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September 20, 2021

#### VIA ELECTRONIC FILING

Ms. A. Shonta Dunston Chief Clerk North Carolina Utilities Commission 4325 Mail Service Center Raleigh, North Carolina 27699-4300

#### RE: Duke Energy Carolinas, LLC's Informational Filing on Depreciation Study Docket No. E-7, Sub 1214

Dear Ms. Dunston:

Duke Energy Carolinas, LLC ("DEC" or "the Company") provides this update concerning its depreciation studies. DEC's depreciation studies were last approved, with modifications, in the North Carolina Utilities Commission's ("Commission") March 31, 2021 Order Accepting Stipulations, Granting Partial Rate Increase and Requiring Customer Notice issued in Docket No. E-7, Sub 1214. As a result of normal periodic review of the Company's depreciation for compliance with General Accepted Accounting Principles, DEC commissioned updated studies of its depreciation schedules. Based on the results of these studies, the Company has determined that it is appropriate to update certain depreciation schedules pertaining to its nuclear fleet. In accordance with N.C. Gen. Stat. § 62-35(c), DEC is hereby filing its revised depreciation study with the Commission as an informational filing.

Revised Nuclear Depreciation Study Effective April 1, 2021

The combined nuclear fleet of DEC and Duke Energy Progress, LLC ("DEP" and together with DEC, "Duke Energy") is comprised of 11 reactors at 6 nuclear stations across Duke Energy's North and South Carolina service territories. For DEC, the fleet consists of 7 reactors at 3 stations (Catawba, McGuire, and Oconee). The Nuclear Regulatory Commission ("NRC") oversees the design, construction, and operations of the nuclear generating facilities in the United States. As part of the NRC regulations, a nuclear license is required to operate a facility. An initial 40-year term is granted for nuclear reactor licenses, and subsequent license renewals are permitted for additional 20-year increments. All Duke Energy-operated nuclear units have received one renewed license for an additional 20 years and are therefore currently licensed to operate for a total life of 60 years. The NRC staff has defined subsequent license renewal ("SLR") to be the period of



extended operation from 60 years to 80 years.

On September 19, 2019, Duke Energy announced its intent to seek SLRs for all of its reactors. Duke Energy's nuclear fleet generates about half of its Carolinas customers' electricity, and because the electricity is carbon-free, the nuclear fleet plays a crucial role in Duke Energy's efforts to lower overall carbon emissions by at least 50% by 2030 and be carbon neutral by 2050. Renewing the nuclear licenses will also provide significant value to Duke Energy customers, ensuring a source of reliable and affordable energy for decades to come, as well as continuing to support Carolinas communities through jobs, tax revenues and partnerships. The September 19, 2019 announcement noted that Duke Energy expected to submit the first SLR application for Oconee Nuclear Station in 2021, followed by its other nuclear stations. Duke Energy submitted its SLR application for Oconee Units 1, 2, and 3 ("Oconee") on June 7, 2021, and provided notice to the Commission of such filing. The NRC officially accepted the Oconee application on July 28, 2021.

Duke Energy will schedule the preparation and filing of SLR applications for the rest of its nuclear fleet over the next several years. The SLR regulatory process is well defined, predictable and provides a pathway for successfully securing approvals of its SLR requests (while still maintaining the rigorous and thorough review of safety and environmental impacts required). Additionally, in recent years, the NRC has approved SLR applications for Florida Power & Light (December 2019), Exelon (March 2020), and Dominion (May 2021); further, several other applications have been submitted to the NRC for review. Therefore, Duke Energy management is confident, based on the NRC's track record to date, that the Oconee SLR application will ultimately be approved, and that the remaining SLR applications for the Carolinas nuclear generation fleet will be submitted and ultimately approved as well.

As mentioned previously, Duke Energy conducts periodic depreciation studies, absent regulatory activity, due to material changes in business conditions. Accordingly, Duke Energy engaged Gannett Fleming to perform depreciation studies to develop analyses and recommendations regarding the impact of the planned SLRs on the depreciable lives of the nuclear stations located in the Carolinas, based on the December 31, 2020 nuclear production plant balances. Based on this assessment and in accordance with accounting guidance that the expected lives of all of Duke Energy's nuclear units should be extended at the same time that the Oconee lives are extended, effective with the June 7, 2021 date of management approval of the Oconee SLR application, DEC has revised the nuclear plant useful lives being used in the calculation of depreciation expense to assume an additional 20 years of nuclear operation, consistent with the SLR application for Oconee.

The effective date of April 1, 2021 for the revised nuclear depreciation schedules, provided as Exhibit A, is consistent with guidance from FASB Accounting Standards Codification ("ASC") 250. As outlined in ASC 250, the implementation of these new depreciation schedules is determined to be a change in an accounting estimate because the updated studies are updating the service lives of depreciable nuclear assets. Accordingly, ASC 250 instructs that the change in accounting estimate shall be effective prospectively in the period in which the new depreciation schedules are implemented, as well as future

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periods, but will not require restating or retroactively adjusting prior amounts reported. As Duke Energy is required to file quarterly and annual financial reports with the Securities and Exchange Commission, the Company believes it is appropriate, in this context, to define the period for which the revised nuclear depreciation schedules are implemented as the beginning of the quarter in which the triggering event occurred. Therefore, since the triggering event occurred in June 2021, the Company is revising its nuclear depreciation schedules be implemented effective the beginning of the second quarter of 2021 (*i.e.*, April 1, 2021). Accordingly, the finalized study establishing revised depreciation schedules for DEC's nuclear units as of April 1, 2021 results in an approximate annual decrease in depreciation expense of \$132.5 million on a total system basis (\$88.7 million on a North Carolina retail basis) when applied to the end of 2020 nuclear production plant balances.

Adoption and implementation of the new depreciation schedules will not involve a change to any of the Company's customer rates at this time, or to any Commission rule, regulation, or policy.

Thank you for your attention to this matter. If you have any questions, please let me know.

