBIT DAW-2?

A OG&E used a depreciation system consisting of the Straight Line Method, the ALG Procedure, and the Remaining Life Technique[5] to calculate its proposed depreciation rates.

Q HOW DOES OG&E'S PROPOSED DEPRECIATION RATES IMPACT THE TEST YEAR DEPRECIATION EXPENSE?

A OG&E's proposed depreciation rates significantly increase its depreciation expense over that calculated using the currently approved depreciation rates. In Table 1 below, I provide the increase by group. This increase totals $103.5 million, a significant component of OG&E's proposed revenue requirement increase.

TABLE 1

Impact of OG&E's Proposed Depreciation Rates and Expense
Test Year Ending September 2023

	Depreciation Expense ($ Millions)				Depreciation Rates		
			Difference				
Depreciable Group	**Present**	**Proposed**	**Amount**	**Percent**	**Present**	**Proposed**	**Difference**
Intangible	$ 31.15	$ 59.20	$ 28.05	90.03%	8.63%	14.69%	6.06%
Production	$ 167.74	$ 192.16	$ 24.42	14.56%	3.06%	3.39%	0.33%
Transmission	$ 65.16	$ 65.46	$ 0.30	0.46%	2.07%	2.03%	-0.04%
Distribution	$ 152.29	$ 196.68	$ 44.39	29.15%	2.65%	3.15%	0.50%
General	$ 30.86	$ 41.30	$ 10.45	33.86%	6.22%	6.71%	0.49%
Transportation Activity	$ -	$ (4.08)	$ (4.08)	N/A	0.00%	-55.28%	-55.28%
Total	**$ 447.20**	**$ 550.73**	**$ 103.53**	**23.15%**	**2.94%**	**3.41%**	**0.47%**

Sources: Exhibit BCA-14 and Direct Exhibit DAW-2, Appendix B

OG&E's proposed $103.5 million increase is a 23% increase over depreciation expense based on the currently approved depreciation rates.

[5]See the Direct Testimony of Dane A. Watson, page 7, line 26.

Q HOW DOES OG&E EXPLAIN THE NEED FOR SUCH AN INCREASE?

A Mr. Watson states that the most significant factors related to the proposed increase in the production area are the terminal retirement dates, additional investment in generating units, reserve reallocation, updated net salvage estimates, and the correction of the historically under-accrued reserve position.[6] For T&D accounts, Mr. Watson states that the Company continues to experience an increase in removal cost, and a decrease in gross salvage, so the current depreciation rates no longer accurately represent the cost incurred to retire some of OG&E's assets.[7] For several T&D accounts, Mr. Watson proposes shorter ASLs and more negative net salvage rates than those currently approved.

Q PLEASE SUMMARIZE THE PROPOSED CHANGES THAT YOU ARE RECOMMENDING TO OG&E'S DEPRECIATION RATES.

A For the wind farms, I present evidence that a 30-year lifespan is a more reasonable estimate of the life of a wind farm. OG&E has assumed that the OU Spirit, Centennial, and Crossroads Wind Farms will only have a useful life of 25 years. These assumptions are not supported by recent industry trends. A 30-year life would be more reasonable for these facilities.

The Transmission and Distribution book depreciation rates should be reduced for the majority of the accounts. The reduction to the depreciation rates for the T&D accounts is necessary because these accounts exhibit ASLs greater than those being proposed by OG&E. The depreciation rates proposed by OG&E would depreciate the assets in these accounts too quickly, which is a burden on current customers.

[6]Exhibit DAW-2, page 2.
[7]See the Direct Testimony of Dane A. Watson, page 16, lines 4-6 and page 17, lines 18-20.

IV. FEA PROPOSED ADJUSTMENTS

Q PLEASE ELABORATE ON YOUR CONCERN WITH THE ASL ASSUMPTIONS FOR THE WIND FARMS USED IN THE DEPRECIATION STUDY.

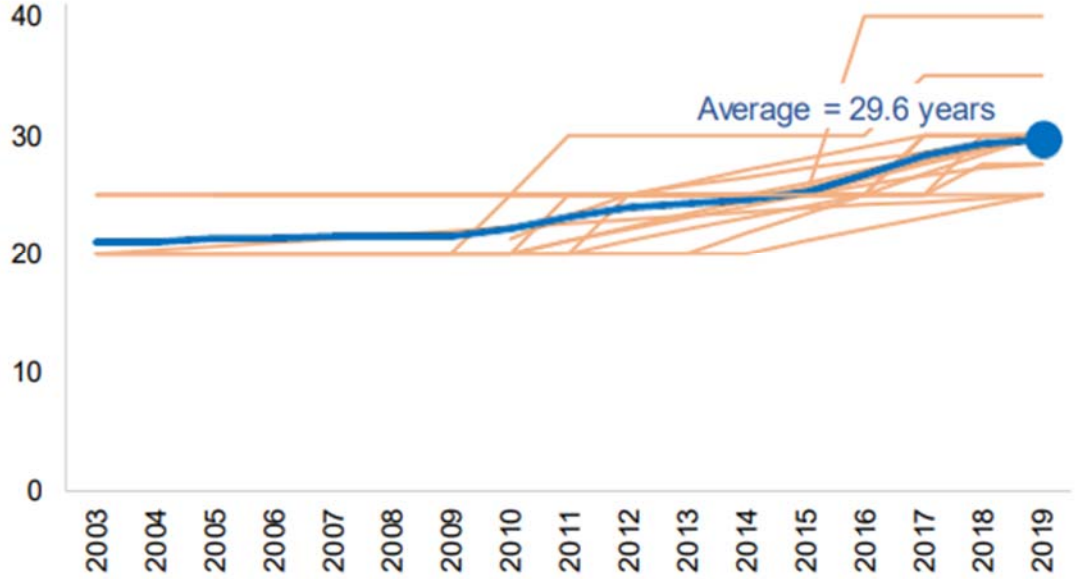
A OG&E has assumed that the OU Spirit, Centennial, and Crossroads Wind Farms will only have a useful life of 25 years. These assumptions are not supported by recent industry trends. These assumed life spans burden OG&E's customers with excessive depreciation expense.

Q WHAT DO YOU BELIEVE TO BE A MORE REASONABLE ASSUMPTION FOR THE LIVES OF OG&E'S WIND FARMS?

A A 30-year life would be more reasonable for these facilities. Recent industry trends indicate that 30 years is a more likely life than 25 years. In Exhibit BCA-1, I provide a survey conducted by Berkeley Lab that demonstrates that 25 years may have been reasonable in the past, but now 30 years is the most common expectation of the useful life of a wind farm. In this survey, Berkeley Lab sent surveys to the U.S. Wind project developers, sponsors, financiers, and consultants in order to understand how expectations of useful life have changed over time. The report concludes that most wind project developers, sponsors, and long-term owners have increased project life assumptions over time, from a typical life of approximately 20 years in the early 2000s, to 25 years by the mid-2010s, and then to 30 years more recently.[8] Figure 2 presents the results of the survey. Of the 20 respondents to the survey, 12 assume 30 years to be the expected useful life of wind farms.

[8]See Exhibit BCA-1 at page 1.

Figure 2. Useful-Life Expectations for Wind, over Time



Q ARE YOU AWARE OF OTHER INFORMATION THAT WOULD SUPPORT A 30-YEAR LIFE FOR WIND FARMS?

A Yes. In three recent Integrated Resource Plan ("IRP") cases that either I, or members of my firm have been involved in, 30 years is the assumed book life for new wind assets. These proceedings are the Minnesota Power 2021 IRP,[9] the Consumers Energy 2021 IRP,[10] and the Public Service Company of New Mexico 2020-2040 IRP.[11] Furthermore, even OG&E assumes a 30-year life in its IRPs.[12]

[9]Minnesota PUC Docket No. E015/RP-21-33.
[10]Michigan PSC Docket No. U-20190.
[11]New Mexico PRC Case No. 21-00033-UT.
[12]See OG&E's Response to PUD 06-08.

Q IS A 30-YEAR LIFE A MORE REASONABLE EXPECTED USEFUL LIFE FOR THE WIND FARMS THAN 25 YEARS?

A Yes. I recommend that the depreciation rates for the wind farms be calculated assuming a 30-year life. 30 years is the new industry average and will result in a more reasonable depreciation expense for OG&E's customers. Finally, the current depreciation rates for OG&E's wind farms assume either a 29- or 30-year life.[13] Given that current trends and OG&E's approved depreciation rates would support a 30-year life, all of OG&E's wind farms should have an assumed lifespan of 30 years.

Q PLEASE PROVIDE ADDITIONAL DETAIL ON THE PROCESS USED FOR THE LIFE ANALYSIS YOU CONDUCTED ON TRANSMISSION AND DISTRIBUTION PLANT ACCOUNTS.

A The first step in my analysis was a thorough review of the OG&E depreciation study and of Mr. Watson's workpapers. I conducted my own actuarial analysis based on the observed life tables created by Mr. Watson for his actuarial analysis. I utilized an Excel-based model to determine the Iowa Curve and ASL combination that best fits the significant points of the observed life table created by Mr. Watson. I then used a statistical and visual analysis to select Iowa Curves and ASLs that resulted in a better statistical fit (lower SSD) than the survivor curves being recommended by Mr. Watson. Again, the SSD is the sum of the squared differences between the Iowa Curves and the significant data points from the observed life tables, see Exhibits BCA-2 through BCA-11.

In each of the exhibits, Exhibits BCA-2 through BCA-11, I provide a table and a graph. The table contains the results of the fitting analysis. This table shows for each

[13] See OG&E's Response to PUD 06-07.

Iowa Curve type, the ASL that minimizes the SSD. In addition, the table contains the SSD of the OG&E and FEA proposals, as well as the currently approved curve. For each account to which an adjustment is proposed, the FEA proposal has a lower SSD, which indicates a better statistical fit than both OG&E's proposal and the currently approved curve. The graph that shows the actual OG&E retirement data (blue triangles), the OG&E proposed curve (green long-dashed line), the FEA proposed curve (purple dotted line), the best fit curve (orange short-dash-dotted line), and the currently approved curve (red short-dashed line). The best fit curve shown on the graph is the curve determined by the statistical fitting analysis to have the lowest SSD.

Q DO THE SURVIVOR CURVES THAT YOU ARE RECOMMENDING PRODUCE A BETTER FIT TO OG&E'S DATA THAN THOSE BEING RECOMMENDED BY MR. WATSON?

A Yes. For each of the 10 accounts where I am proposing a survivor curve that differs from Mr. Watson's recommendation, the SSD is lower. That is, all of my recommendations result in survivor curves that mathematically and statistically fit OG&E's data better than those recommended by Mr. Watson. The SSDs of my recommendations compared to the recommendations of Mr. Watson are shown in Table 2. For each account, the SSD of the FEA proposal is lower than the OG&E proposal.

TABLE 2

Goodness of Fit Statistics

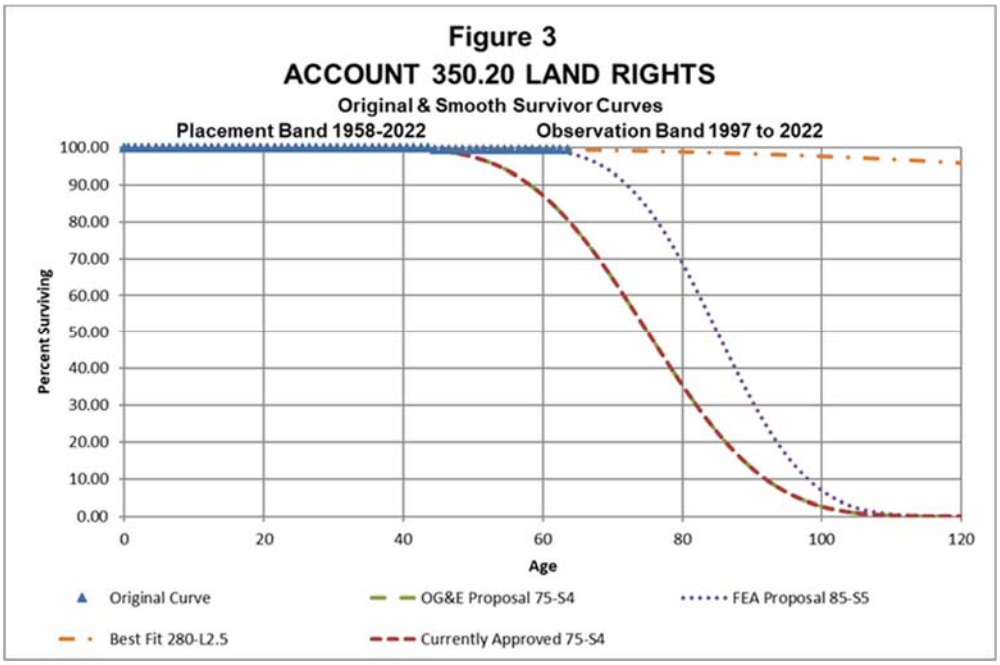
Account	OG&E Curve	OG&E SSD	FEA Curve	FEA SSD	Delta Life	Delta SSD	% Change SSD
350.2	75-S4	1,529	85-S5	3	10	(1,526)	-99.8%
352	70-S3	5,930	75-S3	2,786	5	(3,144)	-53.0%
353	57-R1.5	95	58-R1.5	80	1	(15)	-15.6%
355	75-R1	219	77-R1	176	2	(42)	-19.4%
360.2	75-S4	1,395	85-R5	33	10	(1,362)	-97.6%
362	61-R2	414	64-R1.5	99	3	(315)	-76.1%
364	55-R1	257	60-R1	29	5	(229)	-88.9%
365	60-R0.5	2,637	64-R0.5	1,342	4	(1,295)	-49.1%
367	55-R2.5	397	60-R2.5	281	5	(116)	-29.1%
368	40-R0.5	2,506	48-O1	656	8	(1,851)	-73.8%

Source: Exhibit BCA-2 through Exhibit BCA-11

Q PLEASE DISCUSS YOUR SERVICE LIFE ADJUSTMENT FOR ACCOUNT 350.2.

A The life analysis for this account is presented in Exhibit BCA-2. Account 350.2 is for Land Rights. Per the Federal Energy Regulatory Commission's ("FERC") Uniform System of Accounts, "This account shall include the cost of land and land rights used in connection with transmission operations."

I recommend moving to the 85-S5 curve. This curve produces a much better fit for the data, with an SSD of only 3. The currently approved curve and OG&E's proposal of the 75-S4, which has an SSD of 1,529, diverges from the significant data points near 50 years. The 85-S5 significantly decreases the SSD, resulting in a nearly perfect fit, while maintaining a similar maximum life to OG&E's proposal. Figure 3 is a scaled down version of the full size graph contained in Exhibit BCA-2. As can be seen, the 85-S5 is a much better fit.

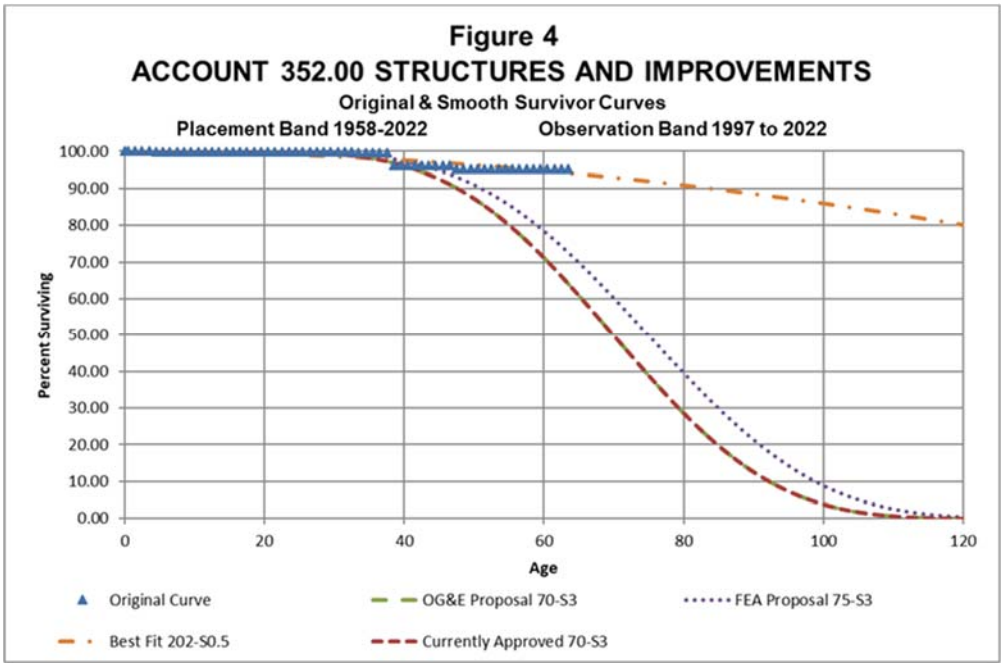


Q PLEASE DISCUSS YOUR SERVICE LIFE ADJUSTMENT FOR ACCOUNT 352.

A The life analysis for this account is presented in Exhibit BCA-3. This account is for Transmission Structures and Improvements. Per the FERC Uniform System of Accounts, "This account shall include the cost in place of structures and improvements used in connection with transmission operations." This includes the cost of all buildings and facilities to house, support, or safeguard property or persons, including all fixtures permanently attached to and made a part of buildings, and improvements of a permanent character on or to land, in connection with transmission operations.

The currently approved curve of 70-S3 no longer produces an acceptable fit. The best fitting curve is 202-S0.5, which would have an SSD of 51. OG&E's proposal to retain the 70-S3 is not reflective of the retirement history or a good match of the data. The 70-S3 has an SSD of 5,930. OG&E's data continues to support a much longer life for this account. I recommend moving to the 75-S3, which is a better fit for the data and would have an SSD of 2,786, roughly half of the SSD of OG&E's proposed curve.

Figure 4 is a scaled down version of the full size graph contained in Exhibit BCA-3. As can be seen, the 75-S3 is a better fit to the data, and a modest increase to the ASL.

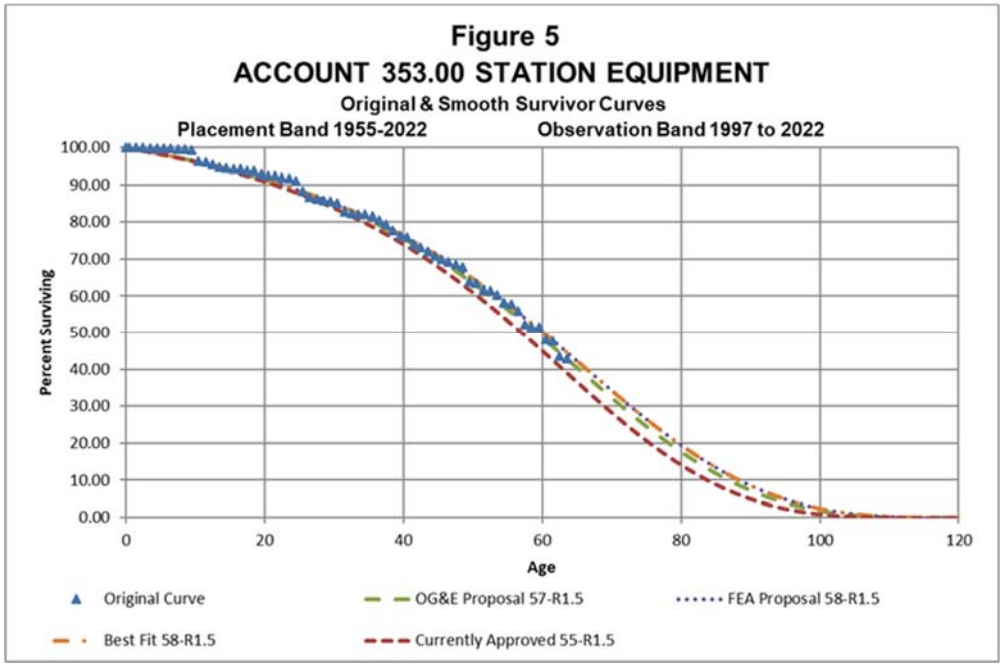


Q PLEASE DISCUSS YOUR SERVICE LIFE ADJUSTMENT FOR ACCOUNT 353.

A The life analysis for this account is presented in Exhibit BCA-4. This account is for Transmission Station Equipment. Per the FERC Uniform System of Accounts, "This account shall include the cost installed of transforming, conversion, and switching equipment used for the purpose of changing the characteristics of electricity in connection with its transmission or for controlling transmission circuits." This includes much of the equipment located within the fence at a transmission substation, including busses, conduits, control equipment, transformers, switching equipment, insulators, general station equipment, etc.

The currently approved curve of 55-R1.5 no longer produces an acceptable fit to the data, deviating from in the early 30's age intervals. The best fit curve is 58-R1.5 with an SSD of 80. OG&E's proposal is for the 57-R1.5 with an SSD of 95. OG&E's

proposal to move very close to the best fit curve is reasonable; however, I see no justification to not use the best fit curve for this account. I recommend the 58-R1.5 survivor curve for this account. Figure 5 is a scaled down version of the full size graph contained in Exhibit BCA-4. As can be seen, the 58-R1.5 is a better fit to the data, and a modest increase to the ASL.

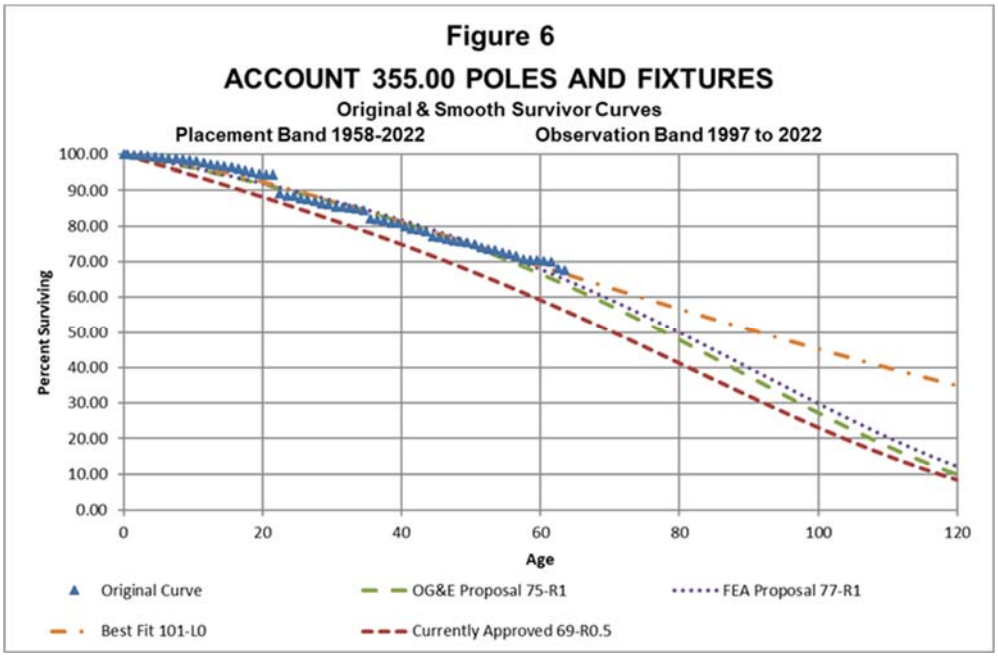


Q PLEASE DISCUSS YOUR SERVICE LIFE ADJUSTMENT FOR ACCOUNT 355.

A The life analysis for this account is presented in Exhibit BCA-5. This account is for Transmission Poles and Fixtures. Per the FERC Uniform System of Accounts, "This account shall include the cost installed of transmission line poles, wood, steel, concrete, or other material, together with appurtenant fixtures used for supporting overhead transmission conductors." This includes the poles, brackets, cross arms, foundations, pole steps, anchors, etc. required to create a pole structure capable of supporting overhead transmission lines.

The currently approved curve is 69-R0.5, which is no longer a good fit to the data as the SSD is 2,414. OG&E's proposal, the 75-R1, has a much smaller SSD of 219 than the currently approved curve. The best fitting curve is the 101-L0. I propose increasing the life to 77-R1. The 77-R1 has an SSD of 176, producing a much better fit to the data compared to the currently approved and OG&E's proposed curves. Figure 6 is a scaled down version of the full size graph contained in Exhibit BCA-5. As can be seen, the 77-R1 is a better fit to the data and a modest increase to the ASL.

Figure 6
ACCOUNT 355.00 POLES AND FIXTURES
Original & Smooth Survivor Curves
Placement Band 1958-2022 Observation Band 1997 to 2022

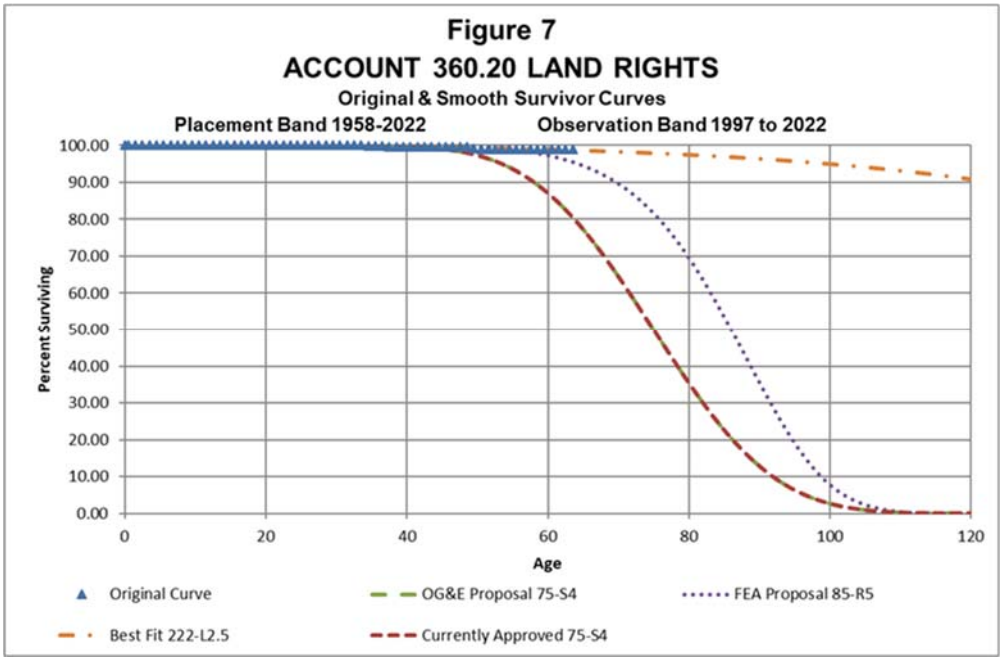


Q PLEASE DISCUSS YOUR SERVICE LIFE ADJUSTMENT FOR ACCOUNT 360.2.

A The life analysis for this account is presented in Exhibit BCA-6. This account is for Distribution Land Rights. Per the FERC Uniform System of Accounts, "This account shall include the cost of land and land rights used in connection with distribution operations."

I recommend moving to the 85-R5 curve. This curve produces a much better fit for the data relative to the 75-S4, which is both the currently approved curve and

OG&E's proposal. The 85-R5 significantly decreases the SSD from 1,395 to 33, while maintaining a similar maximum life to OG&E's proposal. Figure 7 below is a scaled down version of the full size graph contained in Exhibit BCA-6. As can be seen, the 85-R5 is a better fit to the data.

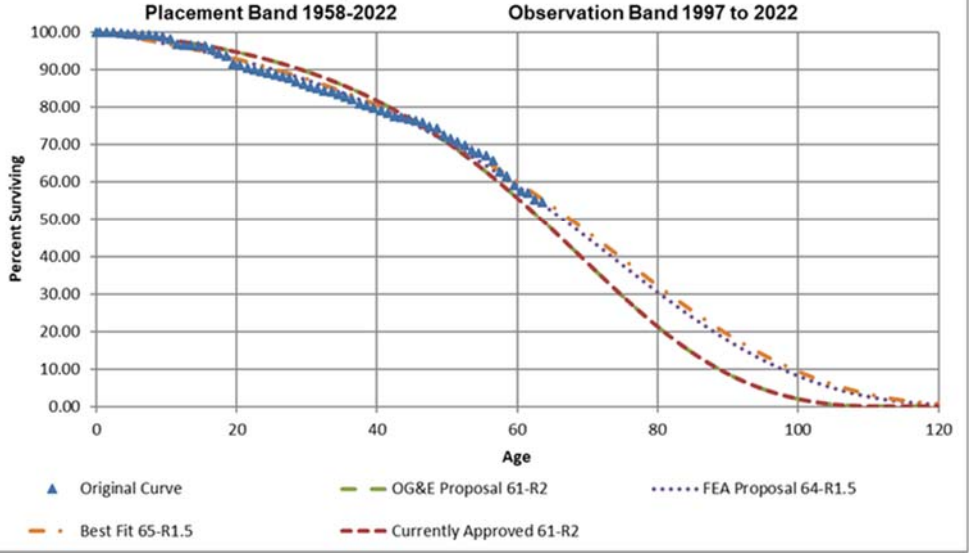


Q PLEASE DISCUSS YOUR SERVICE LIFE ADJUSTMENT FOR ACCOUNT 362.

A The life analysis for this account is presented in Exhibit BCA-7. This account is for Distribution Station Equipment. Per the FERC Uniform System of Accounts, "This account shall include the cost installed of station equipment, including transformer banks, etc., which are used for the purpose of changing the characteristics of electricity in connection with its distribution." This includes much of the equipment located within the fence at a distribution substation, including busses, conduits, control equipment, transformers, switching equipment, insulators, general station equipment, platforms, foundations, etc.

The currently approved curve is 61-R2, and the best fit curve is the 65-R1.5. OG&E proposed no change from the 61-R2. I recommend moving to a flatter dispersion and increasing the ASL to 64 years, which is very near the best fit curve. The 64-R1.5 is more appropriate for this account, as indicated by the lower SSD of 99 versus 414 for the 61-R2. Figure 8 is a scaled down version of the full size graph contained in Exhibit BCA-7. As can be seen, the 64-R1.5 is a better fit to the data.

Figure 8
ACCOUNT 362.00 STATION EQUIPMENT
Original & Smooth Survivor Curves
Placement Band 1958-2022 Observation Band 1997 to 2022

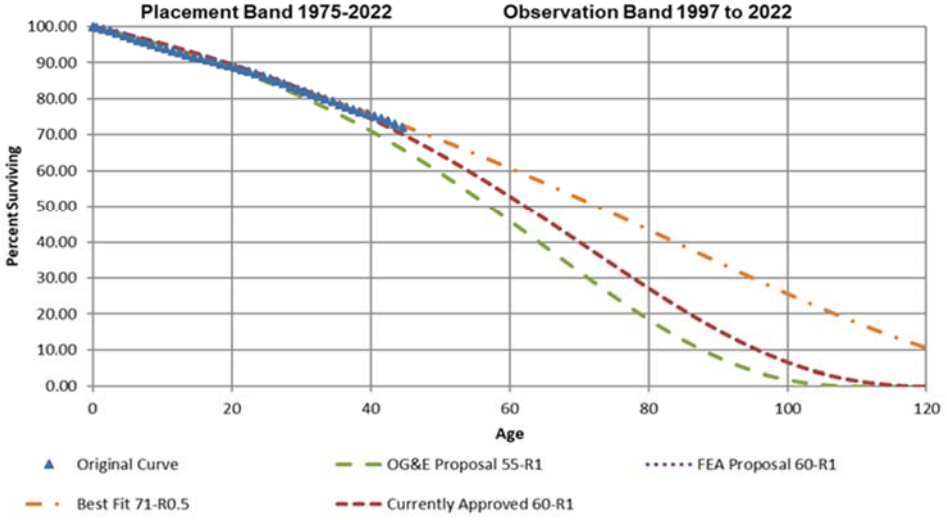


Q PLEASE DISCUSS YOUR SERVICE LIFE ADJUSTMENT FOR ACCOUNT 364.

A The life analysis for this account is presented in Exhibit BCA-8. This account is for Distribution Poles, Towers, and Fixtures. Per the FERC Uniform System of Accounts, "This account shall include the cost installed of poles, towers, and appurtenant fixtures used for supporting overhead distribution conductors and service wires." This includes the poles, towers, brackets, cross arms, foundations, pole steps, ladders, anchors, etc. required to create a pole or tower structure capable of supporting overhead distribution lines.

The currently approved curve is 60-R1. OG&E recommends a decrease to 55-R1. The best fit is the 71-R0.5. The fitting analysis shows that the ASL that best fits the R1 dispersion is 60 or 61 years. The data also supports a flatter dispersion. I recommend maintaining the currently approved 60-R1, which better matches the data than OG&E's proposed survivor curve. The 60-R1 curve has a SSD of 29 versus a SSD of 257 for OG&E's proposed survivor curve 55-R1. Figure 9 is a scaled down version of the full size graph contained in Exhibit BCA-8. As can be seen, the 60-R1 is a better fit to the data.

Figure 9
ACCOUNT 364.00 POLES, TOWERS, AND FIXTURES
Original & Smooth Survivor Curves
Placement Band 1975-2022 Observation Band 1997 to 2022



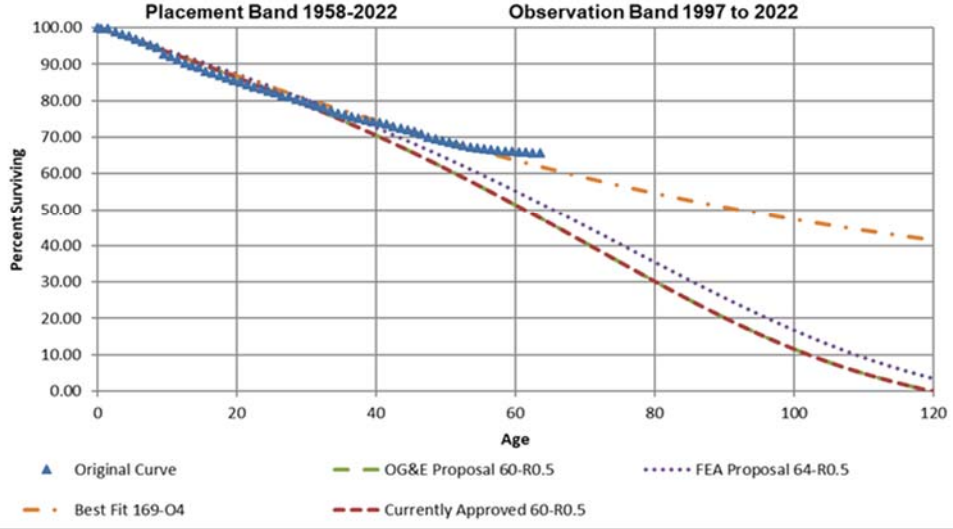
Q PLEASE DISCUSS YOUR SERVICE LIFE ADJUSTMENT FOR ACCOUNT 365.

A The life analysis for this account is presented in Exhibit BCA-9. This account is for Distribution Overhead Conductors and Devices. Per the FERC Uniform System of Accounts, "This account shall include the cost installed of overhead conductors and devices used for distribution purposes." The items contained within this account include circuit breakers, conductors, ground wires, insulators, lightning arresters,

railroad and highway crossing guards, switches, the initial cost of tree trimming including permits, and other line devices.

The currently approved curve is the 60-R0.5 with an SSD of 2,637. OG&E proposes to keep the 60-R0.5. The fitting analysis shows that the R0.5 is the best fitting dispersion of the R-type curves and that the 72-R0.5 is the best fit for the R0.5 dispersion. The R0.5 continues to be a good fit for this account. I recommend increasing the ASL to 64 years to the 64-R0.5, which fits the data better than the 60-R0.5 and has an SSD of 1,342. Figure 10 is a scaled down version of the full size graph contained in Exhibit BCA-9. As can be seen, the 64-R0.5 is a better fit to the data.

Figure 10
ACCOUNT 365.00 OVERHEAD CONDUCTOR AND DEVICES
Original & Smooth Survivor Curves
Placement Band 1958-2022 Observation Band 1997 to 2022



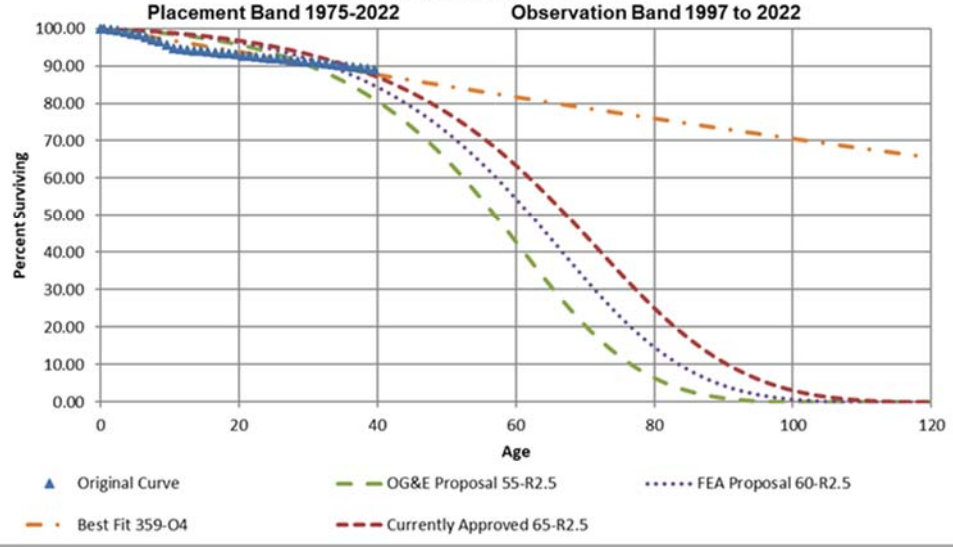
Q PLEASE DISCUSS YOUR SERVICE LIFE ADJUSTMENT FOR ACCOUNT 367.

A The life analysis for this account is presented in Exhibit BCA-10. This account is for Distribution Underground Conductors and Devices. Per the FERC Uniform System of Accounts, "This account shall include the cost installed of underground conductors and devices used for distribution purposes." The items contained within this account

include, circuit breakers, armored conductors, insulators, insulating materials, splicing, fireproofing, inspections, permits, cable racking, lightning arresters, switches, and other line devices.

The currently approved curve is the 65-R2.5. OG&E proposes to decrease the ASL by ten years to the 55-R2.5, however, the SSD for the 65-R2.5 is 311 and the SSD for the 55-R2.5 is 397. The best fit curve is the 359-O4. I believe that decreasing the life by 10 years is not necessary, nor is it supported by the data. I recommend the 60-R2.5 with a SSD of 281 as the midpoint between the currently approved curve and OG&E's proposed curve. Figure 11 is a scaled down version of the full size graph contained in Exhibit BCA-10. As can be seen, the 60-R2.5 is a better fit to the data.

Figure 11
ACCOUNT 367.00 UNDERGROUND CONDUCTORS AND DEVICES
Original & Smooth Survivor Curves
Placement Band 1975-2022 Observation Band 1997 to 2022



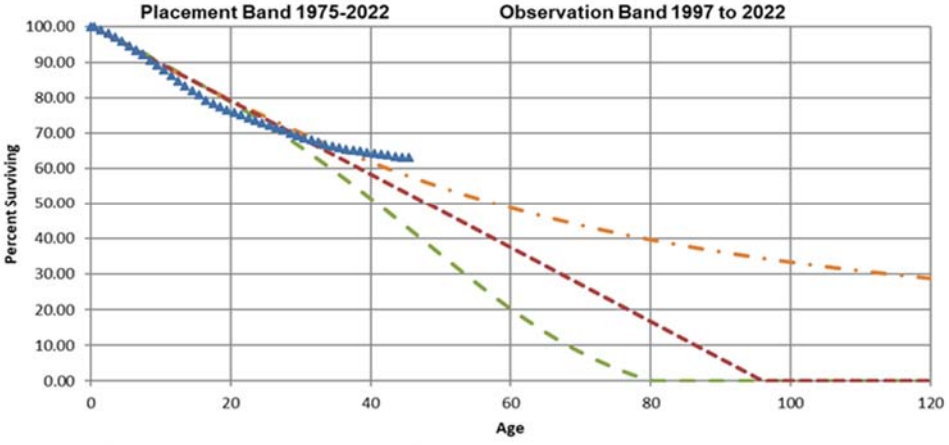
Q PLEASE DISCUSS YOUR SERVICE LIFE ADJUSTMENT FOR ACCOUNT 368.

A The life analysis for this account is presented in Exhibit BCA-11. This account is for Distribution Line Transformers. Per the FERC Uniform System of Accounts, "This account shall include the cost installed of overhead and underground distribution line

transformers and pole type and underground voltage regulators owned by the utility, for use in transforming electricity to the voltage at which it is to be used by the customer, whether actually in service or held in reserve." This includes labor of first installation, transformer cut-out boxes, transformer lightning arresters, transformers, lines and networks, capacitors, network protectors, etc.

The currently approved curve is the 48-O1, which has an SSD of 656. OG&E proposes the 40-R0.5, which has an SSD of 2,506. The fitting analysis shows that the O1 curve is a better fit to the data than the R0.5. It also indicates that a life longer than 40 years is the best fit for all curve types. I recommend maintaining the currently approved life, which is well supported by the data. Figure 12 is a scaled down version of the full size graph contained in Exhibit BCA-11. As can be seen, the 48-O1 is a better fit to the data.

Figure 12
ACCOUNT 368.00 LINE TRANSFORMERS
Original & Smooth Survivor Curves
Placement Band 1975-2022 Observation Band 1997 to 2022



V. FEA PROPOSED DEPRECIATION RATES

Q HAVE YOU CALCULATED THE DEPRECIATION RATES CONSISTENT WITH YOUR RECOMMENDATIONS TO USE A 30-YEAR LIFE FOR THE WIND FARMS AND THE TEN SERVICE LIFE ADJUSTMENTS PROPOSED FOR VARIOUS TRANSMISSION AND DISTRIBUTION ACCOUNTS?

A Yes. FEA's proposed depreciation rates are provided in Exhibit BCA-12. I have also included a comparison exhibit in Exhibit BCA-13, which provides a comparison of FEA's and OG&E's depreciation rates and depreciation expense when using the same plant balances that Mr. Watson used for OG&E's depreciation study. Table 3 below summarized the depreciation rates by group.

TABLE 3

Impact of FEA's Proposed Depreciation Rates

Depreciable Group	OG&E	FEA	Difference
Intangible	11.49%	11.49%	0.00%
Steam Production	3.05%	3.05%	0.00%
Other Production	3.93%	3.44%	-0.49%
Transmission	2.03%	1.99%	-0.04%
Distribution	3.17%	2.88%	-0.29%
General	6.40%	6.40%	0.00%
Total	**3.32%**	**3.14%**	**-0.19%**

Source: Exhibit BCA-13

Q WHAT IS THE IMPACT ON THE TEST YEAR DEPRECIATION EXPENSE DUE TO FEA'S RECOMMENDED DEPRECIATION RATES?

A In Exhibit BCA-14, I provide the test year impact of FEA's proposed depreciation rates. FEA's depreciation rates would reduce the total company test year depreciation

expense by $30.3 million. FEA's proposed depreciation rates will provide OG&E an additional $73.2 million more than the depreciation expense currently included in tariff rates. I estimate that the Oklahoma jurisdictional share of this adjustment is $28.0 million. See Table 4 below for the summary by functional group.

TABLE 4

Impact of FEA's Proposed Depreciation Rates on Test Year Expense
($ Millions)

Depreciable Group	OG&E Proposed	FEA Proposed	Difference Amount	Difference Percent
Intangible	$ 59.20	$ 59.20	$ -	0.00%
Production	$ 192.16	$ 181.13	$ (11.03)	-5.74%
Transmission	$ 65.46	$ 64.09	$ (1.37)	-2.10%
Distribution	$ 196.68	$ 178.77	$ (17.91)	-9.11%
General	$ 41.30	$ 41.30	$ -	0.00%
Transportation Activity	$ (4.08)	$ (4.08)	$ -	0.00%
Total	**$ 550.73**	**$ 520.42**	**$ (30.31)**	**-5.50%**

Source: Exhibit BCA-14

Q DOES THIS CONCLUDE YOU RESPONSIVE TESTIMONY?

A Yes, it does

Qualifications of Brian C. Andrews

Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A Brian C. Andrews. My business address is 16690 Swingley Ridge Road, Suite 140, Chesterfield, MO 63017.

Q PLEASE STATE YOUR OCCUPATION.

A I am a consultant in the field of public utility regulation and a Principal with the firm of Brubaker & Associates, Inc. ("BAI"), energy, economic and regulatory consultants.

Q PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL EMPLOYMENT EXPERIENCE.

A I received a Bachelor of Science Degree in Electrical Engineering from the Washington University in St. Louis/University of Missouri - St. Louis Joint Engineering Program. I have also received a Master of Science Degree in Applied Economics from Georgia Southern University.

I have attended training seminars on multiple topics including class cost of service, depreciation, power risk analysis, production cost modeling, cost-estimation for transmission projects, transmission line routing, MISO load serving entity fundamentals and more.

I am a member and a former President of the Society of Depreciation Professionals. I have been awarded the designation of Certified Depreciation Professional ("CDP") by the Society of Depreciation Professionals. I am also a certified Engineer Intern in the State of Missouri.

As an Associate at BAI, and as a Senior Consultant, Consultant, Associate Consultant and Assistant Engineer before that, I have been involved with several regulated and competitive electric service issues. These have included book depreciation, fuel and purchased power cost, transmission planning, transmission line routing, resource planning including renewable portfolio standards compliance, electric price forecasting, class cost of service, power procurement, and rate design. This has involved use of power flow, production cost, cost of service, and various other analyses and models to address these issues, utilizing, but not limited to, various programs such as Strategist, RealTime, PSS/E, MatLab, R Studio, ArcGIS, Excel, and the United States Department of Energy/Bonneville Power Administration's Corona and Field Effects ("CAFÉ") Program. In addition, I have received extensive training on the PLEXOS Integrated Energy Model and the EnCompass Power Planning Software. I have provided testimony on many of these issues before the Public Service Commissions in Arizona, Arkansas, California, Colorado, Florida, Illinois, Indiana, Kansas, Kentucky, Louisiana, Michigan, Minnesota, Missouri, Montana, New Mexico, Oklahoma, South Carolina, Texas, and Washington DC.

BAI was formed in April 1995. BAI provides consulting services in the economic, technical, accounting, and financial aspects of public utility rates and in the acquisition of utility and energy services through RFPs and negotiations, in both regulated and unregulated markets. Our clients include large industrial and institutional customers, some utilities and, on occasion, state regulatory agencies. We also prepare special studies and reports, forecasts, surveys and siting studies, and present seminars on utility-related issues.

In general, we are engaged in energy and regulatory consulting, economic analysis and contract negotiation. In addition to our main office in St. Louis, the firm

also has branch offices in Corpus Christi, Texas; Louisville, Kentucky and Phoenix, Arizona.

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September 2019

Benchmarking Anticipated Wind Project Lifetimes:

Results from a Survey of U.S. Wind Industry Professionals

Ryan Wiser and Mark Bolinger, Lawrence Berkeley National Laboratory

This paper draws on a survey of wind industry professionals to clarify trends in the expected useful life of land-based wind power plants in the United States. The expected useful life of a project affects expectations about its profitability, the timing of possible decommissioning or repowering, and its levelized costs.

We find that most wind project developers, sponsors and long-term owners have increased project-life assumptions over time, from a typical term of ~20 years in the early 2000s to ~25 years by the mid-2010s and ~30 years more recently. Current assumptions range from 25 to 40 years, with an average of 29.6 years.

The estimated average levelized cost of energy (LCOE) for new wind projects built in 2018 is $40.4/MWh (real 2018$), assuming a 20-year project life. With a 25-year useful life and no change in assumed operations and maintenance (O&M) expenditures or wind plant performance over time, LCOE declines by 10%, to $36.2/MWh, because capital costs are recovered over five additional years of production. At the now-common 30-year assumed life, levelized costs decrease another 7%, to $33.5/MWh (under the same unaltered assumptions about O&M and performance). Even longer assumed lifetimes lead to further (but diminishing) LCOE reductions—e.g., to $31.7/MWh and $30.3/MWh for 35- and 40-year lives, respectively.

The data and trends presented here may inform assumptions used by electric system planners, modelers and analysts. The results may also provide useful benchmarks to the wind industry, helping developers and assets owners to compare their expectations with those of their peers.

Methods

The findings in this paper largely draw from a brief survey of U.S. wind project developers, sponsors, financiers, and consultants. We distributed the survey to staff at 23 different organizations in August 2019. Responses were received from 21 staff at 18 of these organizations, for an overall (organizational) response rate of 78%. Additionally, we conducted a review of the annual financial reports from some of the large, publicly traded wind project developers and owners, yielding three additional sets of project-life assumptions.[1] Ultimately, we assembled 20 different time-series estimates of useful project life.[2]

Our interest was in better understanding how expectations for useful life have changed over time, as the industry has grown and matured. We focus on 'useful' life, defined here to mean the period of time in which the expected costs and revenues of a project are assessed to determine its economic viability. Typically, an asset with a useful life of, for example, 30 years is expected to earn ongoing operating profits during those 30 years (ongoing revenue > ongoing costs). At the end of year 30, however, either decommissioning or full

[1] In some cases, project-life assumptions that derive from financial reports reflect depreciation- or accounting-based lives, which may in theory differ from useful-life assumptions used by developers and sponsors. However, a review of our results indicates no such bias in the estimates reported later in this paper, as the distribution of responses is similar in both sources of data.
[2] These estimates, and other survey responses that we report later, come from staff and annual reports from: NextEra, RES, EDPR, Apex, Enel, Avangrid, EDF, Pattern, Scout, Leeward, MAP, Vestas, AEP, Berkshire Hathaway, JP Morgan, Wells Fargo, Clear Wind, Wood Mackenzie, and DNV GL.

project repowering would be expected. A longer assumed project life may enhance the expected long-term profitability of a project, assuming any resulting increase in O&M is kept within reasonable bounds. Moreover, longer depreciation terms reduce annual book depreciation from an accounting perspective, thereby boosting net income in the near term. From a planning and modeling perspective, meanwhile, longer lifetimes may enable lower LCOE by recovering up-front capital costs (and, potentially, any component replacement or refurbishment costs) over additional years of electricity production.

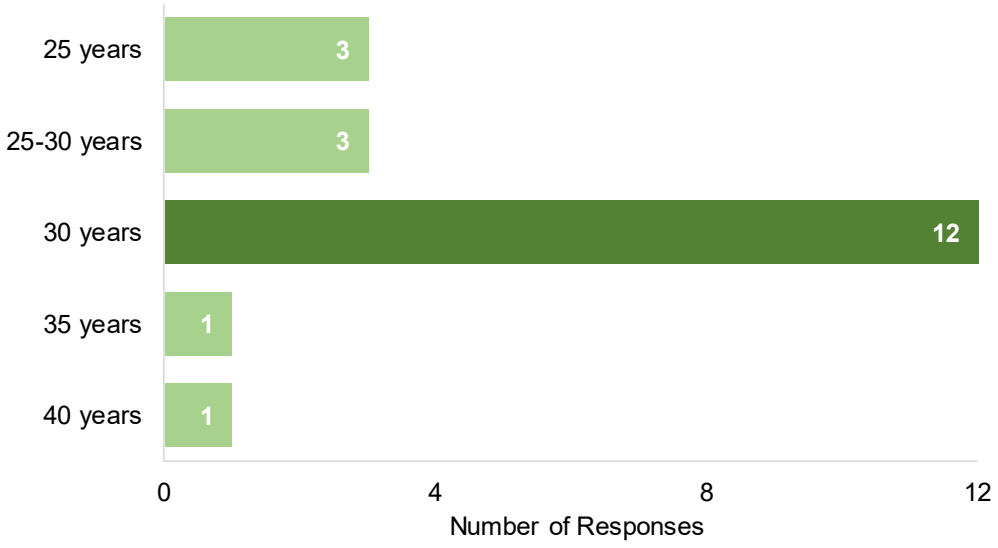
We focused on expectations from project developers, sponsors, and long-term owners because these are the entities most likely to be thinking about the full lifecycle of a project. However, we recognize that each participant in a wind project may have different perspective on what 'project life' means, or how it matters. A lender, for example, will primarily care about the revenue and costs of a project over the term of the loan: often 15 years or less. Tax equity providers may focus on the first 10-12 years, during which their returns are earned. Engineers might think of the certified life of the turbines (20 years historically, but now 25, 30 or even 40 years in some cases), or the engineering design life of the project. Providers of operations and maintenance services might consider the lifetime of any O&M contracts.