Sincerely,

Jack E. Jirak

Enclosure

cc: Parties of Record

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#### CERTIFICATE OF SERVICE

I certify that a copy of Duke Energy Carolinas, LLC's Informational Filing on Depreciation Study, in Docket No. E-7, Sub 1214, has been served by electronic mail, hand delivery, or by depositing a copy in the United States Mail, 1<sup>st</sup> Class Postage Prepaid, properly addressed to parties of record.

This the 20<sup>th</sup> day of September, 2021.

Jack E. Jirak Deputy General Counsel Duke Energy Corporation P. O. Box 1551 / NCRH 20 Raleigh, NC 27602 Telephone: 919.546.3257 Email: Jack.Jirak@duke-energy.com

ATTORNEY FOR DUKE ENERGY CAROLINAS, LLC



## **2020 DEPRECIATION STUDY**

CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO NUCLEAR PLANT AS OF DECEMBER 31, 2020

Prepared by:



Excellence Delivered As Promised

#### DUKE ENERGY CAROLINAS

Charlotte, North Carolina

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#### 2020 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO NUCLEAR PLANT AS OF DECEMBER 31, 2020

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



Excellence Delivered As Promised

June 18, 2021

Duke Energy Carolinas 550 S. Tryon Street Charlotte, NC 28202

Attention: David L. Doss, Jr. Director Asset Accounting

Ladies and Gentlemen:

Pursuant to your request, we have conducted a depreciation study related to the nuclear plant of Duke Energy Carolinas as of December 31, 2020. The attached report presents a description of the methods used in the estimation of depreciation, the summary of annual depreciation accrual rates, the statistical support for the life and net salvage estimates and the detailed tabulations of annual depreciation.

Respectfully submitted,

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC

John J. Aponos

JOHN J. SPANOS President

JJS:mle

067950.000

Gannett Fleming Valuation and Rate Consultants, LLC 207 Senate Avenue • Camp Hill, PA 17011-2316 t: 717.763.7211 • f: 717.763.4590

www.**gfvrc**.com

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Exhibit A

Docket No. E-7, Sub 1214

#### **DEPRECIATION STUDY**

#### EXECUTIVE SUMMARY

Pursuant to Duke Energy Carolinas ("DEC" or "Company") request, Gannett Fleming Valuation and Rate Consultants, LLC ("Gannett Fleming") conducted a depreciation study related to the nuclear plant as of December 31, 2020. The purpose of this study was to determine the annual depreciation accrual rates and amounts for book and ratemaking purposes.

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

The depreciation study results in an overall decrease in depreciation expense. This is primarily related to the extension of the license date of each plant. These changes produce the most appropriate depreciation rates for the Company's nuclear plant accounts over the revised remaining life.

Gannett Fleming recommends the calculated annual depreciation accrual rates set forth herein apply specifically to nuclear plant in service as of December 31, 2020 as summarized by Table 1 of the study. Supporting analysis and calculations are provided within the study.

The study results set forth an annual depreciation expense of \$190.2 million when applied to depreciable plant balances as of December 31, 2020.

### PART I. INTRODUCTION

#### DUKE ENERGY CAROLINA DEPRECIATION STUDY

#### PART I. INTRODUCTION

#### SCOPE

This report sets forth the results of the depreciation study for Duke Energy Carolinas ("Company"), as applied to nuclear plant in service as of December 31, 2020. The rates and amounts are based on the straight-line remaining life method of depreciation. This report also describes the concepts, methods and judgments which underlie the recommended annual depreciation accrual rates related to current nuclear plant in service.

The service life and net salvage estimates resulting from the study were based on informed judgment which incorporated analyses of historical plant retirement data as recorded through 2020; the net salvage analyses of historical plant retirement data recorded through 2020; a review of Company practice and outlook as they relate to plant operation and retirement; and consideration of current practice in the electric industry, including knowledge of service lives and net salvage estimates used for other electric companies.

#### PLAN OF REPORT

Part I, Introduction, contains statements with respect to the plan of the report, and the basis of the study. Part II, Estimation of Survivor Curves, presents descriptions of the considerations and the methods used in the service life study. Part III, Service Life Considerations, presents the factors and judgment utilized in the average service life analysis. Part IV, Net Salvage Considerations, presents the judgment utilized for the net salvage study. Part V, Calculation of Annual and Accrued Depreciation, describes the procedures used in the calculation of group depreciation. Part VI, Results of Study, presents a summary by depreciable group of annual depreciation accrual rates and amounts, as well as composite remaining lives. Part VII, Service Life Statistics presents the statistical analysis of service life estimates, Part VIII, Net Salvage Statistics sets forth the statistical indications of net salvage percents, and Part IX, Detailed Depreciation Calculations presents the detailed tabulations of annual depreciation.

#### **BASIS OF THE STUDY**

#### **Depreciation**

Depreciation, in public utility regulation, is the loss in service value not restored by current maintenance, incurred in connection with the consumption or prospective retirement of utility plant in the course of service from causes which are known to be in current operation and against which the utility is not protected by insurance. Among causes to be given consideration are wear and tear, deterioration, action of the elements, inadequacy, obsolescence, changes in the art, changes in demand, and the requirements of public authorities.

Depreciation, as used in accounting, is a method of distributing fixed capital costs, less net salvage, over a period of time by allocating annual amounts to expense. Each annual amount of such depreciation expense is part of that year's total cost of providing electric utility service. Normally, the period of time over which the fixed capital cost is allocated to the cost of service is equal to the period of time over which an item renders service, that is, the item's service life. The most prevalent method of allocation is to distribute an equal amount of cost to each year of service life. This method is known as the straight-line method of depreciation.

For all accounts, the annual depreciation was calculated by the straight-line method using the average service life procedure and the remaining life basis. The calculated remaining lives and annual depreciation accrual rates were based on attained ages of plant in service and the estimated service life and net salvage characteristics of each depreciable group.

The straight-line method, average service life procedure is a commonly used depreciation calculation procedure that has been widely accepted in jurisdictions throughout North America. Gannett Fleming recommends its continued use.