We specifically sought insights into assumptions that project developers, sponsors and long-term owners most-commonly use for project life, when considering the lifetime profitability of a project, pitching projects to financiers, and establishing power purchase agreements (PPAs) during the development and financing process. We also included major consultancies in our sample, including those that provide due diligence services to the wind industry. We asked about current assumptions, and how those assumptions have changed over time. Some respondents offered additional insights, which we share as appropriate.

Estimated Project Lifetimes

Project developers, sponsors, and long-term owners now most-commonly assume 30-year useful project lives, as depicted in Figure 1.

Figure 1. Current Useful-Life Expectations for Wind Plants



Specifically, twelve sources cited 30 years, three cited 25-30 years (averaged to 27.5 years in Figure 2), three cited 25 years, one cited 35 years, and another cited 40 years.[3] None of the respondents uses a 20-year project life assumption; several respondents also noted that they are not aware of others in the wind industry still using a 20-year assumption.

Expectations for the useful life of wind projects vary by respondent, but have consistently increased over time—from a typical value of ~20 years in the early 2000s and prior, to ~25 years by the mid-2010s, and then to ~30 years most recently (Figure 2, Table 1). The average among respondents for 2019 is 29.6 years.

Figure 2. Useful-Life Expectations for Wind, over Time

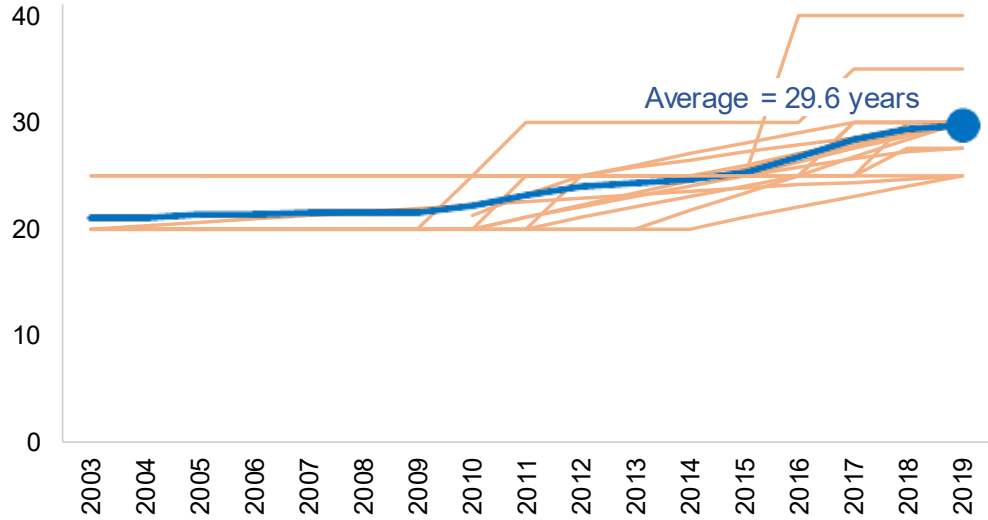


Table 1. Summary of Respondent Estimates of Useful-Life Expectations for Wind Projects

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Source 1	25	25	25	25	25	25	25	25	30	30	30	30	30	30	35	35	35
Source 2										25	26	27	28	29	30	30	30
Source 3	25	25	25	25	25	25	25	25	25	25	25	25	26	27	28	29	30
Source 4	20	20	20	20	20	20	20	20	25	25	25	25	25	25	30	30	30
Source 5								21	23	25	26	26	27	28	29	29	30
Source 6	20	20	20	20	20	20	20	20	20	25	25	25	25	25	25	30	30
Source 7													25	40	40	40	40
Source 8	20	20	20	20	20	20	20	25	25	25	25	25	25	25	30	30	30
Source 9	20	20	20	20	20	20	20	20	21	22	23	24	26	27	28	29	30
Source 10																	30
Source 11									25	25	25	25	25	25	30	30	30
Source 12	20	20	20	20	20	20	20	20	20	20	20	20	21	22	23	24	25
Source 13								25	25	25	25	25	25	26	28	29	30
Source 14	20	20	20	20	20	20	20	20	20	20	20	22	23	25	27	28	30
Source 15			25	25	25	25	25	25	25	25	25	25	25	25	25	27.5	27.5
Source 16																	30
Source 17	20	20	20	20	20	20	20	20	21	22	23	24	25	26	27	27	27.5
Source 18																	27.5
Source 19									20	21	22	23	24	25	25	25	25
Source 20	20	20	21	21	21	22	22	22	23	23	23	23	24	24	24	25	25
AVERAGE	**21.0**	**21.0**	**21.4**	**21.4**	**21.5**	**21.5**	**21.5**	**22.2**	**23.2**	**23.9**	**24.3**	**24.7**	**25.2**	**26.7**	**28.4**	**29.3**	**29.6**
# Responses	*10*	*10*	*11*	*11*	*11*	*11*	*11*	*13*	*15*	*16*	*16*	*16*	*17*	*17*	*17*	*17*	*20*

[3] The firm applying a 40-year assumption notes, however, that this assumption is capped at the term of each project's lease, resulting in a fleet-wide average useful life of 31 years. Moreover, the firm is not altogether clear as to whether the 40-year life applies to entire wind projects, or instead to just certain components of those projects and turbines.

Drivers and Influences

In addition to these numerical estimates, many respondents offered insight into how they or the industry treat project life. Though we do not seek to synthesize generalizable findings from these insights, they do enhance understanding of industry thinking, and so are summarized below where relevant:

- Some respondents noted that turbine design certifications are often 20 years, though some manufacturers are moving towards or already provide 25-, 30-, or even 40-year certifications depending on the turbine and wind regime. Moreover, O&M servicing agreements sometimes (albeit rarely) extend to 25- or even 30-years. Such service agreements may not cover component replacement, and so project owners may still face O&M risk. Nonetheless, in general, these points suggest that the major manufacturers are increasingly comfortable with 30-year lifespans.
- One respondent pointed out, however, that project owners need not equate turbine certification lives with the useful, economic, or depreciable life of a wind power asset. Owners will conduct project-specific engineering and economic analysis to inform useful-life assumptions, considering local wind conditions, expected project revenue, and O&M and refurbishment expectations. As such, regardless of the details on turbine certification and servicing contracts, 30-year lifetimes are now the most common, though a number of developers and sponsors continue to use 25 years or a range of 25-30 years.
- Multiple developers revealed that key factors in increased project lives include technology maturity and robustness, as well as improved understanding of performance, wear-and-tear, and O&M practices. Projects from the 1980s and 1990s continue to operate today in some cases, turbines in the 1+ MW class have growing operating history, and engineering and operational skill and turbine sophistication has dramatically increased. As older projects have reached their design lifetimes, the industry has found ways to extend those lifetimes. Turbine control regimes that clip production to manage fatigue loads and ensure that turbines stay within their design envelope have become increasingly common. One major independent engineering firm agrees that, if taken care of, a facility should last 25-30 years or longer with proper maintenance protocols and, for some components such as gearboxes, plant refurbishment. The recent emergence of 'partial' repowering whereby certain turbine component are replaced and/or upgraded has bolstered confidence in longer useful lives (at least for those turbines that are being refurbished), as have enhanced O&M options and lower overall O&M costs.
- The O&M implications of extended useful lives are uncertain. Some turbine components can easily last 30+ years whereas others, such as gearboxes, would likely require refurbishment or replacement. While acknowledging uncertainty in future O&M costs, a limited number of respondents indicated that they do not anticipate a fundamental step-change in O&M expenditures to achieve 25-year lives. Others indicated that heightened O&M costs and component refurbishment and replacement go hand-in-hand with extended project life, as might increased performance degradation, especially to achieve 30-year life spans—also noting that these effects are factored-in when assessing overall plant profitability and determining useful life. Ultimately, the actual useful life of wind assets will depend critically on how components wear over time, which will affect O&M expenditures.
- Another factor in extended project lives is the desire, and perhaps even need, to capture project value/economics beyond the initial 10-20 year life that is usually covered by the first power purchase agreement (PPA). The extent of this post-PPA (and post-PTC) 'merchant' value is often an item of wide disagreement within the industry, and depends on the trajectory of both power prices and O&M costs. Two respondents noted that today's low wholesale power prices were generally not anticipated a decade ago, challenging post-PPA project economics for older projects. Nonetheless, especially as PPA

terms have tended to shorten over time and competition for those PPAs has strengthened—resulting in lower PPA-derived revenue—an increasing number of projects need to demonstrate some post-PPA value in order for the project to pencil out from an overall return-on-investment perspective. These trends have pushed the industry to more fully investigate longer useful lives. Ultimately, though, whether this post-PPA value materializes will depend on O&M requirements as projects age and, critically, on future wholesale power price developments. These two factors, post-PPA revenue and O&M costs, are generally viewed as the two most uncertain aspects of project life estimates.

- Developers indicated that different owners treat and model project life somewhat differently. For example, one respondent indicated that its firm has historically modeled 25-year project lives as 20 years of revenue plus a terminal value (which is equated to 5 years of net revenue); a separate respondent indicated that this approach was very common earlier in the 2000s. Another respondent mentioned that its company typically assumes 25 years, but with the final 5 years subject to production degradation. An independent engineer revealed that, over the last several years, it has noticed that longer lifetimes have been supported by increasingly sophisticated engineering and economic analysis, whereas previously that analytical support was often somewhat lacking.
- Regional variation in project life assumptions may also exist. Wind plants located in areas with liquid wholesale markets (ERCOT, SPP, MISO, etc.) that enable projects to readily go merchant once the initial PPA expires are more likely to use an assumed life of 30 years. Projects located in illiquid markets (WECC, SERC, FRCC) and selling to an electric utility may more-regularly assume a project life equivalent to the term of the PPA—typically less than 30 years.
- One sponsor remarked that it reviews the estimated useful lives of its assets on an ongoing basis and that, in 2016, this review indicated that many of its wind projects were expected to last longer than previously estimated for depreciation purposes. As a result, the useful lives of certain wind assets[4] were increased from 25 years to 40 years, capped at the land lease term if lower, to better reflect the periods during which these assets are expected to remain in service. The weighted-average useful life of its wind projects was consequently 31 years, and the company is assessing lease extensions to potentially further increase the average useful life of its collective wind assets.
- Another developer and owner reported that it opted to conduct a rigorous independent assessment of its fleet in the early 2010s, taking into account local wind conditions and assessing lifetime both from a structural and economical perspective. From a structural point of view, it analyzed structural components that could not be reasonably replaced, conducting extreme load and fatigue analyses on 37 wind projects, representative of the conditions of all 161 wind projects in its fleet at the time. This owner concluded that, for all wind projects analyzed, failure rates for these components would be lower than 0.5% during a period of 25 years. In parallel, this owner conducted an economic analysis to ensure that operating each of the projects was profitable during these 25 years. Estimated costs were compared with expected revenues, and in all cases, expected revenues remained above expected operational costs during the 25-year lifetime of the assets. Finally, a thorough analysis was conducted to make sure no project had any contractual, land lease, environmental or legal restriction that would prohibit extending operations to 25 years.
- Another large asset owner noted that, in 2017, a review indicated that the actual lives of its wind plants were expected to be longer than the lifetime previously estimated for depreciation purposes. As a

[4] As indicted earlier, this firm is not altogether clear as to whether the 40-year life applies to entire wind projects, or instead to just certain components of those projects and turbines.

result, this wind plant owner changed the estimated useful lives of wind plant equipment from 30 years to 35 years, better reflecting the period during which these assets are expected to remain in service. The resultant accounting reduction in annual book depreciation had the effect of boosting near-term annual net income estimates.

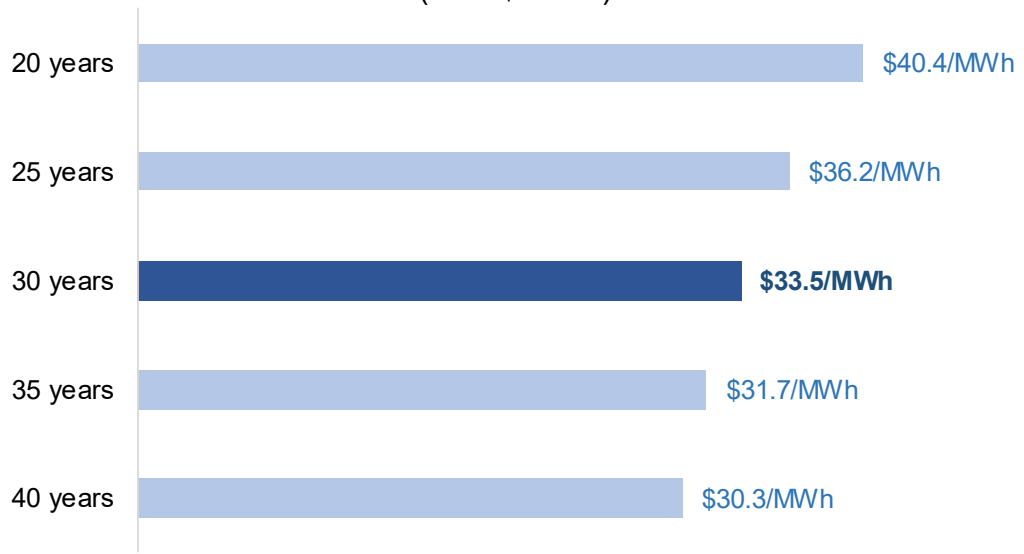
- Yet another developer indicated that it recently increased its useful life assumption from 25 years to a project-specific range of 25 to 30 years. Whether a project is assumed to have a 25-year or a 30-year useful life depends on detailed analysis that considers turbine model, foundation design, wind regime, O&M expectations, merchant-tail revenue expectations, land lease terms, and other considerations. In effect, an 'optimal' useful life is determined, through detailed analysis, for each project.
- An independent engineer cited foundation design as often the governing factor, but further noted that foundations are now commonly designed with a 30-year design life in mind. This respondent indicated that 30-year useful lives are now always employed in project-sale transactions, with shorter terms sometimes the focus in tax equity transactions and debt deals. A 25-year life used to be a stretch in the assumptions, and was not typically considered in most financings (the exception being sale-leaseback tax equity deals, but those were never prevalent). That has now changed, especially over the last few years as 30-year lifetime assumptions have become common.
- A prospective owner revealed that it recently issued an RFP for a large volume of wind that specified that it was looking to buy (at completion) 30-year design life projects with 30-year design life turbines. The solicitation further required wind developers to provide a mechanical load analysis (or equivalent) from the wind turbine manufacturer to support the design life assumption. The owner reached out to the major turbine manufacturers prior to issuing the RFP, confirming that each of those manufacturers could meet the requirement depending on the wind regime, albeit with high O&M costs to be expected in the later years.
- One respondent cited an accounting perspective as a primary driver for recent increases in assumed lifetimes: longer depreciation terms reduce annual book depreciation from an accounting perspective, thereby boosting near-term net income (all else being equal). This same respondent observed that increases in assumed project lives correlated (in time) with a move in the industry to capitalize (and therefore depreciate, not expense) major operating expenses such as gearbox replacements.
- Tax equity and lenders are often less-impacted by project term. Lenders are generally focused on ensuring that loans are repaid during the term of the PPA—before the project has merchant exposure. Tax-equity providers are similarly not always overly concerned with project life, but rather with the first 10+ years or so of operation, and making sure that energy generation matches expectations such that federal tax incentives are fully captured. This is not to say that longer project lives are ignored by these project participants, but only that useful life—whether 25- or 30-years—is less often a governing factor in investment decisions.
- One financier declared that it tends to have a somewhat more conservative view—using 25 years as the technical and economic lifetime, albeit acknowledging that many others have gained comfort with 30 years. This respondent also indicated that the actual incremental value of years 25 to 30 is generally quite low in present value terms, especially if there is need for increased O&M or refurbishment.
- Finally, an independent engineer suggested that, in the future, further extensions to project life might be enabled by even-more-sophisticated control strategies that seek to maximize overall lifetime plant profitability, by trading off immediate power production (especially when wholesale power prices are

very low) against plant-lifetime 'consumption' and O&M costs. While these strategies are not yet employed broadly, the computational tools and expertise exist to potentially self-curtail during periods of high fatigue and low wholesale prices, thereby reducing future O&M costs and extending project life. Moreover, in the wake of a phased-out PTC, such strategies could become more common as the current PTC-induced emphasis on near-term production begins to shift in favor of longer-term considerations.

Impacts on Levelized Cost of Energy

The estimated average levelized cost of energy (LCOE) for new wind projects built in 2018 is $40.4/MWh (real 2018$), assuming a 20-year project life and excluding the impacts of the federal production tax credit (Figure 3).[5] With a 25-year useful life and no change in assumed operations and maintenance (O&M) expenditures or project performance over time, LCOE declines by 10%, to $36.2/MWh because capital costs are recovered over five additional years of production. At the now-common 30-year assumed life, levelized costs decrease another 7%, to $33.5/MWh (again, all else equal). Even longer assumed lifetimes lead to further, but diminishing (due to discounting), LCOE reductions—to $31.7/MWh and $30.3/MWh for 35- and 40-year lives, respectively. These estimates assume that O&M costs simply scale with inflation regardless of useful life and that performance degradation as projects age is not present. Consequently, the analysis overstates the benefits of extended project lifetimes on LCOE, though is still suggestive of a potentially significant positive influence, at least among the nearer-term extensions from 20 to 25 to 30 years (whereas discounting erodes the benefits of longer-term extensions from 30 to 35 to 40 years).

Figure 3. Levelized Cost of Wind in 2018, by Project Life (2018$/MWh)



Project lifetime is not as impactful as installed costs and annual electricity production for determining the overall levelized cost of wind energy. Nonetheless, if O&M costs can be contained, project life is one of several levers (that also include financing and O&M) that helps reduce the levelized cost of wind energy.

[5] These LCOE estimates apply empirical data and assumptions for installed costs, O&M costs, capacity factors, and financing from Wiser, R. and M. Bolinger. 2019. *2018 Wind Technologies Market Report.* Washington, DC: U.S. Department of Energy.

Acknowledgements

For his support of this research at the U.S. Department of Energy, we thank Patrick Gilman. We also acknowledge Rich Tusing at the National Renewable Energy Laboratory for his contributions. We especially thank each of the wind industry professionals who thoughtfully responded to our questions. For reviewing an earlier version of this manuscript, we thank five of the survey respondents, as well as Trieu Mai and Eric Lantz (NREL). Lawrence Berkeley National Laboratory's contributions to this report were funded by the Wind Energy Technologies Office, Office of Energy Efficiency and Renewable Energy of the U.S. Department of Energy under Contract No. DE-AC02-05CH11231. The authors are solely responsible for any omissions or errors contained herein.

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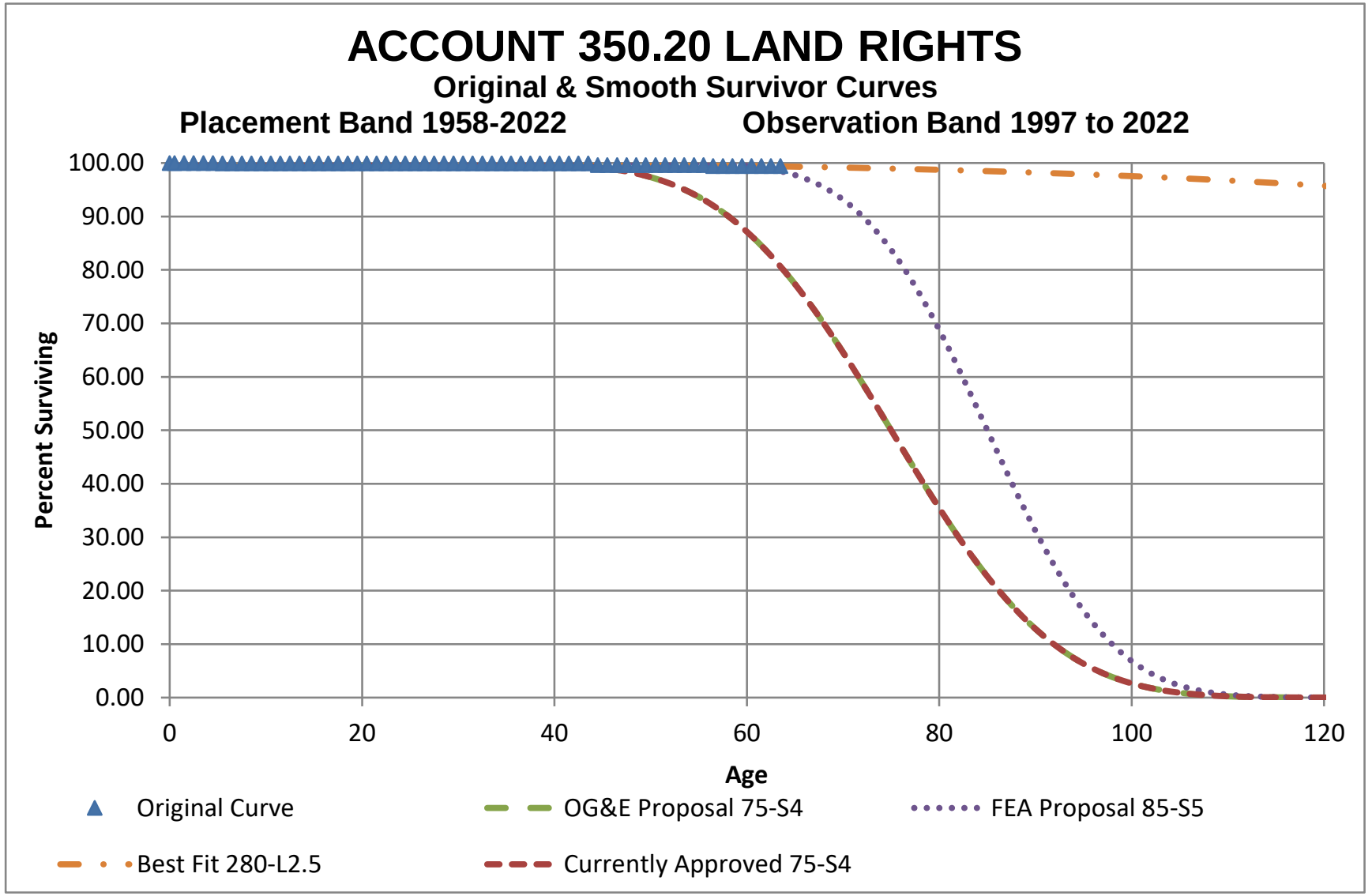
Account 350.2 Fitting Analysis Results

Iowa Curve	Average Service Life	SSD
L2.5	280.4	0.3
L2	347.2	0.3
S1.5	311.5	0.3
S1	388.8	0.3
R4	164.3	0.3
S2	210.6	0.4
S2.5	183.1	0.4
L3	197.7	0.4
S0.5	735.9	0.5
R3.5	275.2	0.6
S0	1,047.9	0.6
R3	395.5	0.7
L1.5	686.6	0.7
S3	144.3	0.7
L0	2,525.8	0.8
L0.5	1,901.1	0.8
L1	1,124.3	0.9
R2.5	984.5	1.0
R2	1,630.5	1.0
R1.5	2,980.2	1.0
R1	4,330.9	1.0
R0.5	6,372.2	1.0
O3	13,749.6	1.0
O1	8,406.5	1.0
O2	9,403.2	1.0
O4	19,051.3	1.0
L4	131.6	1.1
S4	105.9	1.6
L5	99.9	2.2
S5	87.6	2.4
S6	77.4	3.1
R5	164.3	4.1

OG&E Proposal 75-S4	1,529
Currently Approved 75-S4	1,529
FEA Proposal 85-S5	3


ACCOUNT 350.20 LAND RIGHTS
Original & Smooth Survivor Curves
Placement Band 1958-2022
Observation Band 1997 to 2022
Percent Surviving
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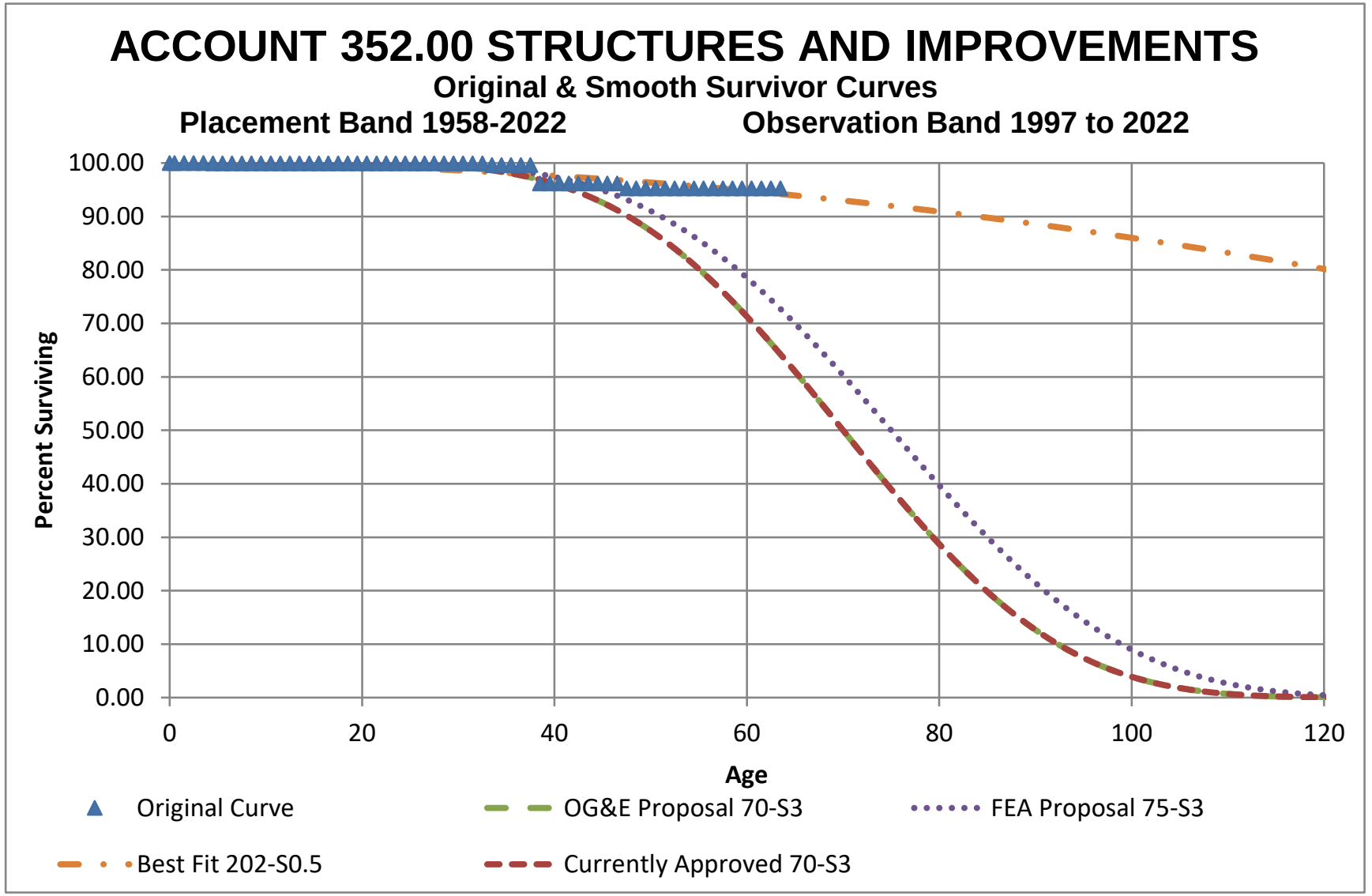
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
0
20
40
60
80
100
120
Age
Original Curve
OG&E Proposal 75-S4
FEA Proposal 85-S5
Best Fit 280-L2.5
Currently Approved 75-S4