#### Service Life and Net Salvage Estimates

The service life and net salvage estimates used in the depreciation calculations were based on informed judgment which incorporated a review of management's plans, policies and outlook, a general knowledge of the electric utility industry, and comparisons of the service life and net salvage estimates from our studies of other electric utilities. The use of survivor curves to reflect the expected dispersion of retirement provides a consistent method of estimating depreciation for utility property. lowa type survivor curves were used to depict the estimated survivor curves for the plant accounts. For all plants, the life span technique was used. In this technique, the date of final retirement was estimated for each unit, and the estimated survivor curves applied to each vintage were truncated at ages coinciding with the date of final retirement.

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

The estimates of net salvage by account incorporated a review of experienced costs of removal and gross salvage related to plant retirements, and consideration of

trends exhibited by the historical data. Each component of net salvage, i.e., cost of removal and gross salvage, was stated in dollars and as a percent of retirement.

An understanding of the function of the plant and information with respect to the reasons for past retirements and the expected causes of future retirements was obtained through discussions with operating and management personnel. The supplemental information obtained in this manner was considered in the interpretation and extrapolation of the statistical analyses.

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### PART II. ESTIMATION OF SURVIVOR CURVES

#### PART II. ESTIMATION OF SURVIVOR CURVES

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

#### SURVIVOR CURVES

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

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

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

#### lowa Type Curves

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

The lowa curves were developed at the lowa State College Engineering Experiment Station through an extensive process of observation and classification of the ages at which industrial property had been retired. A report of the study which resulted in the classification of property survivor characteristics into 18 type curves, which constitute three of the four families, was published in 1935 in the form of the Experiment Station's Bulletin 125. These curve types have also been presented in subsequent Experiment Station bulletins and in the text, "Engineering Valuation and

Exhibit A Docket No. E-7, Sub 1214

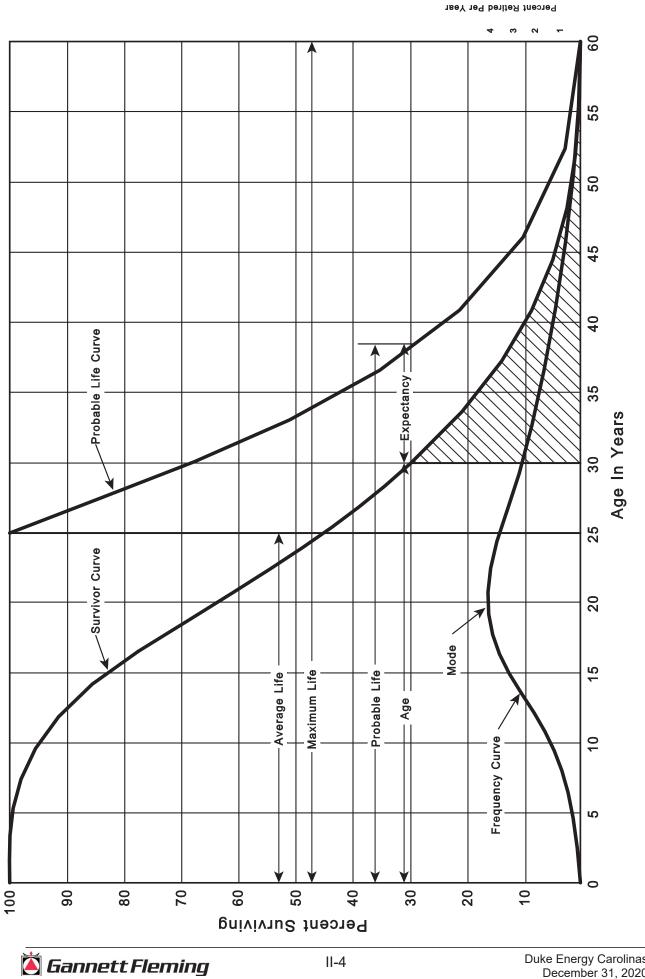
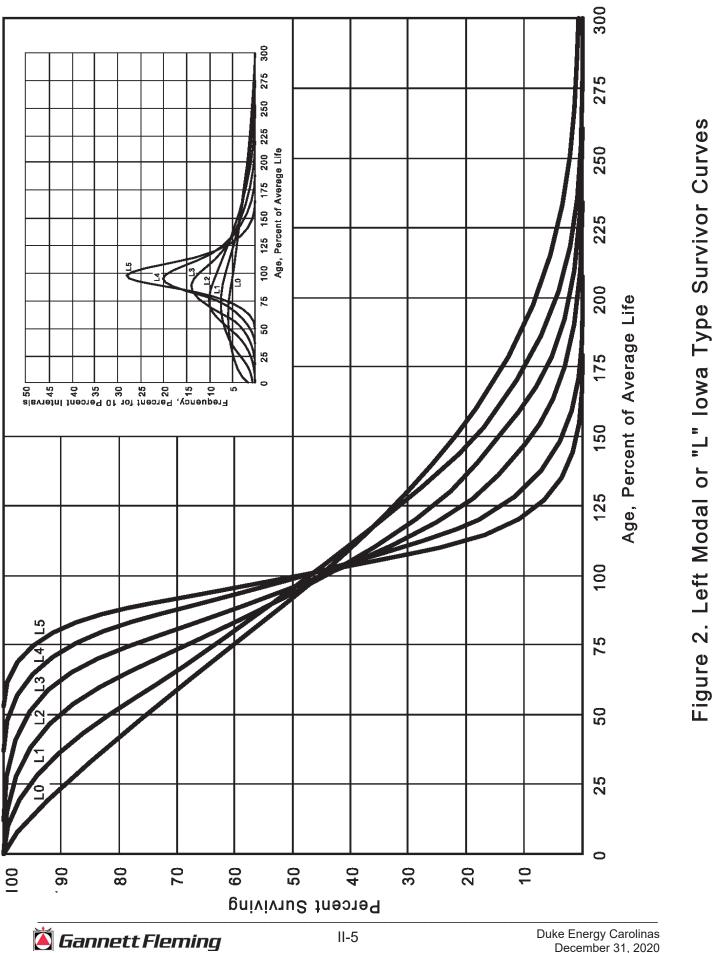


Figure 1. A Typical Survivor Curve and Derived Curves

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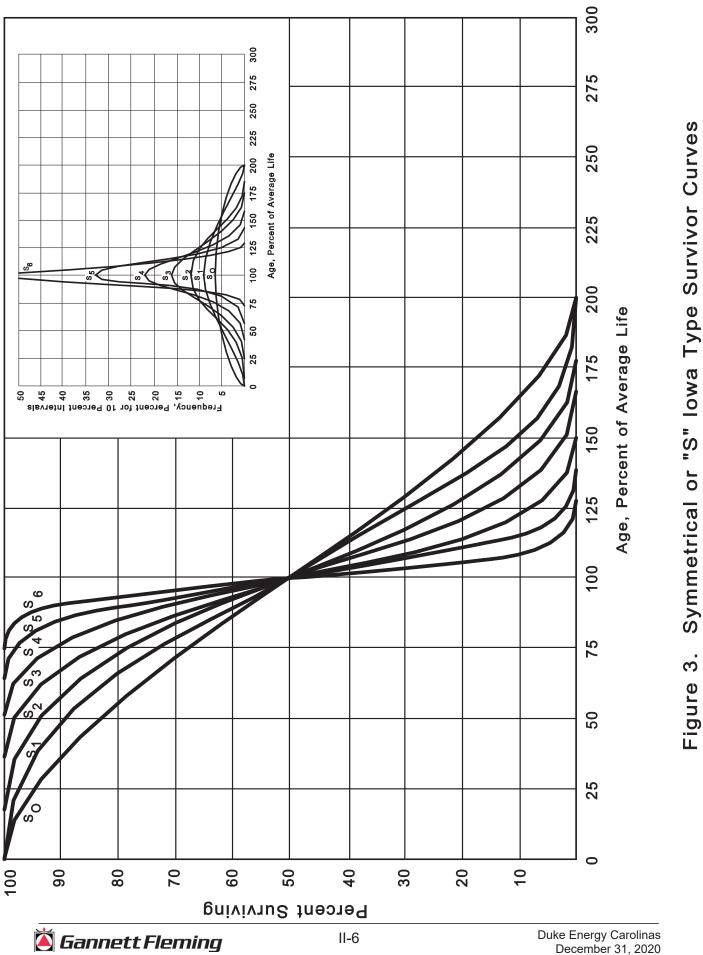
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Duke Energy Carolinas December 31, 2020



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#### **Duke Energy Carolinas** December 31, 2020

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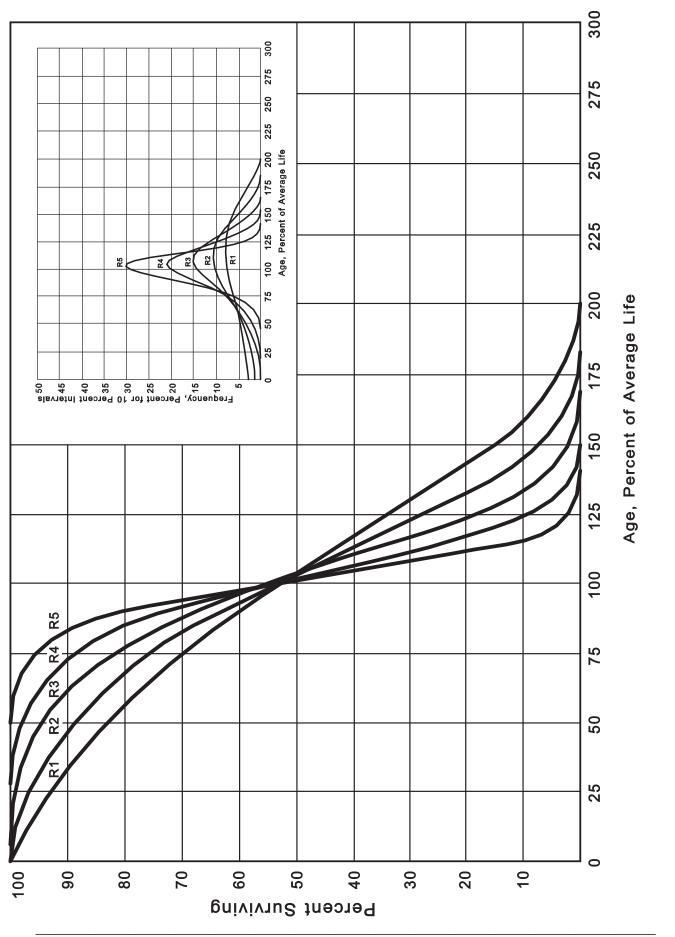


Figure 4. Right Modal or "R" lowa Type Survivor Curves Sep 20 2021

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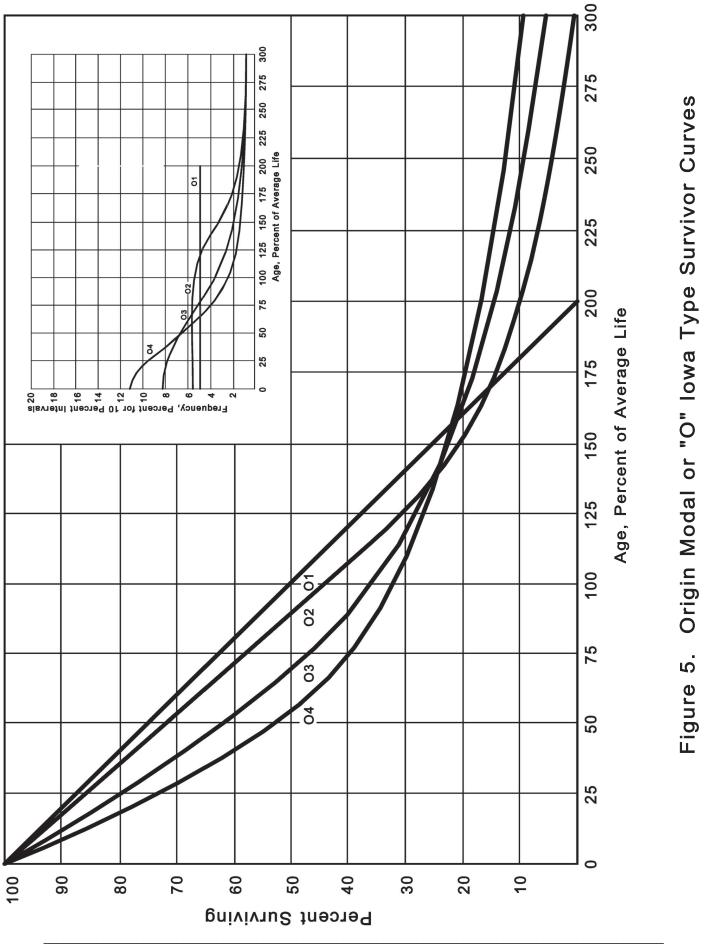