Account 352 Fitting Analysis Results

Iowa Curve	Average Service Life	SSD
S0.5	201.5	51.4
S1	157.4	51.8
L1.5	183.9	52.1
S0	254.8	54.6
L2	145.2	55.1
L1	225.6	56.3
R3	119.9	56.8
S1.5	136.0	59.0
R2.5	152.8	62.2
L2.5	127.7	65.0
L0.5	320.4	65.3
L0	423.9	67.4
R3.5	105.4	67.8
R2	198.0	71.9
R1.5	290.7	85.3
S2	117.0	87.8
R1	398.0	90.3
L3	110.2	90.3
R0.5	556.9	94.4
O2	810.1	95.9
O1	723.9	95.9
O3	1,182.0	96.1
O4	1,637.4	96.2
S2.5	106.7	103.8
R4	93.9	110.0
S3	97.5	154.5
L4	91.7	166.5
R5	79.1	256.0
S4	83.7	260.1
L5	80.6	278.9
S5	76.0	347.9
S6	71.1	411.0

OG&E Proposal 70-S3	5,930
Currently Approved 70-S3	5,930
FEA Proposal 75-S3	2,786


ACCOUNT 352.00 STRUCTURES AND IMPROVEMENTS
Original & Smooth Survivor Curves
Placement Band 1958-2022
Observation Band 1997 to 2022
Percent Surviving
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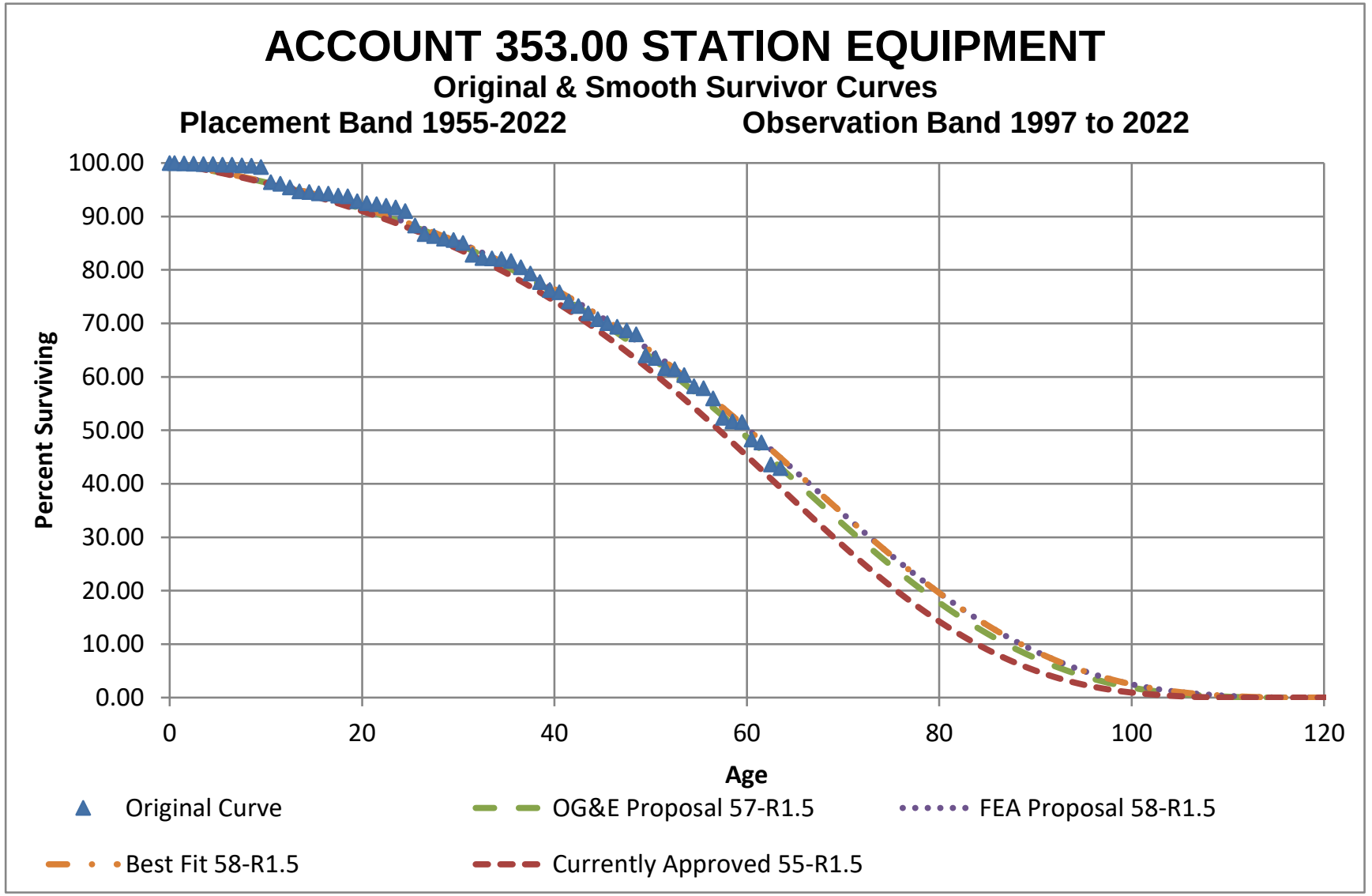
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
0
20
40
60
80
100
120
Age
Original Curve
OG&E Proposal 70-S3
FEA Proposal 75-S3
Best Fit 202-S0.5
Currently Approved 70-S3

Account 353 Fitting Analysis Results

Iowa Curve	Average Service Life	SSD
R1.5	57.7	75.1
S0.5	60.3	95.4
L1	66.5	209.3
R2	56.5	219.2
L1.5	63.7	227.5
S0	62.4	241.5
S1	58.9	318.2
R1	59.7	411.9
L0.5	70.0	453.7
L2	61.9	779.0
S1.5	57.9	823.0
R2.5	55.9	882.7
L0	75.1	981.7
R0.5	64.3	1,159.0
L2.5	60.3	1,528.0
S2	57.2	1,737.2
O2	80.7	1,949.2
O1	72.0	1,950.5
R3	55.7	2,102.9
O3	113.0	2,370.4
O4	153.5	2,592.1
S2.5	56.8	2,803.9
L3	59.1	2,888.7
R3.5	55.8	3,606.1
S3	56.6	4,262.2
R4	56.0	5,547.3
L4	57.4	6,425.8
S4	56.6	8,787.7
L5	57.3	11,313.4
R5	56.9	11,861.8
S5	57.3	14,436.3
S6	58.2	20,818.0

OG&E Proposal 57-R1.5	95
Currently Approved 55-R1.5	433
FEA Proposal 58-R1.5	80


ACCOUNT 353.00 STATION EQUIPMENT
Original & Smooth Survivor Curves
Placement Band 1955-2022
Observation Band 1997 to 2022
Percent Surviving
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80.00
70.00
60.00
50.00
40.00
30.00
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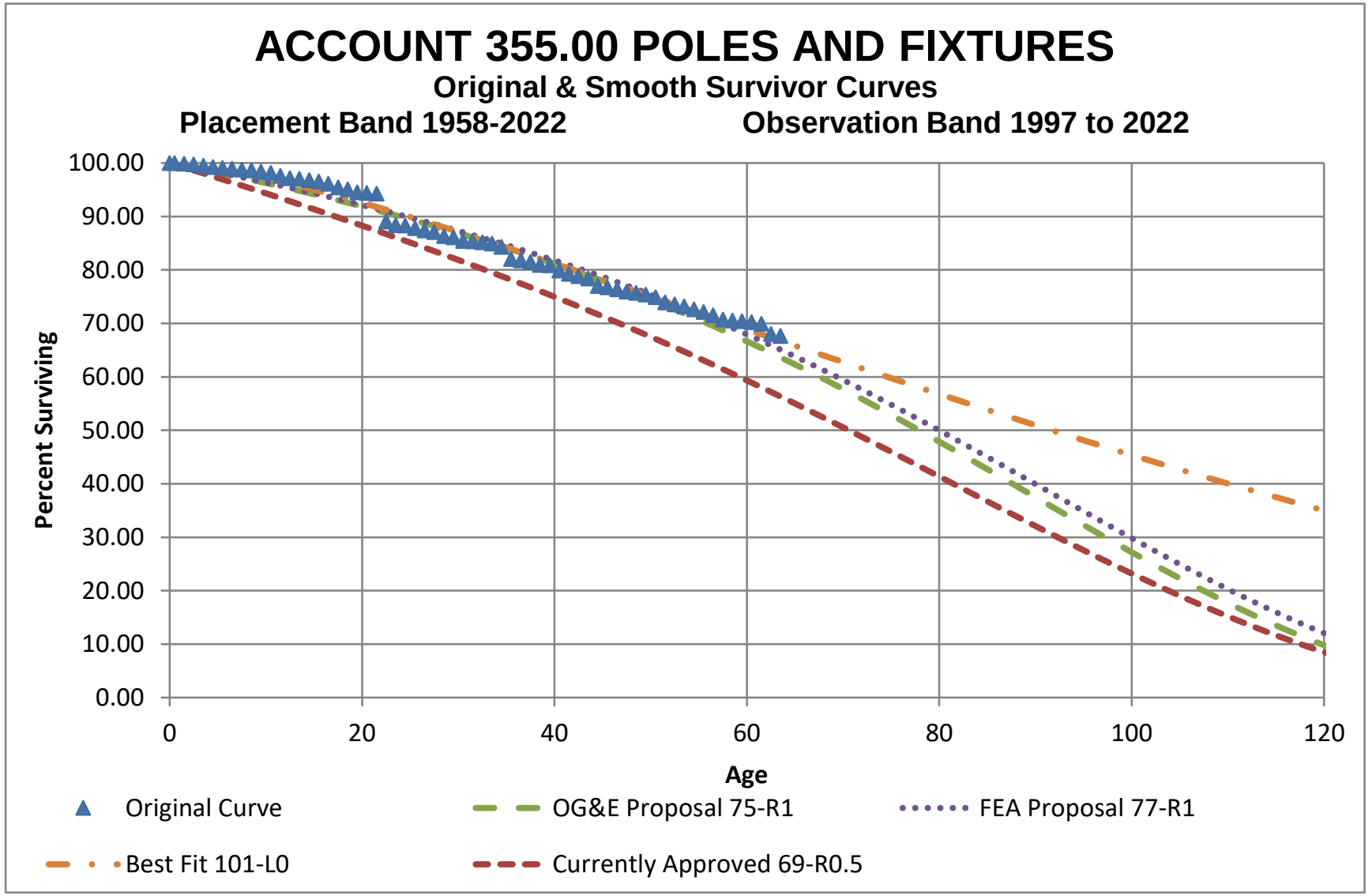
120
Age
Original Curve
OG&E Proposal 57-R1.5
FEA Proposal 58-R1.5
Best Fit 58-R1.5
Currently Approved 55-R1.5

Account 355 Fitting Analysis Results

Iowa Curve	Average Service Life	SSD
L0	100.7	93.7
R1	77.4	175.2
R0.5	87.9	176.7
L0.5	90.7	221.9
O2	115.1	242.8
O1	102.7	243.3
O3	163.2	274.4
S0	79.6	289.3
O4	222.8	293.1
R1.5	71.7	372.1
L1	83.6	591.4
S0.5	74.7	649.7
R2	67.9	891.7
L1.5	78.1	1,128.5
S1	71.3	1,303.4
R2.5	65.6	1,640.7
S1.5	68.8	2,028.2
L2	74.4	2,151.5
R3	64.0	2,806.3
L2.5	71.2	2,963.3
S2	66.9	3,099.0
R3.5	63.2	3,922.7
S2.5	65.6	4,050.9
L3	68.9	4,348.8
S3	64.7	5,343.3
R4	62.6	5,381.2
L4	65.1	6,765.5
S4	63.3	8,520.6
R5	62.4	9,674.8
L5	63.8	9,844.2
S5	62.9	11,670.8
S6	63.0	14,542.1

OG&E Proposal 75-R1	219
Currently Approved 69-R0.5	2,414
FEA Proposal 77-R1	176


ACCOUNT 355.00 POLES AND FIXTURES
Original & Smooth Survivor Curves
Placement Band 1958-2022
Observation Band 1997 to 2022
Percent Surviving
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60.00
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40.00
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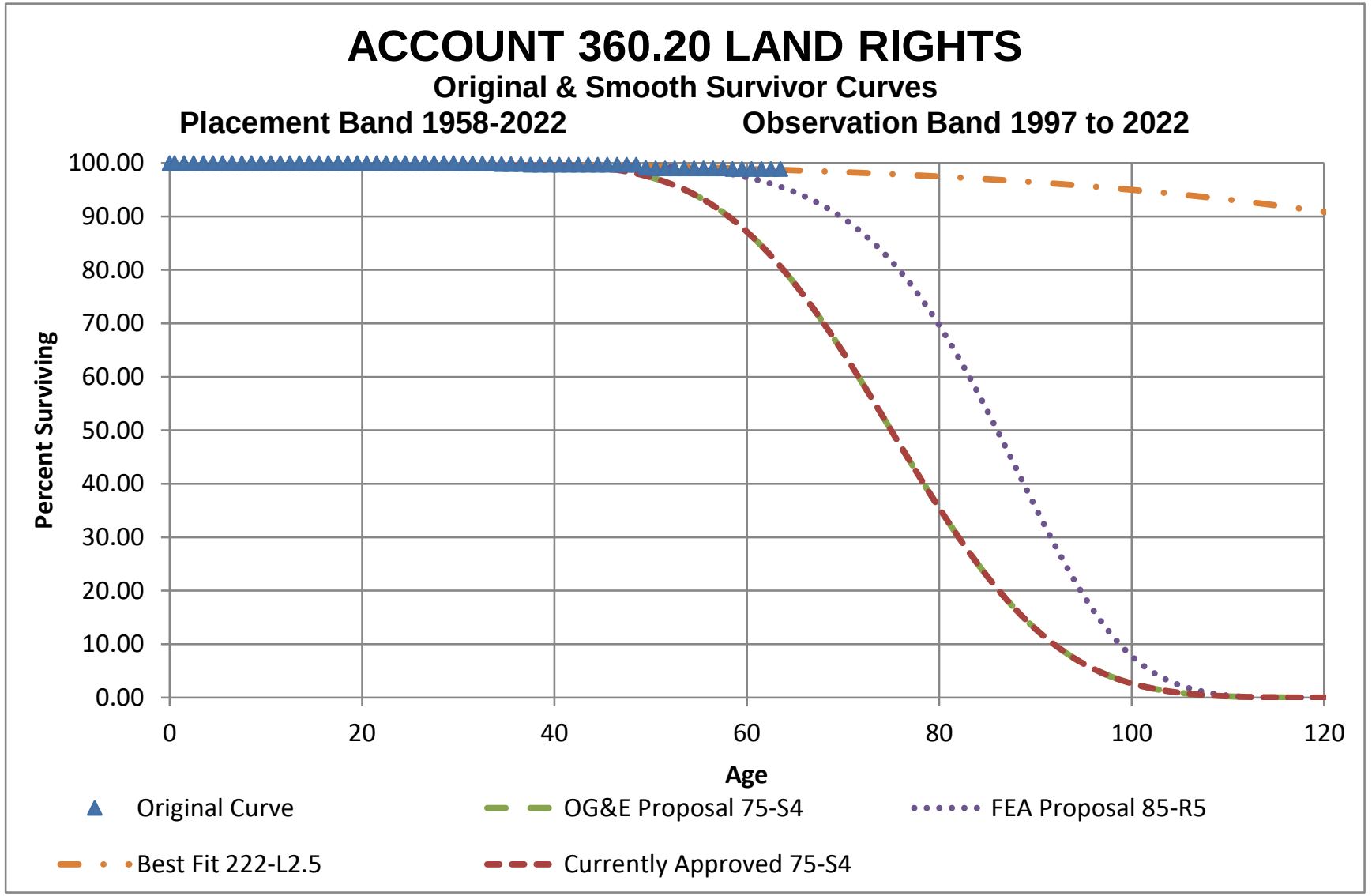
80
100
120
Age
Original Curve
OG&E Proposal 75-R1
FEA Proposal 77-R1
Best Fit 101-L0
Currently Approved 69-R0.5

Account 360.2 Fitting Analysis Results

Iowa Curve	Average Service Life	SSD
L2.5	221.7	0.9
S1.5	243.5	0.9
L2	269.9	0.9
S1	299.8	1.0
R4	136.9	1.1
L3	167.1	1.1
S2	177.9	1.1
S2.5	156.0	1.2
R3.5	194.7	1.6
S0.5	501.3	1.9
S0	696.7	2.0
R3	259.1	2.1
L1.5	440.0	2.3
S3	128.8	2.5
L0	1,497.2	2.9
L1	652.2	3.0
L0.5	1,114.9	3.0
R2.5	527.6	3.5
L4	119.4	3.6
R2	842.7	3.8
R1.5	1,498.4	4.0
R1	2,175.4	4.0
R0.5	3,178.3	4.1
O2	4,685.1	4.1
O3	6,850.7	4.1
O4	9,492.2	4.1
O1	4,188.5	4.1
R5	93.6	5.9
S4	99.2	5.9
L5	94.5	7.7
S5	84.2	9.3
S6	75.5	12.0

OG&E Proposal 75-S4	1,395
Currently Approved 75-S4	1,395
FEA Proposal 85-R5	33


ACCOUNT 360.20 LAND RIGHTS
Original & Smooth Survivor Curves
Placement Band 1958-2022
Observation Band 1997 to 2022
Percent Surviving
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90.00
80.00
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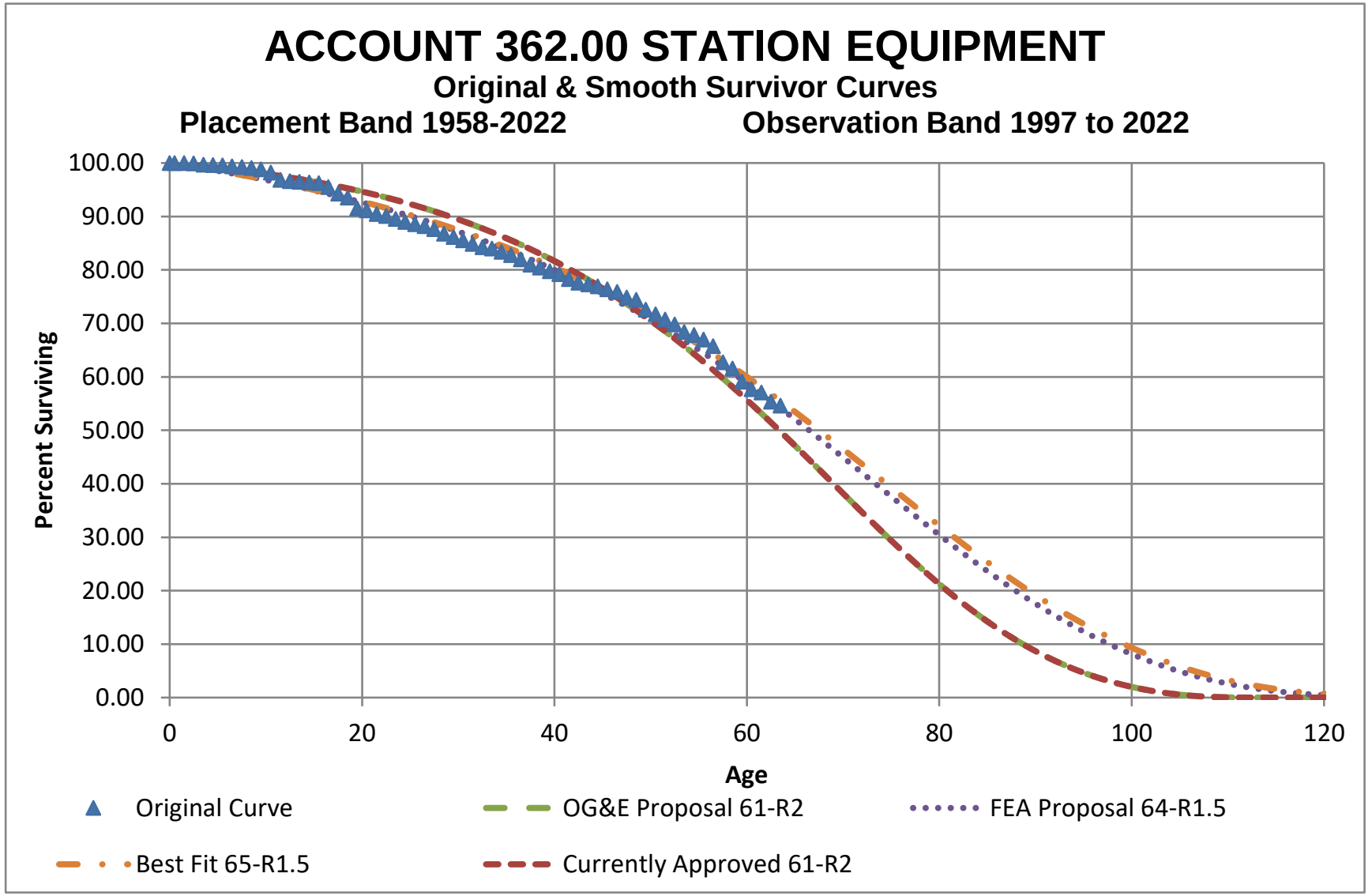
60.00
50.00
40.00
30.00
20.00
10.00
0.00
0
20
40
60
80
100
120
Age
Original Curve
OG&E Proposal 75-S4
FEA Proposal 85-R5
Best Fit 222-L2.5
Currently Approved 75-S4

Account 362 Fitting Analysis Results

Iowa Curve	Average Service Life	SSD
R1.5	64.7	87.9
S0	71.4	121.0
L0.5	81.0	159.6
R1	68.5	179.9
S0.5	67.9	229.6
L1	75.7	243.7
L0	88.5	322.9
R2	62.3	354.8
L1.5	71.4	516.5
R0.5	76.2	518.1
S1	65.4	644.2
O2	98.3	847.8
O1	87.7	848.9
R2.5	60.8	949.5
O3	138.9	996.6
O4	189.4	1,076.6
S1.5	63.6	1,200.9
L2	68.6	1,266.3
L2.5	66.1	1,968.0
R3	59.9	2,000.5
S2	62.3	2,113.4
S2.5	61.4	3,005.6
R3.5	59.5	3,137.0
L3	64.4	3,227.4
S3	60.8	4,245.8
R4	59.3	4,647.7
L4	61.5	5,843.0
S4	60.1	7,643.8
R5	59.7	9,374.6
L5	60.7	9,383.1
S5	60.2	11,524.5
S6	60.7	15,717.5