Exhibit A Docket No. E-7, Sub 1214

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🎽 Gannett Fleming

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Depreciation."<sup>1</sup> In 1957, Frank V. B. Couch, Jr., an Iowa State College graduate student submitted a thesis presenting his development of the fourth family consisting of the four O type survivor curves.

#### **Retirement Rate Method of Analysis**

The retirement rate method is an actuarial method of deriving survivor curves using the average rates at which property of each age group is retired. The method relates to property groups for which aged accounting experience is available and is the method used to develop the original stub survivor curves in this study. The method (also known as the annual rate method) is illustrated through the use of an example in the following text, and is also explained in several publications, including "Statistical Analyses of Industrial Property Retirements,"<sup>2</sup> "Engineering Valuation and Depreciation,"<sup>3</sup> and "Depreciation Systems."<sup>4</sup>

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

<sup>&</sup>lt;sup>1</sup>Marston, Anson, Robley Winfrey and Jean C. Hempstead. Engineering Valuation and Depreciation, 2nd Edition. New York, McGraw-Hill Book Company. 1953.

<sup>&</sup>lt;sup>2</sup>Winfrey, Robley, <u>Statistical Analyses of Industrial Property Retirements</u>. Iowa State College Engineering Experiment Station, Bulletin 125. 1935..

<sup>&</sup>lt;sup>3</sup>Marston, Anson, Robley Winfrey, and Jean C. Hempstead, Supra Note 1.

<sup>&</sup>lt;sup>4</sup>Wolf, Frank K. and W. Chester Fitch. <u>Depreciation Systems</u>. Iowa State University Press. 1994.

#### **Schedules of Annual Transactions in Plant Records**

The property group used to illustrate the retirement rate method is observed for the experience band 2011-2020 during which there were placements during the years 2006-2020. In order to illustrate the summation of the aged data by age interval, the data were compiled in the manner presented in Schedules 1 and 2 on pages II-12 and II-13. In Schedule 1, the year of installation (year placed) and the year of retirement are shown. The age interval during which a retirement occurred is determined from this information. In the example which follows, \$10,000 of the dollars invested in 2006 were retired in 2011. The \$10,000 retirement occurred during the age interval between 4½ and 5½ years on the basis that approximately one-half of the amount of property was installed prior to and subsequent to July 1 of each year. That is, on the average, property installed during a year is placed in service at the midpoint of the year for the purpose of the analysis. All retirements also are stated as occurring at the midpoint of a one-year age interval of time, except the first age interval which encompasses only one-half year.

The total retirements occurring in each age interval in a band are determined by summing the amounts for each transaction year-installation year combination for that age interval. For example, the total of \$143,000 retired for age interval  $4\frac{1}{2}-5\frac{1}{2}$  is the sum of the retirements entered on Schedule 1 immediately above the stair step line drawn on the table beginning with the 2009 retirements of 2006 installations and ending with the 2020 retirements of the 2015 installations. Thus, the total amount of 143 for age interval  $4\frac{1}{2}-5\frac{1}{2}$  equals the sum of:

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

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Experience Band 2011-2020

Placement Band 2006-2020

	Age	Interval	(13)	13½-14½	121/2-131/2	111/2-121/2	101/2-111/2	91⁄2-101⁄2	81⁄2-91⁄2	71/2-81/2	61/2-71/2	51/2-61/2	41/2-51/2	31/2-41/2	21/2-31/2	11/2-21/2	1/2-11/2	0-1⁄2	
	Total During	<u>Age Interval</u>	(12)	26	44	64	83	93	105	113	124	131	143	146	150	151	153	80	1,606
		2020	(11)	26	19	18	17	20	20	20	19	19	20	23	25	25	24	13	308
		2019	(10)	25	22	22	16	19	16	18	19	19	19	22	22	23	11		273
		2018	(6)	24	21	21	15	17	15	16	17	17	17	20	20	11			231
Dollars		2017	(8)	23	20	19	14	16	14	15	16	16	16	18	6				196
Retirements, Thousands of Dollars	During Year	2016	(2)	16	18	17	13	14	13	14	15	15	14	∞					157
nents, Tho	Durinç	2015	(9)	14	16	16	11	13	12	13	13	13	7						128
Retirer		2014	(2)	13	15	14	1	12	11	12	12	9							106
		2013	(4)	12	13	13	10	11	10	11	9								86
		2012	(3)	11	12	12	6	10	6	5									68
		2011	(2)	10	11	11	ω	6	4										53
	Year	Placed	(1)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total

Experience Band 2011-2020

Placement Band 2006-2020

3 2014 2015 2016 2017 2018 2019 2020 Age Interval   1 (5) (6) (7) (8) (9) (10) (11) (12)   1 - - - - - - - - -   1 -<			During Year	) Year						
$ \begin{bmatrix} & & & & & & & & & & & & & & & & & & $	<u>2013</u> (4)	<u>2014</u> (5)	<u>2015</u> (6)	2016 (7)	<u>2017</u> (8)	<u>2018</u> (9)	<u>2019</u> (10)	<u>2020</u> (11)	Total During <u>Age Interval</u> (12)	Age <u>Interval</u> (13)
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$ \begin{bmatrix} 6^{a} \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & & \\ & & & \\ & & & & \\ & & & \\ & & & &$	ı	ı		ı	,	(2) <sup>b</sup>	ı	ı	60	101/2-111/2
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	ı	ı		ı	,	6 <sup>a</sup>	ı	ı		91⁄2-101⁄2
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		ı		ı	,	ı	ı	ı	(5)	81⁄2-91⁄2
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		ı		ı	,	ı	ı	ı	9	71/2-81/2
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	I			·	,					61/2-71/2
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		·		ı	,	(12) <sup>b</sup>	ı	ı	,	51/2-61/2
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			ı	ı	ı	ı	22 <sup>a</sup>	ı		41/2-51/2
				ı	ı	(19) <sup>b</sup>	ı	ı	10	31/2-41/2
(102) <sup>°</sup> (121) 60 (30) 22 (102) (50)					ı	ı	ı	ı		21/2-31/2
						ı	ı	(102) <sup>c</sup>	(121)	11/2-21/2
							ı		ı	1/2-11/2 0_1/2
60 (30) 22 (102)									•	0-72
		·	·		60	(30)	22	(102)	(20)	
	<sup>c</sup> Sale with Continued Use									

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SCHEDULE 2. OTHER TRANSACTIONS FOR EACH YEAR 2011-2020 SUMMARIZED BY AGE INTERVAL

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In Schedule 2, other transactions which affect the group are recorded in a similar manner. The entries illustrated include transfers and sales. The entries which are credits to the plant account are shown in parentheses. The items recorded on this schedule are not totaled with the retirements, but are used in developing the exposures at the beginning of each age interval.

#### Schedule of Plant Exposed to Retirement

The development of the amount of plant exposed to retirement at the beginning of each age interval is illustrated in Schedule 3 on page II-14. The surviving plant at the beginning of each year from 2011 through 2020 is recorded by year in the portion of the table headed "Annual Survivors at the Beginning of the Year." The last amount entered in each column is the amount of new plant added to the group during the year. The amounts entered in Schedule 3 for each successive year following the beginning balance or additions are obtained by adding or subtracting the net entries shown on Schedules 1 and 2. For the purpose of determining the plant exposed to retirement, transfers-in are considered as being <u>exposed</u> to retirement in this group <u>at the beginning of the year</u> in which they occurred, and the sales and transfers-out are considered to be removed from the plant exposed to retirement at the <u>beginning of the year</u>. Thus, the amounts of plant shown at the beginning of each year are the amounts of plant from each placement year considered to be exposures for the installation year 2014 are calculated in the following manner:

Exposures at age 0 = amount of addition	= \$750,000
Exposures at age $\frac{1}{2}$ = \$750,000 - \$8,000	= \$742,000
Exposures at age 1 <sup>1</sup> / <sub>2</sub> = \$742,000 - \$18,000	= \$724,000
Exposures at age 2 <sup>1</sup> / <sub>2</sub> = \$724,000 - \$20,000	- \$19,000 = \$685,000
Exposures at age 3 <sup>1</sup> / <sub>2</sub> = \$685,000 - \$22,000	= \$663,000

Experience Band 2011-2020

Placement Band 2006-2020

				Expos	Exposures, Thousands of Dollars	sands of <b>E</b>	ollars				Total at	
Year				Annual Surv	Survivors at the Beginning of the Year	Beginning	j of the Yea	ar			Beginning of	Age
placed	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Age Interval	Interval
(1)	(2)	(3)	(4)	(2)	(9)	(2)	(8)	(6)	(10)	(11)	(12)	(13)
2006	255		234	222	209	195	239	216	192	167	167	131/2-141/2
2007	279		256	243	228	212	194	174	153	131	323	121/2-131/2
2008	307		284	271	257	241	224	205	184	162	531	111/2-121/2
2009	338		321	311	300	289	276	262	242	226	823	101/2-111/2
2010	376		357	346	334	321	307	297	280	261	1,097	91/2-101/2
2011	420ª		407	397	386	374	361	347	332	316	1,503	81⁄2-91⁄2
2012		460ª	455	444	432	419	405	390	374	356	1,952	71/2-81/2
2013			510 <sup>a</sup>	504	492	479	464	448	431	412	2,463	61/2-71/2
2014				580 <sup>a</sup>	574	561	546	530	501	482	3,057	51/2-61/2
2015					660 <sup>a</sup>	653	639	623	628	609	3,789	41/2-51/2
2016						750a	742	724	685	663	4,332	31/2-41/2
2017							850 <sup>a</sup>	841	821	799	4,955	21/2-31/2
2018								960a	949	926	5,719	11/2-21/2
2019									1,080 <sup>a</sup>	1,069	6,579	11/2-11/2
2020										1,220ª	7,490	0-1⁄2
Total	1,975	2,382	2,824	3,318	3,872	4,494	5,247	6,017	6,852	7,799	44,780	
	<sup>a</sup> Additions during the year	ring the yea										

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For the entire experience band 2011-2020, the total exposures at the beginning of an age interval are obtained by summing diagonally in a manner similar to the summing of the retirements during an age interval (Schedule 1). For example, the figure of 3,789, shown as the total exposures at the beginning of age interval  $4\frac{1}{2}-5\frac{1}{2}$ , is obtained by summing:

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

#### **Original Life Table**

The original life table, illustrated in Schedule 4 on page II-16, is developed from the totals shown on the schedules of retirements and exposures, Schedules 1 and 3, respectively. The exposures at the beginning of the age interval are obtained from the corresponding age interval of the exposure schedule, and the retirements during the age interval are obtained from the corresponding age interval of the retirement schedule. The retirement ratio is the result of dividing the retirements during the age interval by the exposures at the beginning of the age interval. The percent surviving at the beginning of each age interval is derived from survivor ratios, each of which equals one minus the retirement ratio. The percent surviving is developed by starting with 100% at age zero and successively multiplying the percent surviving at the beginning of each interval by the survivor ratio, i.e., one minus the retirement ratio for that age interval. The calculations necessary to determine the percent surviving at age 5½ are as follows:

Percent surviving at age 4½	=	88.15			
Exposures at age 4 <sup>1</sup> / <sub>2</sub>	=	3,789,000			
Retirements from age $4\frac{1}{2}$ to $5\frac{1}{2}$	=	143,000			
Retirement Ratio	=	143,000 -	÷ 3,789,000	=	0.0377
Survivor Ratio	=	1.000	- 0.0377	=	0.9623
Percent surviving at age 5 <sup>1</sup> ⁄ <sub>2</sub>	=	(88.15)	x (0.9623)	=	84.83

The totals of the exposures and retirements (columns 2 and 3) are shown for the purpose of checking with the respective totals in Schedules 1 and 3. The ratio of the total retirements to the total exposures, other than for each age interval, is meaningless.