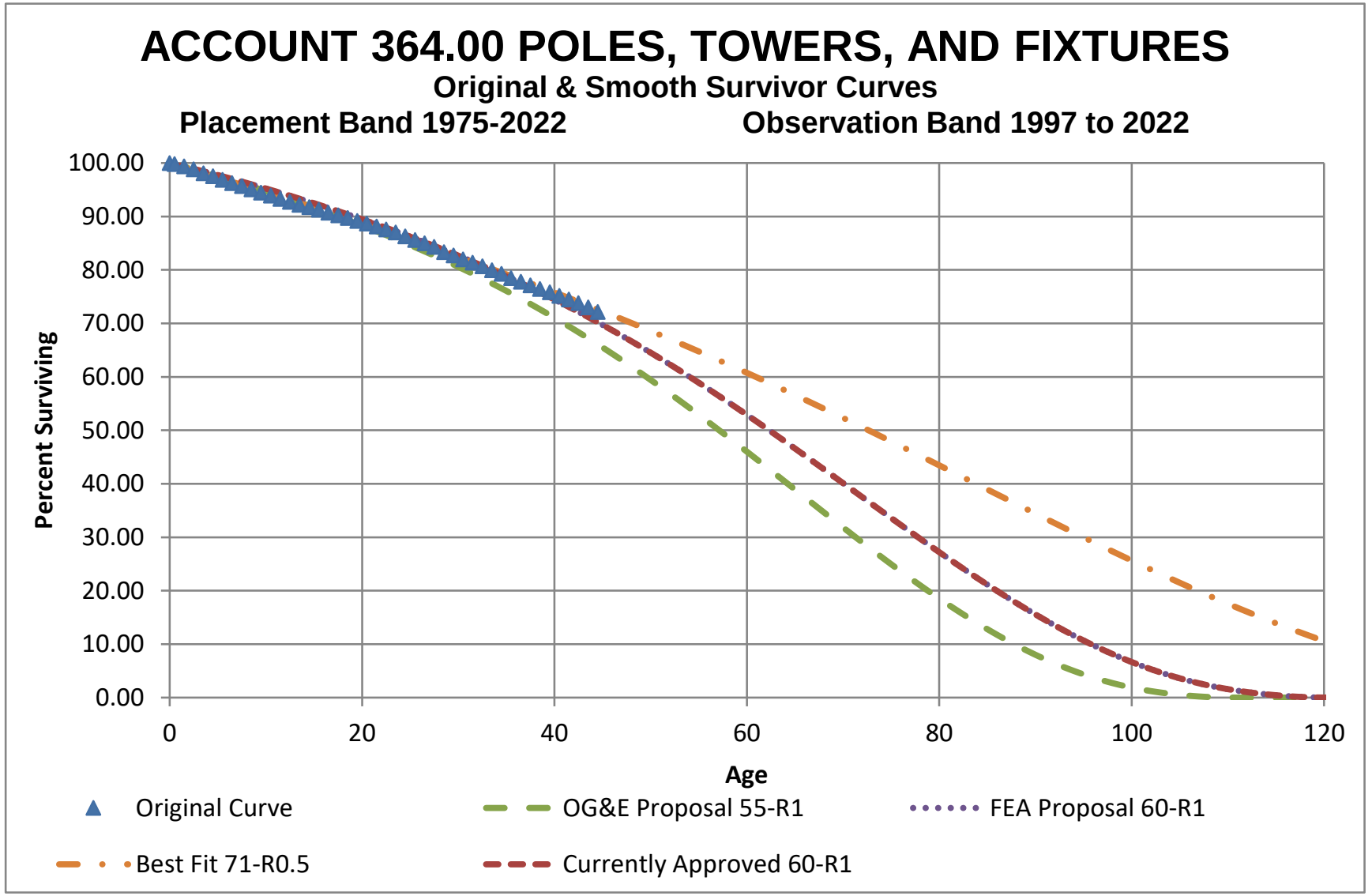
OG&E Proposal 61-R2	414
Currently Approved 61-R2	414
FEA Proposal 64-R1.5	99


ACCOUNT 362.00 STATION EQUIPMENT
Original & Smooth Survivor Curves
Placement Band 1958-2022
Observation Band 1997 to 2022
Percent Surviving
100.00
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
0
20
40
60
80
100
120
Age
Original Curve
OG&E Proposal 61-R2
FEA Proposal 64-R1.5
Best Fit 65-R1.5
Currently Approved 61-R2

Account 364 Fitting Analysis Results

Iowa Curve	Average Service Life	SSD
R0.5	70.6	3.0
O2	93.8	15.5
O1	83.7	15.6
O3	133.8	22.9
R1	60.7	25.5
O4	183.1	27.5
L0	80.0	48.4
R1.5	55.1	138.8
L0.5	71.0	152.4
S0	61.9	209.3
L1	64.6	423.7
S0.5	57.3	424.2
R2	51.4	435.9
L1.5	59.5	703.6
S1	54.0	822.4
R2.5	48.9	823.8
S1.5	51.6	1,193.4
L2	56.0	1,279.2
R3	47.3	1,458.4
L2.5	53.1	1,668.5
S2	49.8	1,777.9
R3.5	46.3	2,022.5
S2.5	48.5	2,244.9
L3	51.0	2,395.4
R4	45.5	2,793.8
S3	47.5	2,923.0
L4	47.4	3,560.4
S4	45.9	4,534.4
R5	44.9	5,032.5
L5	46.0	5,140.0
S5	45.2	6,132.6
S6	44.9	7,590.1

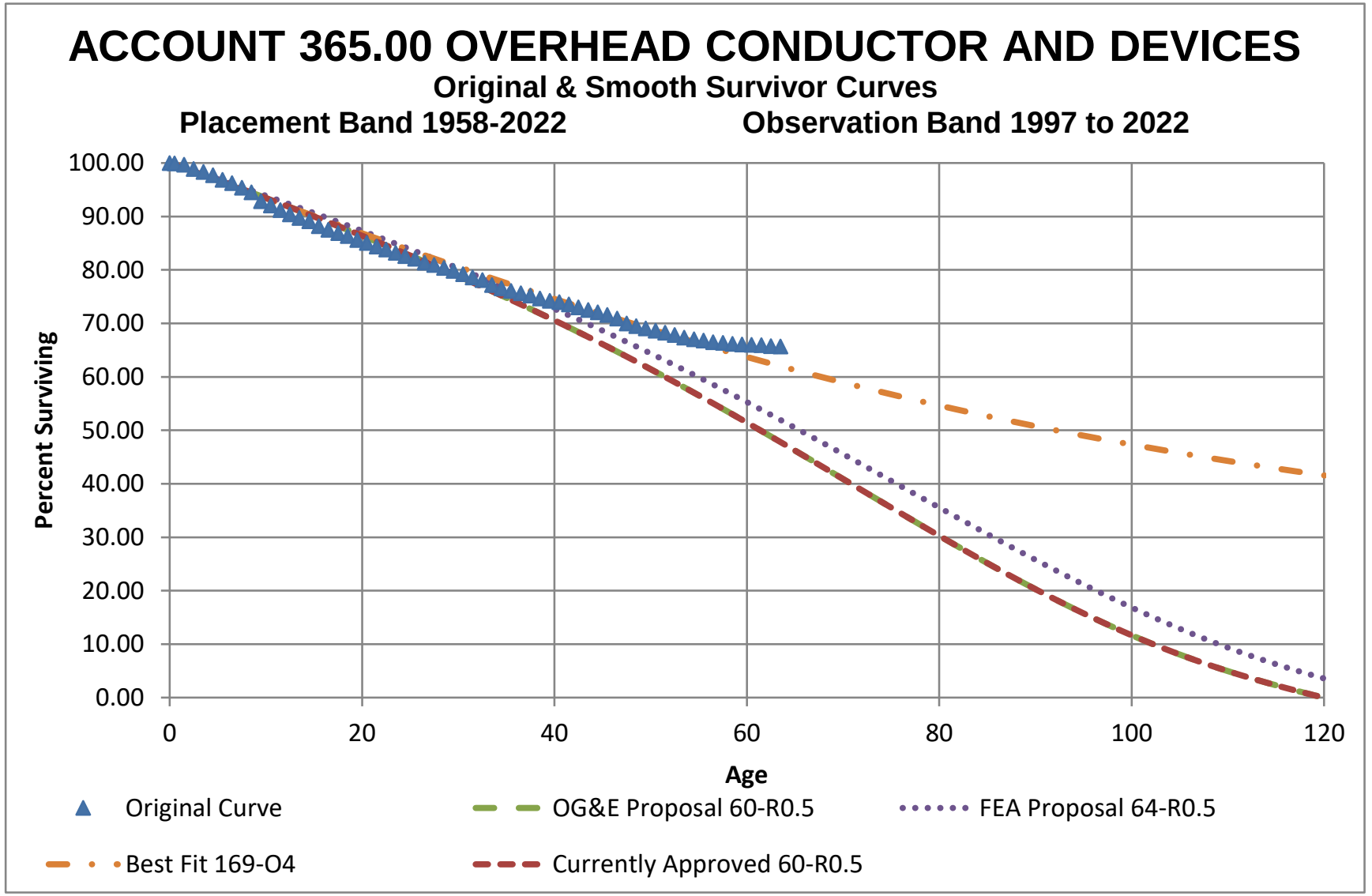
OG&E Proposal 55-R1	257
Currently Approved 60-R1	29
FEA Proposal 60-R1	29


ACCOUNT 364.00 POLES, TOWERS, AND FIXTURES
Original & Smooth Survivor Curves
Placement Band 1975-2022
Observation Band 1997 to 2022
Percent Surviving
100.00
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
0
20
40
60
80
100
120
Age
Original Curve
OG&E Proposal 55-R1
FEA Proposal 60-R1
Best Fit 71-R0.5
Currently Approved 60-R1

Account 365 Fitting Analysis Results

Iowa Curve	Average Service Life	SSD
O4	169.4	100.4
O3	125.5	135.3
O1	80.8	219.7
O2	90.5	220.2
R0.5	72.4	508.2
L0	83.0	792.4
R1	66.8	1,166.5
L0.5	77.2	1,497.7
S0	68.9	1,866.4
R1.5	64.0	2,180.4
L1	72.8	2,597.2
S0.5	66.3	2,945.3
R2	62.1	3,711.9
L1.5	69.8	3,936.2
S1	64.5	4,452.2
R2.5	61.1	5,453.4
L2	67.7	5,936.1
S1.5	63.2	5,938.1
L2.5	65.9	7,551.5
R3	60.5	7,726.1
S2	62.3	7,864.2
S2.5	61.7	9,538.8
R3.5	60.3	9,752.3
L3	64.5	9,897.5
S3	61.3	11,608.0
R4	60.3	12,166.2
L4	62.4	14,048.8
S4	61.1	16,528.3
R5	60.9	18,547.7
L5	62.0	18,684.4
S5	61.4	21,213.6
S6	62.1	25,352.5

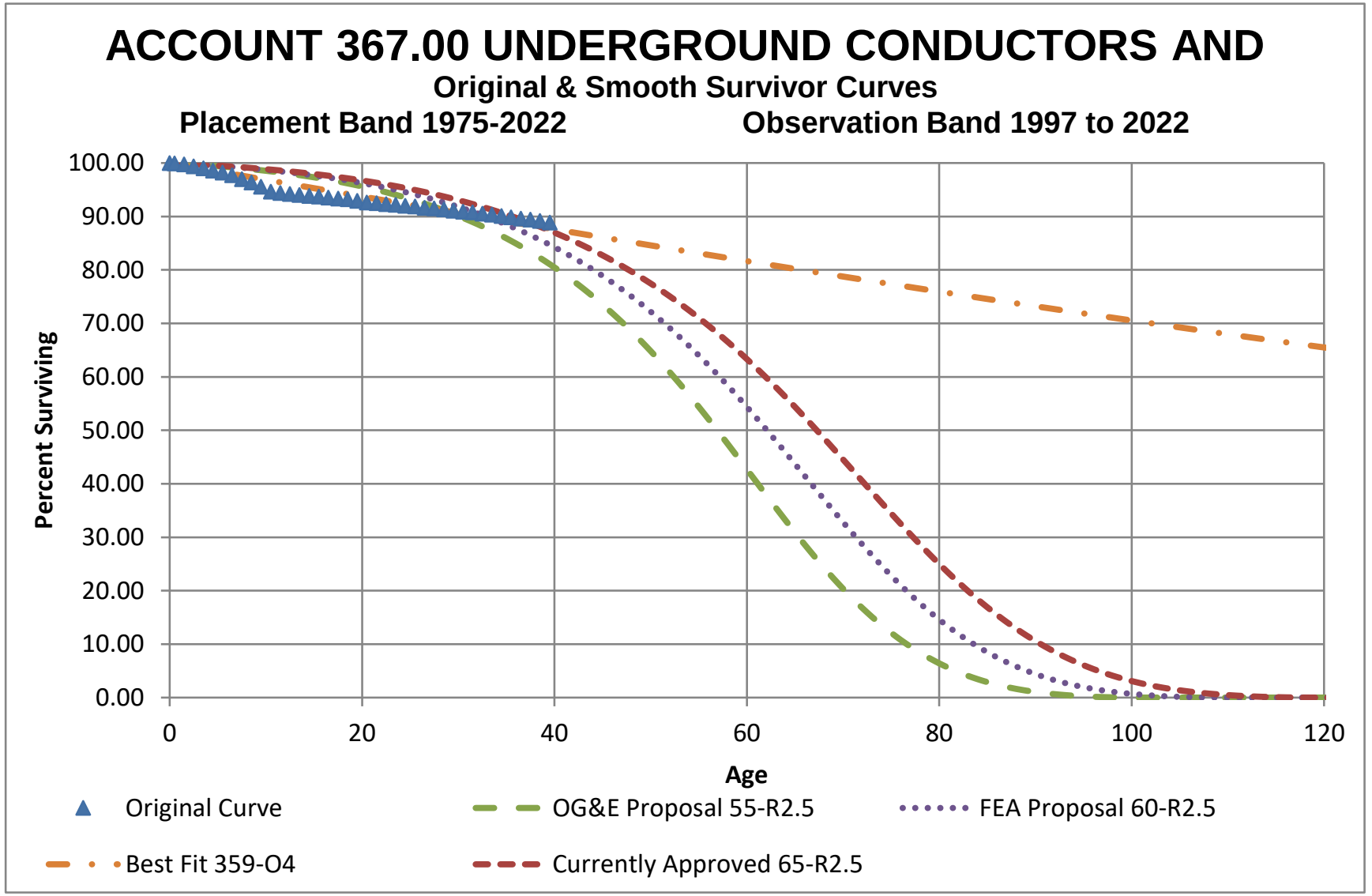
OG&E Proposal 60-R0.5	2,637
Currently Approved 60-R0.5	2,637
FEA Proposal 64-R0.5	1,342


ACCOUNT 365.00 OVERHEAD CONDUCTOR AND DEVICES
Original & Smooth Survivor Curves
Placement Band 1958-2022
Observation Band 1997 to 2022
Percent Surviving
100.00
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
0
20
40
60
80
100
120
Age
Original Curve
OG&E Proposal 60-R0.5
FEA Proposal 64-R0.5
Best Fit 169-O4
Currently Approved 60-R0.5

Account 367 Fitting Analysis Results

Iowa Curve	Average Service Life	SSD
O4	359.2	37.1
O3	260.3	37.8
O1	160.6	39.1
O2	179.9	39.2
R0.5	128.7	46.4
R1	100.8	65.5
R1.5	82.4	97.4
L0	129.3	119.4
L0.5	106.0	157.6
R2	68.8	183.4
S0	90.2	200.5
S0.5	78.1	270.9
L1	88.5	274.5
R2.5	60.9	279.5
L1.5	76.9	343.0
S1	68.8	425.0
R3	55.0	466.4
S1.5	62.8	511.5
L2	67.7	513.6
L2.5	61.7	592.2
R3.5	51.7	599.8
S2	57.9	692.2
L3	56.6	764.8
S2.5	54.6	778.5
R4	49.0	824.0
S3	51.8	954.1
L4	49.5	999.2
S4	47.2	1,264.4
R5	44.9	1,280.3
L5	45.9	1,309.7
S5	44.4	1,518.2
S6	42.5	1,719.0

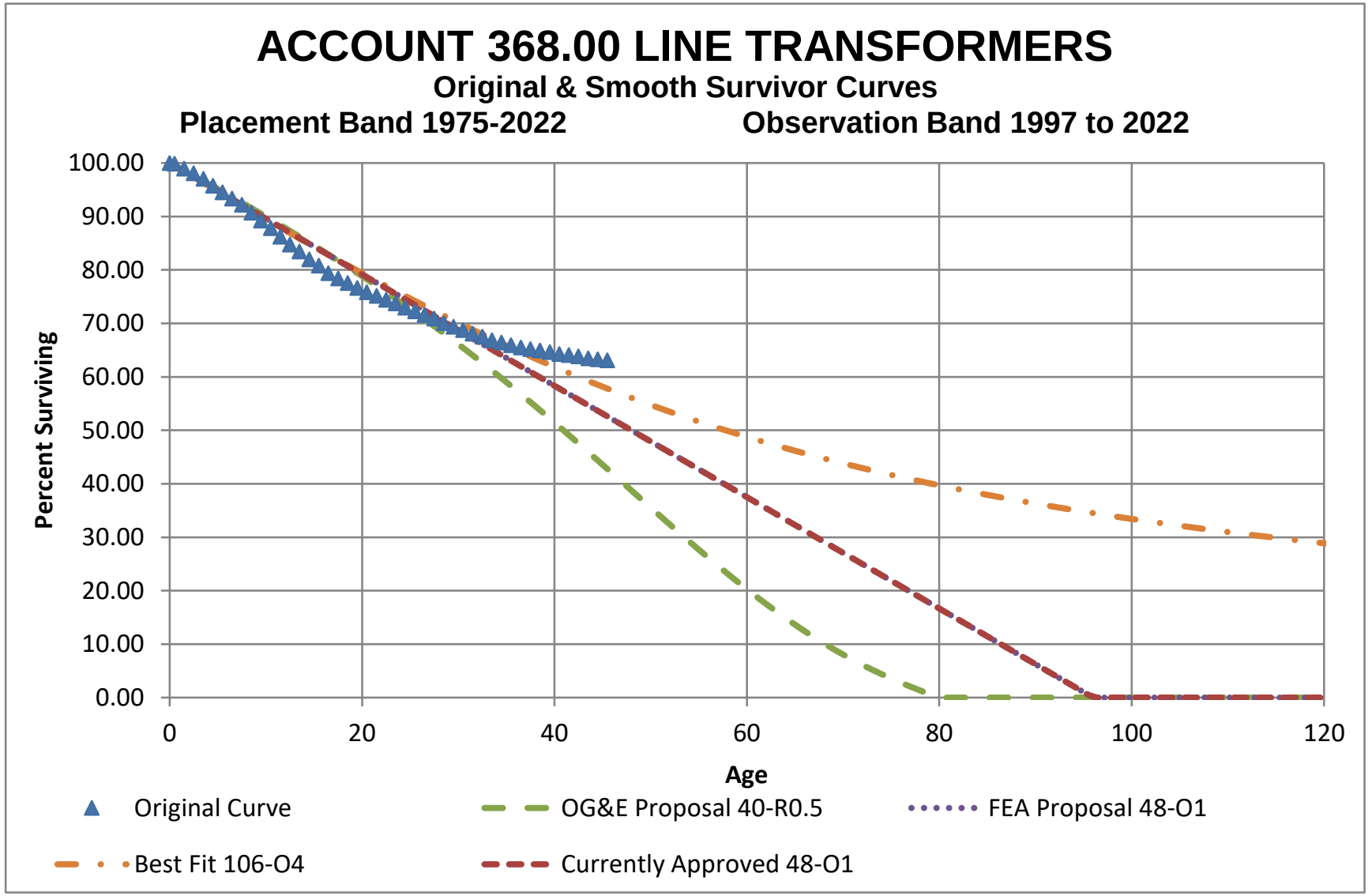
OG&E Proposal 55-R2.5	397
Currently Approved 65-R2.5	311
FEA Proposal 60-R2.5	281


ACCOUNT 367.00 UNDERGROUND CONDUCTORS AND
Original & Smooth Survivor Curves
Placement Band 1975-2022
Observation Band 1997 to 2022
Percent Surviving
100.00
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
0
20
40
60
80
100
120
Age
Original Curve
OG&E Proposal 55-R2.5
FEA Proposal 60-R2.5
Best Fit 359-O4
Currently Approved 65-R2.5

Account 368 Fitting Analysis Results

Iowa Curve	Average Service Life	SSD
O4	106.2	242.5
O3	79.3	307.8
O1	51.9	459.3
O2	58.1	459.7
R0.5	47.5	879.9
L0	54.1	1,059.4
R1	44.7	1,679.3
L0.5	50.9	1,800.4
S0	46.0	2,234.8
R1.5	43.5	2,787.1
L1	48.5	2,852.2
S0.5	44.8	3,336.4
L1.5	47.1	4,212.2
R2	42.6	4,317.0
S1	43.9	4,777.9
R2.5	42.3	6,031.0
L2	46.0	6,084.0
S1.5	43.3	6,229.5
L2.5	45.2	7,677.2
S2	42.9	8,019.2
R3	42.1	8,150.5
S2.5	42.8	9,603.1
L3	44.5	9,833.8
R3.5	42.3	10,048.7
S3	42.7	11,479.9
R4	42.4	12,225.5
L4	43.7	13,726.4
S4	43.0	15,893.2
R5	43.1	17,779.5
L5	43.7	17,822.9
S5	43.5	19,971.2
S6	44.2	23,483.5

OG&E Proposal 40-R0.5	2,506
Currently Approved 48-O1	656
FEA Proposal 48-O1	656


ACCOUNT 368.00 LINE TRANSFORMERS
Original & Smooth Survivor Curves
Placement Band 1975-2022
Observation Band 1997 to 2022
Percent Surviving
100.00
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
0
20
40
60
80
100
120
Age
Original Curve
OG&E Proposal 40-R0.5
FEA Proposal 48-O1
Best Fit 106-O4
Currently Approved 48-O1

OKLAHOMA GAS AND ELECTRIC COMPANY

COMPUTATION OF FEA PROPOSED ANNUAL DEPRECIATION ACCRUAL AMOUNTS AND RATES
RELATED TO ELECTRIC PLANT AS OF DECEMBER 31, 2022

PRODUCTION AND OTHER PRODUCTION REALLOCATED WITHIN EACH GROUP
ALL FUNCTIONS REALLOCATED WITHIN EACH GROUP
TRANSMISSION, DISTRIBUTION, AND GENERAL RESERVE PER BOOK

	Account	Plant Balance	Reserve	Net Salvage %	Net Salvage Amount	Unaccrued Balance	Remaining Life	Accrual Amount	Annual Accrual Rate
	(1)	(2)	(3)	(4)	(5) = (2) x (4)	(6) = (2) - (3) - (5)	(7)	(8) = (6)/(7)	(9) = (8)/(2)
	INTANGIBLE PLANT								
302	FRANCHISES AND CONSENTS	1,551,188	830,287	0.00%	0	720,901	10.85	66,413	4.28%
303.1	MISCELLANEOUS INTANGIBLE PLANT - SOFTWARE - 5-YEAR	113,907,272	43,455,282	0.00%	0	70,451,990	2.99	23,579,985	20.70%
303.2	MISCELLANEOUS INTANGIBLE PLANT - SOFTWARE - 10-YEAR								
	FULLY DEPRECIATED	73,273,842	73,273,842						
	AMORTIZED	148,826,972	79,876,570	0.00%	0	68,950,402	4.55	15,153,799	10.18%
	TOTAL SOFTWARE - 10-YEAR	222,100,814	153,150,411	0.00%	0	68,950,402		15,153,799	6.82%
	TOTAL INTANGIBLE PLANT	**337,559,274**	**197,435,981**		**0**	**140,123,293**		**38,800,197**	**11.49%**
	STEAM PRODUCTION PLANT								
310.2	RIGHTS OF WAY	28,509	28,227	0.00%	0	282	1.00	282	0.99%
	HORSESHOE LAKE 6	78,916	77,193	0.00%	0	1,723	8.00	215	0.27%
	SEMINOLE 1	18,934	15,072	0.00%	0	3,862	20.00	193	1.02%
	MUSKOGEE 4	813,704	412,488	0.00%	0	401,216	22.00	18,237	2.24%
	SOONER 1	940,063	532,980		0	407,083		18,928	2.01%
	TOTAL RIGHTS OF WAY								
311	STRUCTURES AND IMPROVEMENTS								
	HORSESHOE LAKE 6	201,906	164,977	-5.00%	(10,095)	47,024	1.00	47,024	23.29%
	HORSESHOE LAKE 7	2,807,502	2,910,257	-5.00%	(140,375)	37,621	2.00	18,810	0.67%
	HORSESHOE LAKE 8	28,618,552	20,851,689	-5.00%	(1,430,928)	9,197,791	4.97	1,851,747	6.47%
	SEMINOLE 1	26,448,745	18,044,643	-5.00%	(1,322,437)	9,726,539	7.89	1,232,634	4.66%
	SEMINOLE 2	3,799,406	2,384,183	-5.00%	(189,970)	1,605,193	9.81	163,672	4.31%
	SEMINOLE 3	8,154,375	6,535,996	-5.00%	(407,719)	2,026,098	11.68	173,451	2.13%
	MUSKOGEE 4	69,811,751	26,416,417	-5.00%	(3,490,588)	46,885,922	19.32	2,427,002	3.48%
	MUSKOGEE 5	7,451,169	4,696,822	-5.00%	(372,558)	3,126,905	20.05	155,957	2.09%
	MUSKOGEE 6	58,954,946	33,076,243	-5.00%	(2,947,747)	28,826,451	25.41	1,134,626	1.92%
	SOONER 1	151,399,419	72,276,901	-5.00%	(7,569,971)	86,692,489	21.06	4,116,548	2.72%
	SOONER 2	12,655,397	9,102,955	-5.00%	(632,770)	4,185,212	21.73	192,644	1.52%
	RIVER VALLEY 1	61,139,973	35,282,810	-5.00%	(3,056,999)	28,914,161	24.61	1,174,856	1.92%
	RIVER VALLEY 2	54,656	23,723	-5.00%	(2,733)	33,666	24.83	1,356	2.48%
	TOTAL STRUCTURES AND IMPROVEMENTS	431,497,798	231,767,617		(21,574,890)	221,305,071		12,690,325	2.94%
312	BOILER PLANT EQUIPMENT								
	HORSESHOE LAKE 6	20,996,286	19,730,210	-5.00%	(1,049,814)	2,315,890	1.00	2,315,890	11.03%
	HORSESHOE LAKE 7	15,246,822	15,143,144	-5.00%	(762,341)	866,019	2.00	433,010	2.84%
	HORSESHOE LAKE 8	22,959,876	18,818,872	-5.00%	(1,147,994)	5,288,998	4.94	1,070,049	4.66%
	SEMINOLE 1	59,087,267	40,108,209	-5.00%	(2,954,363)	21,933,421	7.87	2,786,522	4.72%
	SEMINOLE 2	49,105,513	32,903,936	-5.00%	(2,455,276)	18,656,853	9.77	1,909,893	3.89%
	SEMINOLE 3	68,970,927	46,127,446	-5.00%	(3,448,546)	26,292,028	11.64	2,257,821	3.27%
	MUSKOGEE 4	127,239,724	61,829,847	-5.00%	(6,361,986)	71,771,863	19.02	3,773,595	2.97%
	MUSKOGEE 5	118,189,382	63,003,471	-5.00%	(5,909,469)	61,095,380	19.88	3,073,697	2.60%
	MUSKOGEE 6	301,242,531	157,469,091	-5.00%	(15,062,127)	158,835,566	25.02	6,348,556	2.11%
	SOONER 1	549,266,125	188,313,664	-5.00%	(27,463,306)	388,415,767	20.97	18,518,884	3.37%
	SOONER 2	369,243,742	131,812,424	-5.00%	(18,462,187)	255,893,505	21.82	11,724,981	3.18%
	RIVER VALLEY 1	221,271,646	122,959,002	-5.00%	(11,063,582)	109,376,226	24.24	4,511,533	2.04%
	RIVER VALLEY 2	121,987,581	70,580,724	-5.00%	(6,099,379)	57,506,236	24.20	2,376,576	1.95%
	TOTAL BOILER PLANT EQUIPMENT	2,044,807,422	968,800,040		(102,240,371)	1,178,247,753		61,101,006	2.99%
314	TURBOGENERATOR UNITS								
	HORSESHOE LAKE 6	10,842,200	9,455,483	-5.00%	(542,110)	1,928,827	1.00	1,928,827	17.79%
	HORSESHOE LAKE 7	10,985,415	10,662,444	-5.00%	(549,271)	872,242	2.00	436,121	3.97%
	HORSESHOE LAKE 8	29,108,074	21,970,062	-5.00%	(1,455,404)	8,593,415	4.91	1,751,851	6.02%
	SEMINOLE 1	32,468,391	24,503,463	-5.00%	(1,623,420)	9,588,347	7.72	1,242,155	3.83%
	SEMINOLE 2	44,903,852	28,389,077	-5.00%	(2,245,193)	18,759,968	9.57	1,961,070	4.37%
	SEMINOLE 3	32,494,674	21,973,682	-5.00%	(1,624,734)	12,145,726	11.44	1,061,754	3.27%
	MUSKOGEE 4	71,581,697	29,660,896	-5.00%	(3,579,085)	45,499,886	18.64	2,440,439	3.41%
	MUSKOGEE 5	52,439,504	29,487,119	-5.00%	(2,621,975)	25,574,360	18.95	1,349,707	2.57%
	MUSKOGEE 6	94,009,241	44,087,092	-5.00%	(4,700,462)	54,622,611	23.61	2,313,785	2.46%
	SOONER 1	43,344,918	23,197,755	-5.00%	(2,167,246)	22,314,409	19.78	1,128,117	2.60%
	SOONER 2	49,136,488	24,917,784	-5.00%	(2,456,824)	26,675,529	20.54	1,298,891	2.64%
	RIVER VALLEY 1	53,028,756	24,948,204	-5.00%	(2,651,438)	30,731,989	23.00	1,336,447	2.52%
	RIVER VALLEY 2	30,735,122	16,284,031	-5.00%	(1,536,756)	15,987,847	22.79	701,401	2.28%
	TOTAL TURBOGENERATOR UNITS	555,078,332	309,537,092		(27,753,917)	273,295,156		18,950,563	3.41%
315	ACCESSORY ELECTRIC EQUIPMENT								
	HORSESHOE LAKE 6	3,348,719	3,031,260	-5.00%	(167,436)	484,895	1.00	484,895	14.48%
	HORSESHOE LAKE 7	2,377,714	2,146,125	-5.00%	(118,886)	350,475	2.00	175,238	7.37%
	HORSESHOE LAKE 8	2,799,956	2,599,204	-5.00%	(139,998)	340,749	4.94	68,982	2.46%
	SEMINOLE 1	4,042,504	3,331,070	-5.00%	(202,125)	913,559	4.45	205,517	5.08%
	SEMINOLE 2	3,287,888	1,838,624	-5.00%	(164,394)	1,613,658	9.81	164,505	5.00%
	SEMINOLE 3	5,362,861	4,250,433	-5.00%	(268,143)	1,380,571	11.71	117,890	2.20%
	MUSKOGEE 4	34,848,214	20,036,281	-5.00%	(1,742,411)	16,554,344	18.98	871,993	2.50%
	MUSKOGEE 5	12,449,797	8,792,833	-5.00%	(622,490)	4,279,453	19.41	220,444	1.77%
	MUSKOGEE 6	44,124,866	28,632,906	-5.00%	(2,206,243)	17,698,203	24.77	714,468	1.62%
	SOONER 1	25,739,512	18,517,416	-5.00%	(1,286,976)	8,509,072	20.24	420,437	1.63%
	SOONER 2	13,215,686	9,604,513	-5.00%	(660,784)	4,271,957	21.03	203,123	1.54%
	RIVER VALLEY 1	41,676,296	23,634,689	-5.00%	(2,083,815)	20,125,422	24.49	821,727	1.97%
	RIVER VALLEY 2	1,565,529	221,238	-5.00%	(78,276)	1,422,568	25.50	55,788	3.56%
	TOTAL ACCESSORY ELECTRIC EQUIPMENT	194,839,542	126,636,594		(9,741,977)	77,944,925		4,525,007	2.32%
316	MISCELLANEOUS POWER PLANT EQUIPMENT								
	HORSESHOE LAKE 6	2,111,076	1,982,300	-5.00%	(105,554)	234,329	1.00	234,329	11.10%
	HORSESHOE LAKE 7	1,116,214	1,101,703	-5.00%	(55,811)	70,321	2.00	35,161	3.15%
	HORSESHOE LAKE 8	3,830,753	1,927,573	-5.00%	(191,538)	2,094,718	4.41	474,851	12.40%
	SEMINOLE 1	4,188,322	3,192,087	-5.00%	(209,416)	1,205,651	4.78	252,281	6.02%
	SEMINOLE 2	21,726	22,514	-5.00%	(1,086)	299	1.38	216	0.99%
	SEMINOLE 3	300,618	188,389	-5.00%	(15,031)	127,260	8.58	14,829	4.93%
	MUSKOGEE 4	10,582,057	4,704,330	-5.00%	(529,103)	6,406,830	13.34	480,108	4.54%
	MUSKOGEE 5	703,624	570,503	-5.00%	(35,181)	168,302	5.99	28,100	3.99%
	MUSKOGEE 6	4,642,616	4,009,306	-5.00%	(232,131)	865,440	6.72	128,713	2.77%
	SOONER 1	9,176,698	4,189,719	-5.00%	(458,835)	5,445,814	13.71	397,077	4.33%
	SOONER 2	2,423,736	1,962,460	-5.00%	(121,187)	582,463	6.69	87,112	3.59%
	RIVER VALLEY 1	20,631,345	14,784,100	-5.00%	(1,031,567)	6,878,812	9.52	722,803	3.50%
	RIVER VALLEY 2	32,329	1,772	-5.00%	(1,616)	32,174	20.94	1,536	4.75%
	POWER SUPPLY SERVICES	2,858,584	859,225	-5.00%	(142,929)	2,142,288	18.00	118,986	4.16%
	TOTAL MISCELLANEOUS POWER PLANT EQUIPMENT	62,619,698	39,495,981		(3,130,985)	26,254,702		2,976,101	4.75%
	TOTAL STEAM PRODUCTION PLANT	**3,289,782,854**	**1,676,770,304**		**(164,442,140)**	**1,777,454,690**		**100,261,931**	**3.05%**
	OTHER PRODUCTION PLANT								
340.2	RIGHTS OF WAY								
	MUSTANG CTs	10,815	8,436	0.00%	0	2,379	32.00	74	0.69%

OKLAHOMA GAS AND ELECTRIC COMPANY

COMPUTATION OF FEA PROPOSED ANNUAL DEPRECIATION ACCRUAL AMOUNTS AND RATES
RELATED TO ELECTRIC PLANT AS OF DECEMBER 31, 2022

PRODUCTION AND OTHER PRODUCTION REALLOCATED WITHIN EACH GROUP
ALL FUNCTIONS REALLOCATED WITHIN EACH GROUP
TRANSMISSION, DISTRIBUTION, AND GENERAL RESERVE PER BOOK

	Account	Plant Balance	Reserve	Net Salvage %	Net Salvage Amount	Unaccrued Balance	Remaining Life	Accrual Amount	Annual Accrual Rate
	(1)	(2)	(3)	(4)	(5) = (2) x (4)	(6) = (2) - (3) - (5)	(7)	(8) = (6)/(7)	(9) = (8)/(2)
341	STRUCTURES AND IMPROVEMENTS								
	REDBUD 1	34,235,763	15,495,962	-5.00%	(1,711,788)	20,451,589	25.54	800,614	2.34%
	REDBUD 2	318,306	69,734	-5.00%	(15,915)	264,487	26.25	10,076	3.17%
	REDBUD 3	265,177	62,100	-5.00%	(13,259)	216,336	26.22	8,251	3.11%
	REDBUD 4	288,878	72,117	-5.00%	(14,444)	231,205	26.18	8,831	3.06%
	HORSESHOE LAKE 9 AND 10	1,201,774	873,050	-5.00%	(60,089)	388,813	12.65	30,730	2.56%
	TINKER	1,781,246	1,396,853	-5.00%	(89,062)	473,455	3.00	157,818	8.86%
	MCCLAIN GAS 1	11,750,959	4,894,114	-5.00%	(587,548)	7,444,393	12.65	588,369	5.01%
	MCCLAIN GAS 2	1,788,683	931,122	-5.00%	(89,434)	946,995	23.04	41,105	2.30%
	MCCLAIN STEAM 1	1,070,785	493,530	-5.00%	(53,539)	630,794	22.85	27,607	2.58%
	FRONTIER 1	8,395,038	5,192,401	-5.00%	(419,752)	3,622,389	22.05	164,266	1.96%
	MUSTANG CTs	43,721,045	9,565,462	-5.00%	(2,186,052)	36,341,636	30.25	1,201,260	2.75%
	TOTAL STRUCTURES AND IMPROVEMENTS	104,817,655	39,046,446		(5,240,883)	71,012,092		3,038,927	2.90%
341	STRUCTURES AND IMPROVEMENTS - WIND								
	CENTENNIAL	3,014,587	1,460,899	-5.00%	(150,729)	1,704,418	13.26	128,542	4.26%
	OU SPIRIT	5,228,646	2,566,409	-5.00%	(261,432)	2,923,669	15.84	184,594	3.53%
	CROSSROADS	11,538,638	4,692,913	-5.00%	(576,932)	7,422,657	18.53	400,534	3.47%
	TOTAL STRUCTURES AND IMPROVEMENTS - WIND	19,781,871	8,720,220		(989,094)	12,050,744		713,671	3.61%
341	STRUCTURES AND IMPROVEMENTS - SOLAR	4,465,531	568,873	-2.00%	(89,311)	3,985,969	21.06	189,304	4.24%
342	FUEL HOLDERS, PRODUCERS AND ACCESSORIES								
	REDBUD 1	12,117,606	5,638,479	-5.00%	(605,880)	7,085,007	26.18	270,579	2.23%
	REDBUD 2	690,651	324,592	-5.00%	(34,533)	400,592	26.17	15,306	2.22%
	REDBUD 3	691,292	324,849	-5.00%	(34,565)	401,007	26.17	15,322	2.22%
	REDBUD 4	719,786	331,808	-5.00%	(35,989)	423,967	26.20	16,184	2.25%
	TINKER	167,151	157,707	-5.00%	(8,358)	17,802	3.00	5,938	3.55%
	MCCLAIN GAS 1	354,085	197,079	-5.00%	(17,704)	174,711	23.18	7,536	2.13%
	MCCLAIN GAS 2	260,457	139,409	-5.00%	(13,023)	134,071	23.20	5,780	2.22%
	FRONTIER 1	978,948	792,666	-5.00%	(48,947)	235,230	20.71	11,361	1.16%
	MUSTANG CTs	7,657,023	1,303,302	-5.00%	(382,851)	6,736,573	31.56	213,481	2.79%
	TOTAL FUEL HOLDERS, PRODUCERS AND ACCESSORIES	23,636,999	9,209,890		(1,181,850)	15,608,958		561,487	2.38%
343	PRIME MOVERS								
	REDBUD 1	93,479,687	38,137,627	-5.00%	(4,673,984)	60,016,044	23.30	2,576,294	2.76%
	REDBUD 2	67,426,482	6,517,884	-5.00%	(3,371,324)	64,279,923	25.28	2,542,815	3.77%
	REDBUD 3	67,539,780	30,341,013	-5.00%	(3,376,989)	40,575,756	22.97	1,766,259	2.62%
	REDBUD 4	61,546,829	27,971,692	-5.00%	(3,077,341)	36,652,478	22.94	1,597,532	2.60%
	HORSESHOE LAKE 9 AND 10	8,902,621	5,498,734	-5.00%	(445,131)	3,849,018	11.75	327,585	3.68%
	TINKER	4,550,058	4,777,561	-5.00%	(227,503)	0	3.00	0	0.00%
	MCCLAIN GAS 1	110,863,190	55,411,522	-5.00%	(5,543,160)	60,994,827	20.61	2,959,658	2.67%
	MCCLAIN GAS 2	105,433,620	57,103,505	-5.00%	(5,271,681)	53,601,796	20.27	2,644,031	2.51%
	MCCLAIN STEAM 1	52,753,857	31,174,130	-5.00%	(2,637,693)	24,217,420	19.83	1,221,238	2.31%
	FRONTIER 1	65,667,528	46,931,663	-5.00%	(3,283,376)	22,019,242	15.85	1,388,959	2.12%
	MUSTANG CTs	263,333,261	47,683,503	-5.00%	(13,166,663)	228,816,421	28.59	8,002,795	3.04%
	TOTAL PRIME MOVERS	901,496,913	351,548,833		(45,074,846)	595,022,925		25,027,166	2.78%
	LTSA								
343.1	6-YEAR								
	REDBUD 1	6,096,068	4,487,291	0.00%	0	1,608,777	2.50	643,511	10.56%
	REDBUD 2	13,864,899	10,205,897	0.00%	0	3,659,002	2.50	1,463,601	10.56%
	REDBUD 3	13,998,897	10,304,532	0.00%	0	3,694,365	2.50	1,477,746	10.56%
	REDBUD 4	5,993,168	4,411,547	0.00%	0	1,581,621	2.50	632,648	10.56%
	MCCLAIN GAS 1	15,798,603	11,629,289	0.00%	0	4,169,314	2.50	1,667,726	10.56%
	MCCLAIN GAS 2	15,810,675	11,638,175	0.00%	0	4,172,500	2.50	1,669,000	10.56%
	Total 6 - YR	71,562,310	52,676,731		0	18,885,579		7,554,232	10.56%
343.2	20-YEAR								
	REDBUD 1	1,490,678	1,363,765	0.00%	0	126,913	5.50	23,075	1.55%
	REDBUD 2	1,490,678	1,363,765	0.00%	0	126,913	5.50	23,075	1.55%
	REDBUD 3	1,490,678	1,363,765	0.00%	0	126,913	5.50	23,075	1.55%
	REDBUD 4	1,490,678	1,363,765	0.00%	0	126,913	5.50	23,075	1.55%
	Total 20-Yr	5,962,712	5,455,060		0	507,652		92,300	1.55%
343.3	30-YEAR								
	MCCLAIN GAS 1	349,749	272,160	0.00%	0	77,589	11.50	6,747	1.93%
	MCCLAIN GAS 2	343,590	267,368	0.00%	0	76,222	11.50	6,628	1.93%
	Total 30-YR	693,339	539,528		0	153,811		13,375	1.93%
	TOTAL LTSA	78,218,361	58,671,319		0	19,547,042		7,659,907	9.79%
	TOTAL ACCOUNT 343	979,715,274	410,220,152		(45,074,846)	614,569,967		32,687,072	3.34%
344	GENERATORS								
	REDBUD 1	717,218	300,669	-5.00%	(35,861)	452,410	24.98	18,111	2.53%
	REDBUD 3	23,199	8,658	-5.00%	(1,160)	15,701	25.17	624	2.69%
	REDBUD 4	23,035	8,597	-5.00%	(1,152)	15,590	25.17	619	2.69%
	HORSESHOE LAKE 9 AND 10	36,135,688	26,258,616	-5.00%	(1,806,784)	11,683,856	12.50	935,066	2.59%
	TINKER	3,366,088	3,163,786	-5.00%	(168,304)	370,606	3.00	123,535	3.67%
	FRONTIER 1	8,118,041	6,198,140	-5.00%	(405,902)	2,325,803	20.99	110,817	1.37%
	MUSTANG CTs	31,405,980	5,354,001	-5.00%	(1,570,299)	27,622,278	29.89	924,111	2.94%
	TOTAL GENERATORS	79,789,249	41,292,468		(3,989,462)	42,486,244		2,112,883	2.65%
344	GENERATORS - WIND								
	CENTENNIAL	185,423,873	104,962,860	-5.00%	(9,271,194)	89,732,207	12.55	7,149,157	3.86%
	OU SPIRIT	237,888,863	113,919,093	-5.00%	(11,894,443)	135,864,213	15.03	9,042,499	3.80%
	CROSSROADS	349,390,682	139,614,057	-5.00%	(17,469,534)	227,246,159	17.45	13,025,498	3.73%
	TOTAL GENERATORS - WIND	772,703,418	358,496,010		(38,635,171)	452,842,579		29,217,154	3.78%
344	GENERATORS - SOLAR	39,650,005	6,030,438	0.00%	0	33,619,567	19.51	1,723,522	4.35%
345	ACCESSORY ELECTRIC EQUIPMENT								
	REDBUD 1	13,173,539	5,849,645	-5.00%	(658,677)	7,982,571	25.88	308,434	2.34%
	REDBUD 2	9,557,253	4,349,658	-5.00%	(477,863)	5,685,457	25.86	219,848	2.30%
	REDBUD 3	9,330,337	4,276,678	-5.00%	(466,517)	5,520,176	25.85	213,535	2.29%
	REDBUD 4	9,593,118	4,377,380	-5.00%	(479,656)	5,695,394	25.86	220,250	2.30%
	HORSESHOE LAKE 9 AND 10	4,874,594	3,716,392	-5.00%	(243,730)	1,401,932	12.72	110,192	2.26%
	TINKER	3,078,637	3,131,897	-5.00%	(153,932)	100,671	3.00	33,557	1.09%
	MCCLAIN GAS 1	7,224,119	3,415,519	-5.00%	(361,206)	4,169,806	23.10	180,512	2.50%
	MCCLAIN GAS 2	6,049,899	3,312,275	-5.00%	(302,495)	3,040,119	22.95	132,441	2.19%
	MCCLAIN STEAM 1	3,740,436	2,112,285	-5.00%	(187,022)	1,815,172	22.90	79,250	2.12%
	FRONTIER 1	7,857,363	5,708,790	-5.00%	(392,868)	2,541,441	22.62	112,347	1.43%
	MUSTANG CTs	25,263,658	4,454,195	-5.00%	(1,263,183)	22,072,646	31.10	709,672	2.81%
	TOTAL ACCESSORY ELECTRIC EQUIPMENT	99,742,953	44,704,714		(4,987,148)	60,025,387		2,320,037	2.33%
345	ACCESSORY ELECTRIC EQUIPMENT - WIND								
	CENTENNIAL	2,324,844	690,112	-5.00%	(116,242)	1,750,974	12.82	136,592	5.88%
	OU SPIRIT	4,871,019	893,471	-5.00%	(243,551)	4,221,099	15.44	273,302	5.61%
	CROSSROADS	45,877,900	17,248,302	-5.00%	(2,293,895)	30,923,493	16.64	1,858,090	4.05%
	TOTAL ACCESSORY ELECTRIC EQUIPMENT - WIND	53,073,763	18,831,884		(2,653,688)	36,895,567		2,267,984	4.27%

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	Account	Plant Balance	Reserve	Net Salvage %	Net Salvage Amount	Unaccrued Balance	Remaining Life	Accrual Amount	Annual Accrual Rate
	(1)	(2)	(3)	(4)	(5) = (2) x (4)	(6) = (2) - (3) - (5)	(7)	(8) = (6)/(7)	(9) = (8)/(2)
345	ACCESSORY ELECTRIC EQUIPMENT - SOLAR	9,653,560	1,233,932	0.00%	0	8,419,628	20.96	401,710	4.16%
346	MISCELLANEOUS POWER PLANT EQUIPMENT								
	REDBUD 1	2,774,340	1,175,800	-5.00%	(138,717)	1,737,257	16.15	107,581	3.88%
	REDBUD 2	18,098	8,682	-5.00%	(905)	10,321	15.30	675	3.73%
	REDBUD 3	13,800	3,551	-5.00%	(690)	10,939	18.69	585	4.24%
	REDBUD 4	20,045	6,139	-5.00%	(1,002)	14,908	18.15	821	4.10%
	HORSESHOE LAKE 9 AND 10	1,033,095	833,176	-5.00%	(51,655)	251,574	8.48	29,663	2.87%
	TINKER	61,581	27,693	-5.00%	(3,079)	36,967	3.00	12,322	20.01%
	MCCLAIN GAS 1	5,975,450	3,511,194	-5.00%	(298,773)	2,763,029	12.94	213,582	3.57%
	FRONTIER 1	5,299,221	3,854,836	-5.00%	(264,961)	1,709,347	10.61	161,098	3.04%
	MUSTANG CTs	7,704,785	4,400,568	-5.00%	(385,239)	3,689,456	13.65	270,231	3.51%
	TOTAL MISCELLANEOUS POWER PLANT EQUIPMENT	22,900,415	13,821,639		(1,145,021)	10,223,797		796,559	3.48%
346	MISCELLANEOUS POWER PLANT EQUIPMENT - WIND								
	CENTENNIAL	885,860	386,316	-3.00%	(26,576)	526,120	11.43	46,045	5.20%
	OU SPIRIT	658,794	124,290	-3.00%	(19,764)	554,268	14.57	38,030	5.77%
	CROSSROADS	562,592	139,751	-3.00%	(16,878)	439,719	15.73	27,951	4.97%
	TOTAL MISCELLANEOUS POWER PLANT EQUIPMENT - WIND	2,107,246	650,357		(63,217)	1,520,107		112,026	5.32%
	TOTAL OTHER PRODUCTION PLANT	**2,212,048,754**	**952,835,459**		**(104,049,690)**	**1,363,262,985**		**76,142,411**	**3.44%**
	TRANSMISSION PLANT								
350.2	LAND RIGHTS	131,963,405	26,357,019	0.00%	0	105,606,386	67.83	1,556,863	1.18%
352.0	STRUCTURES AND IMPROVEMENTS	9,042,721	2,184,920	-10.00%	(904,272)	7,762,073	60.83	127,611	1.41%
353.0	STATION EQUIPMENT	954,383,732	202,724,022	-20.00%	(190,876,746)	942,536,456	47.48	19,851,035	2.08%
354.0	TOWERS AND FIXTURES	173,271,523	60,653,413	-20.00%	(34,654,305)	147,272,414	54.02	2,726,420	1.57%
355.0	POLES AND FIXTURES	1,117,698,049	284,310,845	-65.00%	(726,503,732)	1,559,890,936	67.89	22,975,655	2.06%
356.0	OVERHEAD CONDUCTORS AND DEVICES	693,683,857	234,327,621	-55.00%	(381,526,121)	840,882,358	60.31	13,942,116	2.01%
358.0	UNDERGROUND CONDUCTORS AND DEVICES	110,494	112,091	0.00%	0	(1,597)	6.76	(236)	0.00%
	TOTAL TRANSMISSION PLANT	**3,080,153,781**	**810,669,931**		**(1,334,465,176)**	**3,603,949,026**		**61,179,465**	**1.99%**
	DISTRIBUTION PLANT								
360.2	LAND RIGHTS	6,459,925	1,856,485	0.00%	0	4,603,440	64.28	71,613	1.11%
361.0	STRUCTURES AND IMPROVEMENTS	7,971,930	2,384,771	-10.00%	(797,193)	6,384,352	52.94	120,585	1.51%
362.0	STATION EQUIPMENT	877,615,427	199,661,000	-35.00%	(307,165,399)	985,119,827	52.49	18,768,255	2.14%
363.0	STORAGE BATTERY	851,046	173,818	0.00%	0	677,228	11.52	58,780	6.91%
364.0	POLES, TOWERS AND FIXTURES	786,956,009	304,180,726	-65.00%	(511,521,406)	994,296,689	47.92	20,748,058	2.64%
365.0	OVERHEAD CONDUCTORS AND DEVICES	1,101,396,821	231,506,879	-55.00%	(605,768,252)	1,475,658,194	57.36	25,727,085	2.34%
366.0	UNDERGROUND CONDUIT	335,409,588	88,577,525	-25.00%	(83,852,397)	330,684,460	53.10	6,227,440	1.86%
367.0	UNDERGROUND CONDUCTORS AND DEVICES	971,654,868	280,382,265	-55.00%	(534,410,177)	1,225,682,780	45.96	26,665,804	2.74%
368.0	LINE TRANSFORMERS	670,460,796	128,190,027	-65.00%	(435,799,517)	978,070,286	40.18	24,339,329	3.63%
369.0	SERVICES	266,118,193	149,026,905	-35.00%	(93,141,368)	210,232,656	45.47	4,623,710	1.74%
	METERS								
370.0	METERS - SMART METERS	184,961,833	93,760,342	-10.00%	(18,496,183)	109,697,674	7.52	14,596,513	7.89%
370.1	METERS - METERING EQUIPMENT	39,490,060	26,311,722	-10.00%	(3,949,006)	17,127,344	21.22	807,233	2.04%
	TOTAL METERS	224,451,893	120,072,064		(22,445,189)	126,825,019		15,403,746	6.86%
371.0	INSTALLATIONS ON CUSTOMERS' PREMISES	57,414,311	42,421,298	0.00%	0	14,993,013	6.45	2,324,969	4.05%
373.0	STREET LIGHTING AND SIGNAL SYSTEMS	316,836,035	47,184,922	-55.00%	(174,259,819)	443,910,932	26.18	16,957,364	5.35%
	TOTAL DISTRIBUTION PLANT	**5,623,596,842**	**1,595,618,685**		**(2,769,160,718)**	**6,797,138,875**		**162,036,739**	**2.88%**
	GENERAL PLANT								
389.2	LAND RIGHTS	178,598	88,692	0.00%	0	89,906	23.96	3,753	2.10%
390.0	STRUCTURES AND IMPROVEMENTS	228,678,766	64,711,425	-5.00%	(11,433,938)	175,401,279	39.49	4,441,385	1.94%
	OFFICE FURNITURE AND EQUIPMENT								
391.0	OFFICE FURNITURE AND EQUIPMENT	19,379,183	5,810,415	0.00%	0	13,568,767	6.95	1,951,594	10.07%
391.1	COMPUTER EQUIPMENT	74,525,311	42,563,446	0.00%	0	31,961,865	2.19	14,591,706	19.58%
	TOTAL OFFICE AND FURNITURE EQUIPMENT	93,904,494	48,373,862		0	45,530,632		16,543,300	17.62%
	TRANSPORTATION EQUIPMENT				0				
392.1	CARS AND TRUCKS	27,059,844	14,972,932	10.00%	2,705,984	9,380,928	4.97	1,887,734	6.98%
392.5	HEAVY TRUCKS	78,137,483	32,340,212	10.00%	7,813,748	37,983,523	8.05	4,720,062	6.04%
392.6	TRAILERS	10,015,704	3,582,039	10.00%	1,001,570	5,432,095	17.91	303,320	3.03%
	TOTAL TRANSPORTATION EQUIPMENT	115,213,031	50,895,183		11,521,303	52,796,545		6,911,115	6.00%
393.0	STORES EQUIPMENT	1,198,089	208,600	0.00%	0	989,489	16.95	58,387	4.87%
394.0	TOOLS, SHOP AND GARAGE EQUIPMENT	28,819,877	5,855,631	0.00%	0	22,964,246	18.79	1,222,160	4.24%
395.0	LABORATORY EQUIPMENT	11,310,063	4,348,664	0.00%	0	6,961,399	9.64	722,112	6.38%
396.0	POWER OPERATED EQUIPMENT	16,256,047	6,536,704	15.00%	2,438,407	7,280,936	9.88	737,212	4.54%
397.0	COMMUNICATION EQUIPMENT	34,537,031	19,729,114	0.00%	0	14,807,917	4.17	3,547,456	10.27%
398.0	MISCELLANEOUS EQUIPMENT	12,469,947	4,862,439	0.00%	0	7,607,508	13.80	551,169	4.42%
	TOTAL GENERAL PLANT	**542,565,943**	**205,610,313**		**2,525,772**	**334,429,858**		**34,738,050**	**6.40%**
	TOTAL DEPRECIABLE ELECTRIC PLANT	**15,085,707,448**	**5,438,940,672**		**(4,369,591,952)**	**14,016,358,727**		**473,158,793**	**3.14%**

NOTES:

1) ACCOUNTS BELOW WILL HAVE THE FOLLOWING RATES .