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#### SCHEDULE 4. ORIGINAL LIFE TABLE CALCULATED BY THE RETIREMENT RATE METHOD

Experience Band 2011-2020

Placement Band 2006-2020

(Exposure and Retirement Amounts are in Thousands of Dollars)

Age at Beginning of Interval	Exposures at Beginning of Age Interval	Retirements During Age Interval	Retirement Ratio	Survivor Ratio	Percent Surviving at Beginning of Age Interval
(1)	(2)	(3)	(4)	(5)	(6)
0.0	7,490	80	0.0107	0.9893	100.00
0.5 1.5	6,579 5 710	153 151	0.0233	0.9767 0.9736	98.93 96.62
2.5	5,719 4,955	151	0.0264 0.0303	0.9736	90.02 94.07
3.5	4,332	146	0.0303	0.9663	94.07
4.5	3,789	143	0.0377	0.9623	88.15
5.5	3,057	131	0.0429	0.9571	84.83
6.5	2,463	124	0.0503	0.9497	81.19
7.5	1,952	113	0.0579	0.9421	77.11
8.5	1,503	105	0.0699	0.9301	72.65
9.5	1,097	93	0.0848	0.9152	67.57
10.5	823	83	0.1009	0.8991	61.84
11.5	531	64	0.1205	0.8795	55.60
12.5	323	44	0.1362	0.8638	48.90
13.5	167	26	0.1557	0.8443	42.24
					35.66
Total	<u>44,780</u>	<u>1,606</u>			

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

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

Column 4 = Column 3 Divided by Column 2.

Column 5 = 1.0000 Minus Column 4.

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

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

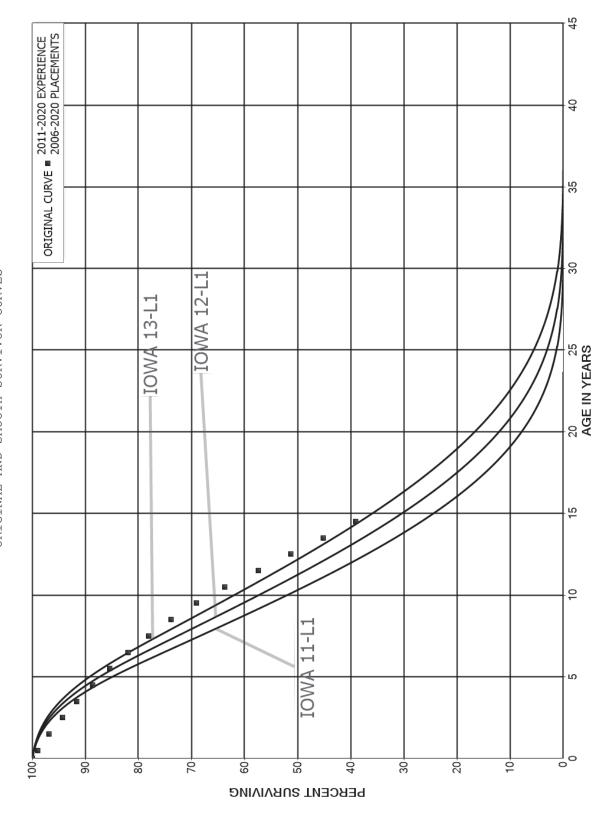
#### **Smoothing the Original Survivor Curve**

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

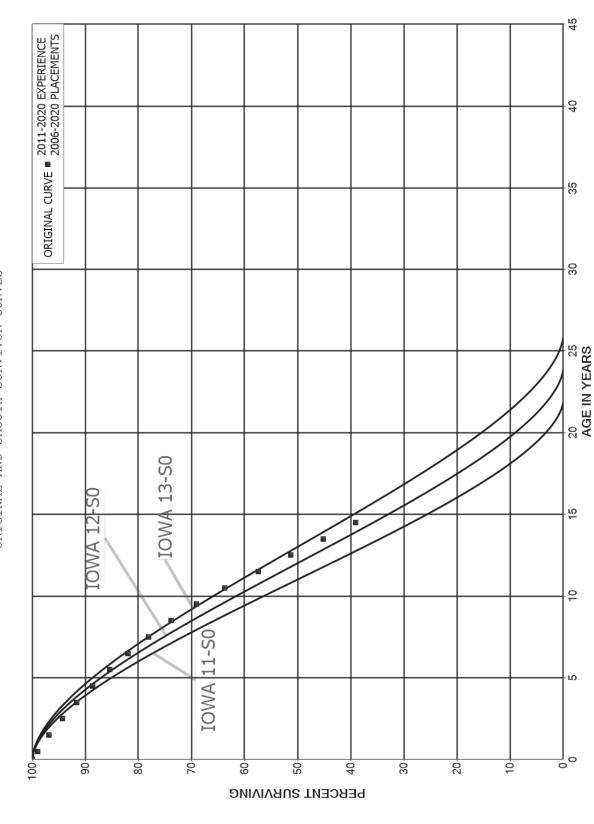
The lowa type curves are used in this study to smooth those original stub curves which are expressed as percents surviving at ages in years. Each original survivor curve was compared to the lowa curves using visual and mathematical matching in order to determine the better fitting smooth curves. In Figures 6, 7, and 8, the original curve developed in Schedule 4 is compared with the L, S, and R lowa type curves which most nearly fit the original survivor curve. In Figure 6, the L1 curve with an average life between 12 and 13 years appears to be the best fit. In Figure 7, the S0 type curve with a 12-year average life appears to be the best fit and appears to be better than the L1 fitting. In Figure 8, the R1 type curve with a 12-year average life appears to be the best fit and appears to be better than either the L1 or the S0.