303.4 MISCELLANEOUS INTANGIBLE PLANT - SAP S4 SOFTWARE	6.67%
311-316 NEW UNITS AT HORSESHOE LAKE ARE PROJECTED TO HAVE A RATE OF	3.00%
358 WHEN PLANT IS ADDED WHERE THE PLANT BALANCE IS GREATER THAN ACCUMULATED DEPRECIATION PROPOSED RATE IS	2.22%

OKLAHOMA GAS AND ELECTRIC COMPANY

COMPARISON OF OG&E AND FEA PROPOSED ANNUAL DEPRECIATION ACCRUAL AMOUNTS AND RATES
RELATED TO ELECTRIC PLANT AS OF DECEMBER 31, 2022
PRODUCTION AND OTHER PRODUCTION RESERVE REALLOCATED WITHIN GROUP
TRANSMISSION, DISTRIBUTION, AND GENERAL RESERVE PER BOOK

			Current Oklahoma Accrual		OG&E Proposed Accrual			FEA Proposed Accrual		
	Account	Plant Balance	Rate	Amount	Rate	Amount	Difference	Rate	Amount	Difference
	(1)	(2)	(3)	(4) = (2) x (3)	(5)	(6) = (2) x (5)	(7) = (6) - (4)	(8)	(9) = (2) x (8)	(10) = (9) - (6)
	INTANGIBLE PLANT									
302	FRANCHISES AND CONSENTS	1,551,188	4.48%	69,493	4.28%	66,413	(3,081)	4.28%	66,413	0
303.1	MISCELLANEOUS INTANGIBLE PLANT - SOFTWARE - 5-YEAR	113,907,272	15.87%	18,077,084	20.70%	23,579,985	5,502,901	20.70%	23,579,985	0
303.2	MISCELLANEOUS INTANGIBLE PLANT - SOFTWARE - 10-YEAR									
	FULLY DEPRECIATED	73,273,842								
	AMORTIZED	148,826,972	7.37%	10,968,548	10.18%	15,153,799	4,185,251	10.18%	15,153,799	0
	TOTAL SOFTWARE - 10-YEAR	222,100,814		10,968,548		15,153,799	4,185,251		15,153,799	0
	TOTAL INTANGIBLE PLANT	**337,559,274**	**8.63%**	**29,115,125**	**11.49%**	**38,800,197**	**9,685,072**	**11.49%**	**38,800,197**	**0**
	STEAM PRODUCTION PLANT									
310.2	RIGHTS OF WAY									
	HORSESHOE LAKE 6	28,509	0.99%	282	0.99%	282	(0)	0.99%	282	0
	SEMINOLE 1	78,916	2.11%	1,665	0.27%	215	(1,450)	0.27%	215	0
	MUSKOGEE 4	18,934	2.68%	507	1.02%	193	(314)	1.02%	193	0
	SOONER 1	813,704	3.18%	25,876	2.24%	18,237	(7,639)	2.24%	18,237	0
	TOTAL RIGHTS OF WAY	940,063	3.01%	28,331	2.01%	18,928	(9,403)	2.01%	18,928	0
311	STRUCTURES AND IMPROVEMENTS									
	HORSESHOE LAKE 6	201,906	23.29%	47,024	23.29%	47,024	0	23.29%	47,024	0
	HORSESHOE LAKE 7	2,807,502	0.67%	18,810	0.67%	18,810	0	0.67%	18,810	0
	HORSESHOE LAKE 8	28,618,552	7.67%	2,195,043	6.47%	1,851,747	(343,296)	6.47%	1,851,747	0
	SEMINOLE 1	26,448,745	4.07%	1,076,464	4.66%	1,232,634	156,170	4.66%	1,232,634	0
	SEMINOLE 2	3,799,406	3.43%	130,320	4.31%	163,672	33,352	4.31%	163,672	0
	SEMINOLE 3	8,154,375	1.70%	138,624	2.13%	173,451	34,826	2.13%	173,451	0
	MUSKOGEE 4	69,811,751	3.44%	2,401,524	3.48%	2,427,002	25,478	3.48%	2,427,002	0
	MUSKOGEE 5	7,451,169	1.99%	148,278	2.09%	155,957	7,678	2.09%	155,957	0
	MUSKOGEE 6	58,954,946	1.22%	719,250	1.92%	1,134,626	415,376	1.92%	1,134,626	0
	SOONER 1	151,399,419	2.22%	3,361,067	2.72%	4,116,548	755,481	2.72%	4,116,548	0
	SOONER 2	12,655,397	1.13%	143,006	1.52%	192,644	49,638	1.52%	192,644	0
	RIVER VALLEY 1	61,139,973	0.36%	220,104	1.92%	1,174,856	954,752	1.92%	1,174,856	0
	RIVER VALLEY 2	54,656	0.25%	137	2.48%	1,356	1,219	2.48%	1,356	0
	TOTAL STRUCTURES AND IMPROVEMENTS	431,497,798	2.46%	10,599,652	2.94%	12,690,325	2,090,674	2.94%	12,690,325	0
312	BOILER PLANT EQUIPMENT									
	HORSESHOE LAKE 6	20,996,286	11.03%	2,315,890	11.03%	2,315,890	0	11.03%	2,315,890	0
	HORSESHOE LAKE 7	15,246,822	2.84%	433,010	2.84%	433,010	(0)	2.84%	433,010	0
	HORSESHOE LAKE 8	22,959,876	5.13%	1,177,842	4.66%	1,070,049	(107,793)	4.66%	1,070,049	0
	SEMINOLE 1	59,087,267	6.55%	3,870,216	4.72%	2,786,522	(1,083,694)	4.72%	2,786,522	0
	SEMINOLE 2	49,105,513	5.18%	2,543,666	3.89%	1,909,893	(633,773)	3.89%	1,909,893	0
	SEMINOLE 3	68,970,927	3.82%	2,634,689	3.27%	2,257,821	(376,868)	3.27%	2,257,821	0
	MUSKOGEE 4	127,239,724	3.77%	4,796,938	2.97%	3,773,595	(1,023,343)	2.97%	3,773,595	0
	MUSKOGEE 5	118,189,382	2.91%	3,439,311	2.60%	3,073,697	(365,614)	2.60%	3,073,697	0
	MUSKOGEE 6	301,242,531	1.83%	5,512,738	2.11%	6,348,556	835,817	2.11%	6,348,556	0
	SOONER 1	549,266,125	3.31%	18,180,709	3.37%	18,518,884	338,175	3.37%	18,518,884	0
	SOONER 2	369,243,742	2.94%	10,855,766	3.18%	11,724,981	869,215	3.18%	11,724,981	0
	RIVER VALLEY 1	221,271,646	0.43%	951,468	2.04%	4,511,533	3,560,065	2.04%	4,511,533	0
	RIVER VALLEY 2	121,987,581	0.47%	573,342	1.95%	2,376,576	1,803,234	1.95%	2,376,576	0
	TOTAL BOILER PLANT EQUIPMENT	2,044,807,422	2.80%	57,285,584	2.99%	61,101,006	3,815,422	2.99%	61,101,006	0
314	TURBOGENERATOR UNITS									
	HORSESHOE LAKE 6	10,842,200	17.79%	1,928,827	17.79%	1,928,827	0	17.79%	1,928,827	0
	HORSESHOE LAKE 7	10,985,415	3.97%	436,121	3.97%	436,121	0	3.97%	436,121	0
	HORSESHOE LAKE 8	29,108,074	9.57%	2,785,643	6.02%	1,751,851	(1,033,792)	6.02%	1,751,851	0
	SEMINOLE 1	32,468,391	3.72%	1,207,824	3.83%	1,242,155	34,331	3.83%	1,242,155	0
	SEMINOLE 2	44,903,852	4.59%	2,061,087	4.37%	1,961,070	(100,017)	4.37%	1,961,070	0
	SEMINOLE 3	32,494,674	2.39%	776,623	3.27%	1,061,754	285,132	3.27%	1,061,754	0
	MUSKOGEE 4	71,581,697	3.27%	2,340,721	3.41%	2,440,439	99,717	3.41%	2,440,439	0
	MUSKOGEE 5	52,439,504	2.14%	1,122,205	2.57%	1,349,707	227,501	2.57%	1,349,707	0
	MUSKOGEE 6	94,009,241	2.60%	2,444,240	2.46%	2,313,785	(130,455)	2.46%	2,313,785	0
	SOONER 1	43,344,918	1.83%	793,212	2.60%	1,128,117	334,905	2.60%	1,128,117	0
	SOONER 2	49,136,488	2.43%	1,194,017	2.64%	1,298,891	104,874	2.64%	1,298,891	0
	RIVER VALLEY 1	53,028,756	0.41%	217,418	2.52%	1,336,447	1,119,029	2.52%	1,336,447	0
	RIVER VALLEY 2	30,735,122	0.50%	153,676	2.28%	701,401	547,725	2.28%	701,401	0
	TOTAL TURBOGENERATOR UNITS	555,078,332	3.15%	17,461,614	3.41%	18,950,563	1,488,949	3.41%	18,950,563	0
315	ACCESSORY ELECTRIC EQUIPMENT									
	HORSESHOE LAKE 6	3,348,719	14.48%	484,895	14.48%	484,895	0	14.48%	484,895	0
	HORSESHOE LAKE 7	2,377,714	7.37%	175,238	7.37%	175,238	0	7.37%	175,238	0
	HORSESHOE LAKE 8	2,799,956	4.26%	119,278	2.46%	68,982	(50,296)	2.46%	68,982	0
	SEMINOLE 1	4,042,504	3.67%	148,360	5.08%	205,517	57,157	5.08%	205,517	0
	SEMINOLE 2	3,287,888	7.16%	235,413	5.00%	164,505	(70,908)	5.00%	164,505	0
	SEMINOLE 3	5,362,861	1.82%	97,604	2.20%	117,890	20,286	2.20%	117,890	0
	MUSKOGEE 4	34,848,214	3.00%	1,045,446	2.50%	871,993	(173,453)	2.50%	871,993	0
	MUSKOGEE 5	12,449,797	1.68%	209,157	1.77%	220,444	11,288	1.77%	220,444	0
	MUSKOGEE 6	44,124,866	1.27%	560,386	1.62%	714,468	154,082	1.62%	714,468	0
	SOONER 1	25,739,512	1.27%	326,892	1.63%	420,437	93,545	1.63%	420,437	0
	SOONER 2	13,215,686	1.58%	208,808	1.54%	203,123	(5,685)	1.54%	203,123	0
	RIVER VALLEY 1	41,676,296	0.28%	116,694	1.97%	821,727	705,033	1.97%	821,727	0
	RIVER VALLEY 2	1,565,529	1.13%	17,690	3.56%	55,788	38,098	3.56%	55,788	0
	TOTAL ACCESSORY ELECTRIC EQUIPMENT	194,839,542	1.92%	3,745,859	2.32%	4,525,007	779,148	2.32%	4,525,007	0
316	MISCELLANEOUS POWER PLANT EQUIPMENT									
	HORSESHOE LAKE 6	2,111,076	11.10%	234,329	11.10%	234,329	(0)	11.10%	234,329	0
	HORSESHOE LAKE 7	1,116,214	3.15%	35,161	3.15%	35,161	0	3.15%	35,161	0
	HORSESHOE LAKE 8	3,830,753	2.94%	112,624	12.40%	474,851	362,226	12.40%	474,851	0
	SEMINOLE 1	4,188,322	4.89%	204,809	6.02%	252,281	47,472	6.02%	252,281	0
	SEMINOLE 2	21,726	7.49%	1,627	0.99%	216	(1,411)	0.99%	216	0
	SEMINOLE 3	300,618	2.96%	8,898	4.93%	14,829	5,930	4.93%	14,829	0
	MUSKOGEE 4	10,582,057	4.44%	469,843	4.54%	480,108	10,265	4.54%	480,108	0
	MUSKOGEE 5	703,624	1.89%	13,298	3.99%	28,100	14,801	3.99%	28,100	0
	MUSKOGEE 6	4,642,616	1.75%	81,246	2.77%	128,713	47,467	2.77%	128,713	0
	SOONER 1	9,176,698	3.17%	290,901	4.33%	397,077	106,176	4.33%	397,077	0
	SOONER 2	2,423,736	2.16%	52,353	3.59%	87,112	34,759	3.59%	87,112	0
	RIVER VALLEY 1	20,631,345	0.19%	39,200	3.50%	722,803	683,603	3.50%	722,803	0
	RIVER VALLEY 2	32,329			4.75%	1,536	1,536	4.75%	1,536	0
	POWER SUPPLY SERVICES	2,858,584	1.67%	47,738	4.16%	118,986	71,247	4.16%	118,986	0
	TOTAL MISCELLANEOUS POWER PLANT EQUIPMENT	62,619,698	2.54%	1,592,028	4.75%	2,976,101	1,384,072	4.75%	2,976,101	0
	TOTAL STEAM PRODUCTION PLANT	**3,289,782,854**	**2.76%**	**90,713,068**	**3.05%**	**100,261,931**	**9,548,862**	**3.05%**	**100,261,931**	**0**
	OTHER PRODUCTION PLANT									
340.2	RIGHTS OF WAY									
	MUSTANG CTs	10,815	0.00%	0	0.69%	74	74	0.69%	74	0

OKLAHOMA GAS AND ELECTRIC COMPANY

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	Account	Plant Balance	Current Oklahoma Accrual		OG&E Proposed Accrual		Difference	FEA Proposed Accrual		Difference
			Rate	Amount	Rate	Amount		Rate	Amount	
	(1)	(2)	(3)	(4) = (2) x (3)	(5)	(6) = (2) x (5)	(7) = (6) - (4)	(8)	(9) = (2) x (8)	(10) = (9) - (6)
341	STRUCTURES AND IMPROVEMENTS									
	REDBUD 1	34,235,763	2.11%	722,375	2.34%	800,614	78,240	2.34%	800,614	0
	REDBUD 2	318,306	3.33%	10,600	3.17%	10,076	(524)	3.17%	10,076	0
	REDBUD 3	265,177	3.44%	9,122	3.11%	8,251	(871)	3.11%	8,251	0
	REDBUD 4	288,878	3.32%	9,591	3.06%	8,831	(759)	3.06%	8,831	0
	HORSESHOE LAKE 9 AND 10	1,201,774	3.14%	37,736	2.56%	30,730	(7,006)	2.56%	30,730	0
	TINKER	1,781,246	8.86%	157,818	8.86%	157,818	0	8.86%	157,818	0
	MCCLAIN GAS 1	11,750,959	2.56%	300,825	5.01%	588,369	287,544	5.01%	588,369	0
	MCCLAIN GAS 2	1,788,683	1.59%	28,440	2.30%	41,105	12,665	2.30%	41,105	0
	MCCLAIN STEAM 1	1,070,785	1.83%	19,595	2.58%	27,607	8,011	2.58%	27,607	0
	FRONTIER 1	8,395,038	2.44%	204,839	1.96%	164,266	(40,573)	1.96%	164,266	0
	MUSTANG CTs	43,721,045	2.83%	1,237,306	2.75%	1,201,260	(36,046)	2.75%	1,201,260	0
	TOTAL STRUCTURES AND IMPROVEMENTS	104,817,655	2.61%	2,738,246	2.90%	3,038,927	300,681	2.90%	3,038,927	0
341	STRUCTURES AND IMPROVEMENTS - WIND									
	CENTENNIAL	3,014,587	3.22%	97,070	6.36%	191,715	94,645	4.26%	128,542	(63,173)
	OU SPIRIT	5,228,646	3.22%	168,362	4.85%	253,456	85,094	3.53%	184,594	(68,862)
	CROSSROADS	11,538,638	3.48%	401,545	4.51%	520,285	118,740	3.47%	400,534	(119,751)
	TOTAL STRUCTURES AND IMPROVEMENTS - WIND	19,781,871	3.37%	666,977	4.88%	965,456	298,479	3.61%	713,671	(251,786)
341	STRUCTURES AND IMPROVEMENTS - SOLAR	4,465,531	2.74%	122,356	4.24%	189,304	66,948	4.24%	189,304	0
342	FUEL HOLDERS, PRODUCERS AND ACCESSORIES									
	REDBUD 1	12,117,606	1.87%	226,599	2.23%	270,579	43,980	2.23%	270,579	0
	REDBUD 2	690,651	1.82%	12,570	2.22%	15,306	2,736	2.22%	15,306	0
	REDBUD 3	691,292	1.82%	12,582	2.22%	15,322	2,740	2.22%	15,322	0
	REDBUD 4	719,786	1.88%	13,532	2.25%	16,184	2,653	2.25%	16,184	0
	TINKER	167,151	3.55%	5,934	3.55%	5,934	0	3.55%	5,934	0
	MCCLAIN GAS 1	354,085	1.53%	5,418	2.13%	7,536	2,118	2.13%	7,536	0
	MCCLAIN GAS 2	260,457	1.63%	4,245	2.22%	5,780	1,534	2.22%	5,780	0
	FRONTIER 1	978,948	1.37%	13,412	1.16%	11,361	(2,051)	1.16%	11,361	0
	MUSTANG CTs	7,657,023	2.74%	209,802	2.79%	213,481	3,678	2.79%	213,481	0
	TOTAL FUEL HOLDERS, PRODUCERS AND ACCESSORIES	23,636,999	2.13%	504,093	2.38%	561,482	57,389	2.38%	561,482	0
343	PRIME MOVERS									
	REDBUD 1	93,479,687	2.92%	2,729,607	2.76%	2,576,294	(153,313)	2.76%	2,576,294	0
	REDBUD 2	67,426,482	2.65%	1,786,802	3.77%	2,542,815	756,013	3.77%	2,542,815	0
	REDBUD 3	67,539,780	2.44%	1,647,971	2.62%	1,766,259	118,289	2.62%	1,766,259	0
	REDBUD 4	61,546,829	2.57%	1,581,754	2.60%	1,597,532	15,778	2.60%	1,597,532	0
	HORSESHOE LAKE 9 AND 10	8,902,621	4.37%	389,045	3.68%	327,585	(61,459)	3.68%	327,585	0
	TINKER	4,550,058	6.94%	315,774	0.00%	0	(315,774)	0.00%	0	0
	MCCLAIN GAS 1	110,863,190	2.15%	2,383,559	2.67%	2,959,658	576,099	2.67%	2,959,658	0
	MCCLAIN GAS 2	105,433,620	1.99%	2,098,129	2.51%	2,644,031	545,902	2.51%	2,644,031	0
	MCCLAIN STEAM 1	52,753,857	1.55%	817,685	2.31%	1,221,238	403,553	2.31%	1,221,238	0
	FRONTIER 1	65,667,528	2.35%	1,543,187	2.12%	1,388,959	(154,227)	2.12%	1,388,959	0
	MUSTANG CTs	263,333,261	3.00%	7,899,998	3.04%	8,002,795	102,797	3.04%	8,002,795	0
	TOTAL PRIME MOVERS	901,496,913	2.57%	23,193,508	2.78%	25,027,166	1,833,657	2.78%	25,027,166	0
	LTSA									
343.1	20-YEAR									
	REDBUD 1	1,490,678	7.70%	114,782	1.55%	23,075	(91,707)	1.55%	23,075	0
	REDBUD 2	1,490,678	4.89%	72,894	1.55%	23,075	(49,819)	1.55%	23,075	0
	REDBUD 3	1,490,678	1.85%	27,578	1.55%	23,075	(4,502)	1.55%	23,075	0
	REDBUD 4	1,490,678	3.95%	58,882	1.55%	23,075	(35,807)	1.55%	23,075	0
	20 YR Total	5,962,712	4.60%	274,136	1.55%	92,300	(181,835)	1.55%	92,300	0
343.2	6-YEAR									
	REDBUD 1	6,096,068	20.98%	1,278,955	10.56%	643,511	(635,444)	10.56%	643,511	0
	REDBUD 2	13,864,899	19.96%	2,767,434	10.56%	1,463,601	(1,303,833)	10.56%	1,463,601	0
	REDBUD 3	13,998,897	18.86%	2,640,192	10.56%	1,477,746	(1,162,446)	10.56%	1,477,746	0
	REDBUD 4	5,993,168	19.62%	1,175,860	10.56%	632,648	(543,211)	10.56%	632,648	0
	MCCLAIN GAS 1	15,798,603	15.94%	2,518,297	10.56%	1,667,726	(850,572)	10.56%	1,667,726	0
	MCCLAIN GAS 2	15,810,675	16.14%	2,551,843	10.56%	1,669,000	(882,843)	10.56%	1,669,000	0
	6 Yr Total	71,562,310	18.07%	12,932,581	10.56%	7,554,232	(5,378,349)	10.56%	7,554,232	0
	30-YEAR									
	MCCLAIN GAS 1	349,749	2.15%	7,520	1.93%	6,747	(773)	1.93%	6,747	0
	MCCLAIN GAS 2	343,590	1.99%	6,837	1.93%	6,628	(209)	1.93%	6,628	0
	Total 30-YR	693,339	2.07%	14,357	1.93%	13,375	(982)	1.93%	13,375	0
	TOTAL LTSA	78,218,361	16.90%	13,221,073	9.79%	7,659,907	(5,561,167)	9.79%	7,659,907	0
344	GENERATORS									
	REDBUD 1	717,218	2.88%	20,656	2.53%	18,111	(2,545)	2.53%	18,111	0
	REDBUD 3	23,199	2.85%	661	2.69%	624	(37)	2.69%	624	0
	REDBUD 4	23,035	2.81%	647	2.69%	619	(28)	2.69%	619	0
	HORSESHOE LAKE 9 AND 10	36,135,688	3.79%	1,369,543	2.59%	935,066	(434,477)	2.59%	935,066	0
	TINKER	3,366,088	3.67%	123,535	3.67%	123,535	0	3.67%	123,535	0
	FRONTIER 1	8,118,041	1.39%	112,841	1.37%	110,817	(2,024)	1.37%	110,817	0
	MUSTANG CTs	31,405,980	2.89%	907,633	2.94%	924,111	16,479	2.94%	924,111	0
	TOTAL GENERATORS	79,789,249	3.18%	2,535,516	2.65%	2,112,883	(422,632)	2.65%	2,112,883	0
344	GENERATORS - WIND									
	CENTENNIAL	185,423,873	3.27%	6,063,361	5.62%	10,415,702	4,352,341	3.86%	7,149,157	(3,266,544)
	OU SPIRIT	237,888,863	3.72%	8,849,466	5.11%	12,157,779	3,308,313	3.80%	9,042,499	(3,115,279)
	CROSSROADS	349,390,682	3.73%	13,032,272	4.75%	16,596,733	3,564,461	3.73%	13,025,498	(3,571,236)
	TOTAL GENERATORS - WIND	772,703,418	3.62%	27,945,099	5.07%	39,170,214	11,225,115	3.78%	29,217,154	(9,953,059)
344	GENERATORS - SOLAR	39,650,005	3.21%	1,272,765	4.35%	1,723,522	450,757	4.35%	1,723,522	0
345	ACCESSORY ELECTRIC EQUIPMENT									
	REDBUD 1	13,173,539	2.10%	276,644	2.34%	308,434	31,790	2.34%	308,434	0
	REDBUD 2	9,557,253	1.82%	173,942	2.30%	219,848	45,906	2.30%	219,848	0
	REDBUD 3	9,330,337	1.79%	167,013	2.29%	213,535	46,522	2.29%	213,535	0
	REDBUD 4	9,593,118	1.79%	171,717	2.30%	220,250	48,533	2.30%	220,250	0
	HORSESHOE LAKE 9 AND 10	4,874,594	3.28%	159,887	2.26%	110,192	(49,695)	2.26%	110,192	0
	TINKER	3,078,637	1.09%	33,557	1.09%	33,557	(0)	1.09%	33,557	0
	MCCLAIN GAS 1	7,224,119	1.96%	141,593	2.50%	180,512	38,919	2.50%	180,512	0
	MCCLAIN GAS 2	6,049,899	1.47%	88,934	2.19%	132,441	43,508	2.19%	132,441	0
	MCCLAIN STEAM 1	3,740,436	1.32%	49,374	2.12%	79,250	29,876	2.12%	79,250	0
	FRONTIER 1	7,857,363	1.43%	112,360	1.43%	112,347	(13)	1.43%	112,347	0
	MUSTANG CTs	25,263,658	2.83%	714,962	2.81%	709,672	(5,290)	2.81%	709,672	0
	TOTAL ACCESSORY ELECTRIC EQUIPMENT	99,742,953	2.10%	2,089,982	2.33%	2,320,037	230,055	2.33%	2,320,037	0
345	ACCESSORY ELECTRIC EQUIPMENT - WIND									
	CENTENNIAL	2,324,844	5.32%	123,682	8.41%	195,479	71,797	5.88%	136,592	(58,887)
	OU SPIRIT	4,871,019	5.92%	288,364	7.48%	364,120	75,755	5.61%	273,302	(90,817)
	CROSSROADS	45,877,900	4.04%	1,853,467	5.07%	2,326,856	473,388	4.05%	1,858,090	(468,766)
	TOTAL ACCESSORY ELECTRIC EQUIPMENT - WIND	53,073,763	4.27%	2,265,513	5.44%	2,886,454	620,941	4.27%	2,267,984	(618,470)
345	ACCESSORY ELECTRIC EQUIPMENT - SOLAR	9,653,560	2.77%	267,404	4.16%	401,710	134,307	4.16%	401,710	0

OKLAHOMA GAS AND ELECTRIC COMPANY

COMPARISON OF OG&E AND FEA PROPOSED ANNUAL DEPRECIATION ACCRUAL AMOUNTS AND RATES
RELATED TO ELECTRIC PLANT AS OF DECEMBER 31, 2022
PRODUCTION AND OTHER PRODUCTION RESERVE REALLOCATED WITHIN GROUP
TRANSMISSION, DISTRIBUTION, AND GENERAL RESERVE PER BOOK

			Current Oklahoma Accrual		OG&E Proposed Accrual			FEA Proposed Accrual		
	Account	Plant Balance	Rate	Amount	Rate	Amount	Difference	Rate	Amount	Difference
	(1)	(2)	(3)	(4) = (2) x (3)	(5)	(6) = (2) x (5)	(7) = (6) - (4)	(8)	(9) = (2) x (8)	(10) = (9) - (6)
346	MISCELLANEOUS POWER PLANT EQUIPMENT									
	REDBUD 1	2,774,340	3.12%	86,559	3.88%	107,581	21,022	3.88%	107,581	0
	REDBUD 2	18,098	2.85%	516	3.73%	675	159	3.73%	675	0
	REDBUD 3	13,800	3.44%	475	4.24%	585	110	4.24%	585	0
	REDBUD 4	20,045	3.27%	655	4.10%	821	166	4.10%	821	0
	HORSESHOE LAKE 9 AND 10	1,033,095	2.93%	30,270	2.87%	29,663	(606)	2.87%	29,663	0
	TINKER	61,581	20.01%	12,322	20.01%	12,322	0	20.01%	12,322	0
	MCCLAIN GAS 1	5,975,450	2.53%	151,179	3.57%	213,582	62,403	3.57%	213,582	0
	FRONTIER 1	5,299,221	2.10%	111,284	3.04%	161,098	49,815	3.04%	161,098	0
	MUSTANG CTs	7,704,785	3.02%	232,685	3.51%	270,231	37,547	3.51%	270,231	0
	TOTAL MISCELLANEOUS POWER PLANT EQUIPMENT	22,900,415	2.73%	625,944	3.48%	796,559	170,615	3.48%	796,559	0
346	MISCELLANEOUS POWER PLANT EQUIPMENT - WIND									
	CENTENNIAL	885,860	4.46%	39,509	7.09%	62,838	23,329	5.20%	46,045	(16,793)
	OU SPIRIT	658,794	4.68%	30,832	7.53%	49,577	18,745	5.77%	38,030	(11,546)
	CROSSROADS	562,592	4.50%	25,317	5.99%	33,684	8,367	4.97%	27,951	(5,733)
	TOTAL MISCELLANEOUS POWER PLANT EQUIPMENT - WIND	2,107,246	4.54%	95,658	6.93%	146,099	50,441	5.32%	112,026	(34,072)
	TOTAL OTHER PRODUCTION PLANT	**2,212,048,754**	**3.51%**	**77,544,134**	**3.93%**	**86,999,795**	**9,455,661**	**3.44%**	**76,142,407**	**(10,857,388)**
	TRANSMISSION PLANT									
350.2	LAND RIGHTS	131,963,405	1.40%	1,847,488	1.37%	1,814,290	(33,198)	1.18%	1,556,863	(257,427)
352	STRUCTURES AND IMPROVEMENTS	9,042,721	1.44%	130,215	1.53%	138,791	8,576	1.41%	127,611	(11,180)
353	STATION EQUIPMENT	954,383,732	2.13%	20,328,373	2.12%	20,269,880	(58,493)	2.08%	19,851,035	(418,845)
354	TOWERS AND FIXTURES	173,271,523	1.58%	2,737,690	1.57%	2,726,420	(11,270)	1.57%	2,726,420	0
355	POLES AND FIXTURES	1,117,698,049	2.16%	24,142,278	2.12%	23,667,775	(474,503)	2.06%	22,975,655	(692,120)
356	OVERHEAD CONDUCTORS AND DEVICES	693,683,857	2.11%	14,636,729	2.01%	13,942,116	(694,613)	2.01%	13,942,116	0
358	UNDERGROUND CONDUCTORS AND DEVICES	110,494	2.22%	2,453	0.00%	0	(2,453)	0.00%	0	0
	TOTAL TRANSMISSION PLANT	**3,080,153,781**	**2.07%**	**63,825,227**	**2.03%**	**62,559,272**	**(1,265,955)**	**1.99%**	**61,179,701**	**(1,379,571)**
	DISTRIBUTION PLANT									
360.2	LAND RIGHTS	6,459,925	1.27%	82,041	1.31%	84,383	2,341	1.11%	71,613	(12,769)
361	STRUCTURES AND IMPROVEMENTS	7,971,930	1.47%	117,187	1.51%	120,585	3,397	1.51%	120,585	0
362	STATION EQUIPMENT	877,615,427	2.18%	19,132,016	2.31%	20,291,014	1,158,998	2.14%	18,768,255	(1,522,759)
363	STORAGE BATTERY	851,046	6.75%	57,446	6.91%	58,780	1,334	6.91%	58,780	0
364	POLES, TOWERS AND FIXTURES	786,956,009	2.47%	19,437,813	2.94%	23,115,215	3,677,401	2.64%	20,748,058	(2,367,157)
365	OVERHEAD CONDUCTORS AND DEVICES	1,101,396,821	2.36%	25,992,965	2.51%	27,644,482	1,651,517	2.34%	25,727,085	(1,917,397)
366	UNDERGROUND CONDUIT	335,409,588	1.70%	5,701,963	1.86%	6,227,440	525,477	1.86%	6,227,440	0
367	UNDERGROUND CONDUCTORS AND DEVICES	971,654,868	2.35%	22,833,889	3.07%	29,833,686	6,999,797	2.74%	26,665,804	(3,167,882)
368	LINE TRANSFORMERS	670,460,796	3.59%	24,069,543	4.70%	31,544,550	7,475,007	3.63%	24,339,329	(7,205,221)
369	SERVICES	266,118,193	1.87%	4,976,410	1.74%	4,623,710	(352,700)	1.74%	4,623,710	0
	METERS									
370	METERS - SMART METERS	184,961,833	4.48%	8,286,290	7.89%	14,596,513	6,310,223	7.89%	14,596,513	0
370.1	METERS - METERING EQUIPMENT	39,490,060	5.59%	2,207,494	2.04%	807,233	(1,400,261)	2.04%	807,233	0
	TOTAL METERS	224,451,893	4.68%	10,493,784	6.86%	15,403,746	4,909,962	6.86%	15,403,746	0
371	INSTALLATIONS ON CUSTOMERS' PREMISES	57,414,311	4.04%	2,319,538	4.05%	2,324,969	5,431	4.05%	2,324,969	0
373	STREET LIGHTING AND SIGNAL SYSTEMS	316,836,035	4.42%	14,004,153	5.35%	16,957,364	2,953,211	5.35%	16,957,364	0
	TOTAL DISTRIBUTION PLANT	**5,623,596,842**	**2.65%**	**149,218,749**	**3.17%**	**178,229,924**	**29,011,174**	**2.88%**	**162,036,739**	**(16,193,185)**
	GENERAL PLANT									
389.2	LAND RIGHTS	178,598	2.24%	4,001	2.10%	3,753	(248)	2.10%	3,753	0
390	STRUCTURES AND IMPROVEMENTS	228,678,766	1.48%	3,384,446	1.94%	4,441,385	1,056,939	1.94%	4,441,385	0
	OFFICE FURNITURE AND EQUIPMENT									
391	OFFICE FURNITURE AND EQUIPMENT	19,379,183	8.14%	1,577,465	10.07%	1,951,594	374,128	10.07%	1,951,594	0
391.1	COMPUTER EQUIPMENT	74,525,311	21.69%	16,164,540	19.58%	14,591,706	(1,572,834)	19.58%	14,591,706	0
	TOTAL OFFICE AND FURNITURE EQUIPMENT	93,904,494	18.89%	17,742,005	17.62%	16,543,300	(1,198,706)	17.62%	16,543,300	0
	TRANSPORTATION EQUIPMENT									
392.1	CARS AND TRUCKS	27,059,844	5.04%	1,363,816	6.98%	1,887,734	523,918	6.98%	1,887,734	0
392.5	HEAVY TRUCKS	78,137,483	5.30%	4,141,287	6.04%	4,720,062	578,775	6.04%	4,720,062	0
392.6	TRAILERS	10,015,704	3.23%	323,507	3.03%	303,320	(20,187)	3.03%	303,320	0
	TOTAL TRANSPORTATION EQUIPMENT	115,213,031	5.06%	5,828,610	6.00%	6,911,115	1,082,505	6.00%	6,911,115	0
393	STORES EQUIPMENT	1,198,089	5.48%	65,655	4.87%	58,387	(7,268)	4.87%	58,387	0
394	TOOLS, SHOP AND GARAGE EQUIPMENT	28,819,877	5.07%	1,461,168	4.24%	1,222,160	(239,008)	4.24%	1,222,160	0
395	LABORATORY EQUIPMENT	11,310,063	8.75%	989,631	6.38%	722,112	(267,518)	6.38%	722,112	0
396	POWER OPERATED EQUIPMENT	16,256,047	3.48%	565,710	4.54%	737,212	171,502	4.54%	737,212	0
397	COMMUNICATION EQUIPMENT	34,537,031	9.99%	3,450,249	10.27%	3,547,456	97,207	10.27%	3,547,456	0
398	MISCELLANEOUS EQUIPMENT	12,469,947	2.08%	259,375	4.42%	551,169	291,794	4.42%	551,169	0
	TOTAL GENERAL PLANT	**542,565,943**	**6.22%**	**33,750,850**	**6.40%**	**34,738,050**	**987,200**	**6.40%**	**34,738,050**	**0**
	TOTAL DEPRECIABLE ELECTRIC PLANT	**15,085,707,448**	**2.94%**	**444,167,153**	**3.32%**	**501,589,168**	**57,422,015**	**3.14%**	**473,159,024**	**(28,430,143)**

NOTES:

1) ACCOUNTS BELOW WILL HAVE THE FOLLOWING RATES .

303.4 MISCELLANEOUS INTANGIBLE PLANT - SAP S4 SOFTWARE	6.67%
311-316 NEW UNITS AT HORSESHOE LAKE ARE PROJECTED TO HAVE A RATE OF	3.00%
358 WHEN PLANT IS ADDED WHERE THE PLANT BALANCE IS GREATER THAN ACCUMULATED DEPRECIATION PROPOSED RATE IS	2.22%

OKLAHOMA GAS AND ELECTRIC COMPANY
COMPARISON OF OG&E AND FEA PROPOSED DEPRECIATION EXPENSE
TEST YEAR ENDING SEPTEMBER 30, 2023

Line	Account	Plant	Test Year DD&A Expense	Pro Forma Adjusted Depreciable Plant In Service	OG&E Proposed Annual Rate	OG&E Proposed Annual DD&A Expense	OG&E Proposed Pro Forma Adjustment	FEA Proposed Annual Rate	FEA Proposed Annual DD&A Expense	FEA Proposed Pro Forma Adjustment	Difference	OK Jurisdictional Allocator	FEA Oklahoma Depreciation Expense Adjustment
	(1)	(2)	(3)	(4)	(5)	(6) = (4) x (5)	(7) = (6) - (3)	(8)	(9) = (4) x (8)	(10) = (9) - (3)	(11) = (10) - (7)	(12)	(13) = (11) x (12)
		INTANGIBLE PLANT											
1	301	Organization	-	-	-	-	-	-	-	-	-		
2	302	Franchise and Consents	71,049	1,688,662	4.28%	72,275	1,226	4.28%	72,275	1,226	-		
3	303	Miscellaneous Intangible Plant	31,082,507	341,010,664	14.74%	50,264,972	19,182,465	14.74%	50,264,972	19,182,465	-		
4		CWIP	-	60,383,421	14.68%	8,864,286	8,864,286	14.68%	8,864,286	8,864,286	-		
5		TOTAL INTANGIBLE PLANT	$ 31,153,556	$ 403,082,747		$ 59,201,533	$ 28,047,977		$ 59,201,533	$ 28,047,977	$ -	0.87974138	$ -
		PRODUCTION PLANT STEAM PRODUCTION											
6	310	Land and Land Rights	27,534	940,062	2.01%	18,895	(8,639)	2.01%	18,895	(8,639)	-		
7	311	Structures and Improvements	10,436,730	440,239,927	2.94%	12,943,054	2,506,324	2.94%	12,943,054	2,506,324	-		
8	312	Boiler Plant Equipment	57,997,944	2,087,171,222	2.99%	62,406,420	4,408,476	2.99%	62,406,420	4,408,476	-		
9	313	Engines and Engine-Driven Generators	-	-	0.00%	-	-	0.00%	-	-	-		
10	314	Turbogenerator Units	17,148,877	593,660,933	3.41%	20,243,838	3,094,961	3.41%	20,243,838	3,094,961	-		
11	315	Accessory Electric Equipment	3,665,019	196,518,242	2.32%	4,559,223	894,204	2.32%	4,559,223	894,204	-		
12	316	Miscellaneous Power Plant Equipment	1,513,442	60,712,825	4.75%	2,883,859	1,370,417	4.75%	2,883,859	1,370,417	-		
13	317	ARO Cost - Steam Production	-	22,119,046	0.00% *	-	-	0.00% *	-	-	-		
14		TOTAL STEAM PRODUCTION	$ 90,789,546	$ 3,401,362,257		$ 103,055,289	$ 12,265,743		$ 103,055,289	$ 12,265,743	$ -		
		OTHER PRODUCTION											
15	340	Land and Land Rights	-	10,816	0.69%	75	75	0.69%	75	75	-		
16	341	Structures and Improvements	3,535,792	131,292,861	3.25%	4,267,018	731,226	3.05%	4,004,432	468,640	(262,586)		
17	342	Fuel Holders, Producers and Accessories	511,361	23,692,509	2.38%	563,882	52,521	2.38%	563,882	52,521	-		
18	343	Prime movers	35,103,123	986,898,512	3.34%	32,962,410	(2,140,713)	3.34%	32,962,410	(2,140,713)	-		
19	344	Generators	32,371,146	893,453,607	4.82%	43,064,464	10,693,318	3.70%	33,057,783	686,637	(10,006,680)		
20	345	Accessory Electric Equipment	4,707,089	170,198,111	3.45%	5,871,835	1,164,746	3.07%	5,225,082	517,993	(646,753)		
21	346	Miscellaneous Power Plant Equipment	721,720	25,859,863	3.77%	974,917	253,197	3.63%	938,713	216,993	(36,204)		
22	347	ARO Cost - Other Production	-	37,060,911	0.00% *	-	-	0.00% *	-	-	-		
23		TOTAL OTHER PRODUCTION	$ 76,950,231	$ 2,268,467,190		$ 87,704,600	$ 10,754,369		$ 76,752,377	$ (197,854)	$ (10,952,223)		
24		CWIP	-	41,215,170	3.40%	1,401,316	1,401,316	3.21%	1,323,007	1,323,007	(78,309)		
25		TOTAL PRODUCTION PLANT	$ 167,739,777	$ 5,669,829,447		$ 192,161,205	$ 24,421,428		$ 181,130,673	$ 13,390,896	$ (11,030,532)	0.91571312	$ (10,100,802)
		TRANSMISSION PLANT											
26	350	Land and Land Rights	1,812,705	132,051,584	1.37%	1,809,107	(3,598)	1.18%	1,558,209	(254,496)	(250,898)		
27	351	Clearing Land and Right of Ways	-	-	0.00%	-	-	0.00%	-	-	-		
28	352	Structures and Improvements	130,203	9,103,292	1.53%	139,280	9,077	1.41%	128,356	(1,847)	(10,924)		
29	353	Station Equipment	20,592,059	994,901,405	2.12%	21,091,910	499,851	2.08%	20,693,949	101,890	(397,961)		
30	354	Towers and Fixtures	2,724,180	174,139,232	1.57%	2,733,986	9,806	1.57%	2,733,986	9,806	-		
31	355	Poles and Fixtures	25,034,751	1,149,548,181	2.12%	24,370,421	(664,330)	2.06%	23,680,693	(1,354,058)	(689,729)		
32	356	Overhead Conductors and Devices	14,866,073	704,035,622	2.01%	14,151,116	(714,957)	2.01%	14,151,116	(714,957)	-		
33	357	Underground Conduit	-	-	0.00%	-	-	0.00%	-	-	-		
34	358	Underground Conductors and Devices	22	110,494	0.00%	-	(22)	0.00%	-	(22)	-		
35	359	ARO Cost - Transmission	-	1,175,724	0.00% *	-	-	0.00% *	-	-	-		
36		CWIP	-	57,224,197	2.03%	1,161,651	1,161,651	1.99%	1,138,762	1,138,762	(22,890)		
37		TOTAL TRANSMISSION PLANT	$ 65,159,993	$ 3,222,289,731		$ 65,457,471	$ 297,478		$ 64,085,070	$ (1,074,923)	$ (1,372,401)	0.80768368	$ (1,108,466)
		DISTRIBUTION PLANT											
38	360	Land and Land Rights	76,845	6,475,324	1.31%	84,827	7,982	1.11%	71,876	(4,969)	(12,951)		
39	361	Structures and Improvements	118,834	7,875,483	1.51%	118,920	86	1.51%	118,920	86	-		
40	362	Station Equipment	19,161,303	921,951,311	2.31%	21,297,075	2,135,772	2.14%	19,729,758	568,455	(1,567,317)		
41	363	Storage Battery Equipment	57,446	851,046	6.91%	58,807	1,361	6.91%	58,807	1,361	-		
42	364	Poles, Towers, and Fixtures	20,031,540	825,732,658	2.94%	24,276,540	4,245,000	2.64%	21,799,342	1,767,802	(2,477,198)		
43	365	Overhead Conductors and Devices	27,272,136	1,279,218,608	2.51%	32,108,387	4,836,251	2.34%	29,933,715	2,661,579	(2,174,672)		
44	366	Underground Conduit	6,040,592	372,520,949	1.86%	6,928,890	888,298	1.86%	6,928,890	888,298	-		
45	367	Underground Conductors and Devices	22,778,066	999,177,125	3.07%	30,674,738	7,896,672	2.74%	27,377,453	4,599,387	(3,297,285)		
46	368	Line Transformers	24,476,795	720,127,162	4.70%	33,845,977	9,369,182	3.63%	26,140,616	1,663,821	(7,705,361)		
47	369	Services	5,063,436	268,106,395	1.74%	4,665,051	(398,385)	1.74%	4,665,051	(398,385)	-		
48	370	Meters	10,704,765	234,901,281	6.86%	16,114,228	5,409,463	6.86%	16,114,228	5,409,463	-		
49	371	Installation on Customers' Premises	2,320,064	57,414,314	4.05%	2,325,280	5,216	4.05%	2,325,280	5,216	-		
50	372	Leased Property on Customer's Premises	-	-	0.00%	-	-	0.00%	-	-	-		
51	373	Street Lighting and Signal Systems	14,186,037	314,421,924	5.35%	16,821,573	2,635,536	5.35%	16,821,573	2,635,536	-		
52		CWIP		232,229,246	3.17%	7,361,667	7,361,667	2.88%	6,688,202	6,688,202	(673,465)		
53		TOTAL DISTRIBUTION PLANT	$ 152,287,859	$ 6,241,002,826		$ 196,681,959	$ 44,394,100		$ 178,773,712	$ 26,485,853	$ (17,908,247)	0.93989344	$ (16,831,844)

OKLAHOMA GAS AND ELECTRIC COMPANY
COMPARISON OF OG&E AND FEA PROPOSED DEPRECIATION EXPENSE
TEST YEAR ENDING SEPTEMBER 30, 2023

Line	Account	Plant	Test Year DD&A Expense	Pro Forma Adjusted Depreciable Plant In Service	OG&E Proposed Annual Rate	OG&E Proposed Annual DD&A Expense	OG&E Proposed Pro Forma Adjustment	FEA Proposed Annual Rate	FEA Proposed Annual DD&A Expense	FEA Proposed Pro Forma Adjustment	Difference	OK Jurisdictional Allocator	FEA Oklahoma Depreciation Expense Adjustment
	(1)	(2)	(3)	(4)	(5)	(6) = (4) x (5)	(7) = (6) - (3)	(8)	(9) = (4) x (8)	(10) = (9) - (3)	(11) = (10) - (7)	(12)	(13) = (11) x (12)
		GENERAL PLANT											
54	389	Land and Land Rights	(70,862)	178,597	2.10%	3,751	74,612	2.10%	3,751	74,612	-		
55	390	Structures and Improvements	3,503,187	234,604,231	1.94%	4,551,322	1,048,135	1.94%	4,551,322	1,048,135	-		
56	391	Office Furniture and Equipment	17,917,221	113,549,919	17.62%	20,007,496	2,090,275	17.62%	20,007,496	2,090,275	-		
57	392	Transportation Equipment	2,703,342	122,975,859	6.00%	7,378,552	4,675,210	6.00%	7,378,552	4,675,210	-		
58	393	Stores Equipment	67,360	1,360,672	4.87%	66,265	(1,095)	4.87%	66,265	(1,095)	-		
59	394	Tools, Shop and Garage Equipment	1,441,031	31,461,005	4.24%	1,333,947	(107,084)	4.24%	1,333,947	(107,084)	-		
60	395	Laboratory Equipment	947,093	11,534,489	6.38%	735,900	(211,193)	6.38%	735,900	(211,193)	-		
61	396	Power Operated Equipment	588,668	16,512,343	4.54%	749,660	160,992	4.54%	749,660	160,992	-		
62	397	Communication Equipment	3,464,979	35,605,096	10.27%	3,656,643	191,664	10.27%	3,656,643	191,664	-		
63	398	Miscellaneous Equipment	295,470	12,402,073	4.42%	548,172	252,702	4.42%	548,172	252,702	-		
64	399	Other Tangible Property	-	-		-	-		-	-	-		
65		CWIP	-	35,518,289	6.40%	2,273,170	2,273,170	6.40%	2,273,170	2,273,170	-		
66		TOTAL GENERAL PLANT	$ 30,857,489	$ 615,702,573		$ 41,304,877	$ 10,447,387		$ 41,304,877	$ 10,447,387	$ -	0.87838689	$ -
67		TOTAL ELECTRIC PLANT IN SERVICE	$ 447,198,674	$ 16,151,907,324		$ 554,807,046	$ 107,608,371		$ 524,495,866	$ 77,297,191	$ (30,311,180)		$ (28,041,113)
68		Holding Co. included above	$ -										
69		Total Plant in Service	$ 447,198,674	$ 16,151,907,324		$ 554,807,046	$ 107,608,372		$ 524,495,866	$ 77,297,192	$ (30,311,180)		$ (28,041,113)
70		Transportation Activity Depreciation	-		55.28%	(4,079,129)	(4,079,129)	55.28%	(4,079,129)	(4,079,129)	-		-
71		Holding Company Test Year Expense	-			-	-		-	-	-		-
			(for Reclass Adj)			(for Pro Forma Adj) Schedule I 1-1			(for Pro Forma Adj) Schedule I 1-1				
72		**TOTAL DD&A EXPENSE**	**$ 447,198,674**			**$ 550,727,917**	**$ 103,529,243**		**$ 520,416,737**	**$ 73,218,063**	**$ (30,311,180)**		**$ (28,041,113)**
73		Add back Smart Grid Stranded Meters/Web Portal	$ -										
74		TOTAL DD&A EXPENSE (to tie to books)	$ 447,198,674										
			Schedule I-1				Schedule H-2						

Notes:
Source for (3): Schedule I-1
Source for (4), (5): Schedule I-1-1
Source for (8): Exhibit BCA-13
Source for (12): OG&E WP K-2.2/L-2.2 Depreciation Expense

*Per Schedule I-1-1: Excluded from this schedule is depreciation related to ARO's for the following amounts: FERC 317- $1,754,925; FERC 347- $1,438,152; & FERC 359- $60,051

CERTIFICATE OF SERVICE

On this 26th day of April 2024, a true and correct copy of the *Responsive Testimony of Brian C. Andrews on Behalf of the Federal Executive Agencies* was sent via electronic mail to the following interested parties:

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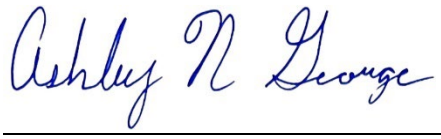

ASHLEY N. GEORGE, Capt, USAF
FEA ATTORNEY