In Figure 9, the three fittings, 12-L1, 12-S0 and 12-R1 are drawn for comparison purposes. It is probable that the 12-R1 lowa curve would be selected as the most representative of the plotted survivor characteristics of the group.

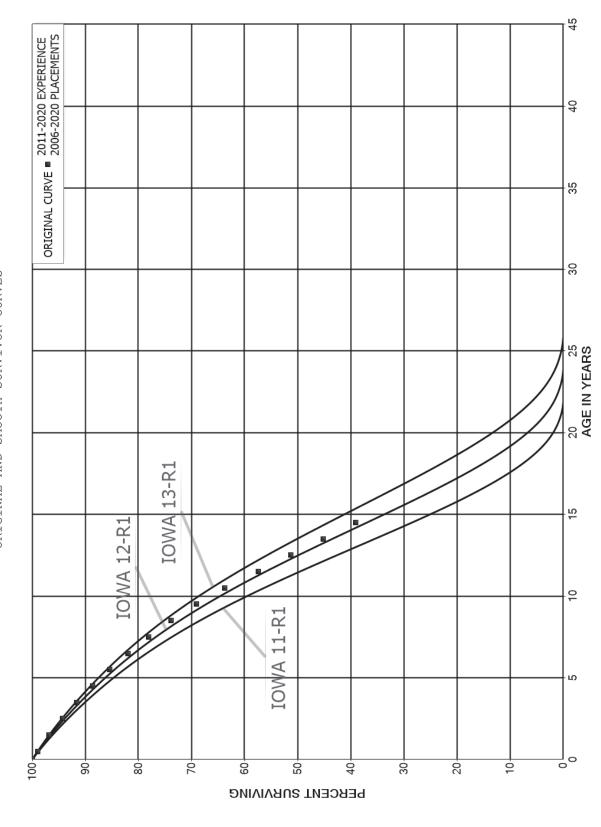
FIGURE 6. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN L1 IOWA TYPE CURVE ORIGINAL AND SMOOTH SURVIVOR CURVES



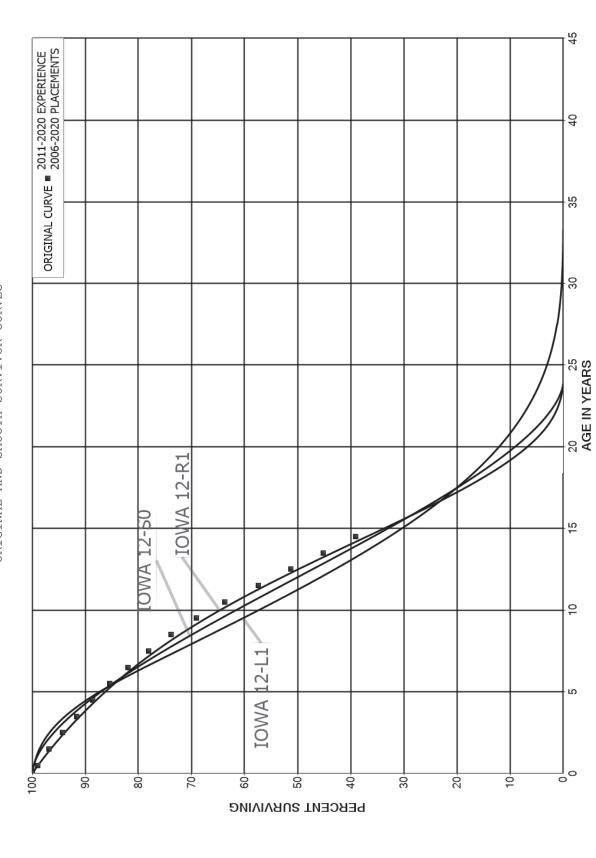
SO IOWA TYPE CURVE FIGURE 7. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN ORIGINAL AND SMOOTH SURVIVOR CURVES



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



AND R1 IOWA TYPE CURVE 0 0 0 FIGURE 9. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN L1, ORIGINAL AND SMOOTH SURVIVOR CURVES



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## PART III. SERVICE LIFE CONSIDERATIONS

🎽 Gannett Fleming

Exhibit A

Docket No. E-7, Sub 1214

#### SERVICE LIFE ANALYSIS

The service life estimates were based on judgment which considered a number of factors. The primary factors were the statistical analyses of data, current Company policies and outlook as determined during conversations with management; and the survivor curve estimates from previous studies of this company and other electric utility companies.

For 5 plant accounts for which survivor curves were estimated, the statistical analyses using the retirement rate method resulted in good to excellent indications of the survivor patterns experienced. Generally, the information external to the statistics led to minimal or no significant departure from the indicated survivor curves for the accounts listed below. The statistical support for the service life estimates is presented in the section beginning on page VII-2.

#### NUCLEAR PLANT

- 321.00 Structures and Improvements
- 322.00 Reactor Plant Equipment
- 323.00 Turbogenerator Units
- 324.00 Accessory Electric Equipment
- 325.00 Miscellaneous Power Plant Equipment

Account 322, Reactor Plant Equipment, is used to illustrate the manner in which the study was conducted for the groups in the preceding list. Aged plant accounting data have been compiled for the years 1978 through 2020. These data have been coded in the course of the Company's normal record keeping according to account or property group, type of transaction, year in which the transaction took place, and year in which the electric plant was placed in service. The retirements, other plant transactions, and plant additions were analyzed by the retirement rate method. The survivor curve estimate is based on the statistical indications for the period 1978 through 2020. The Iowa 48-S0.5 is a reasonable fit of the stub original survivor curve for Reactor Plant Equipment. The 48-year service life is within the typical service life range of 40 to 50 years for reactor plant equipment. The 48-year life reflects the Company's plans to continue to replace reactor plant equipment at the time the equipment requires an upgrade due to reliability or functionality.

For Account 323, Turbogenerator Units, the interim survivor curve estimate is the 40-S0.5. The statistical analysis for this account provides a good indication of service life through age 48. The 40-S0.5 estimate is within the industry range, reflects the recent replacement practices and is consistent with the future outlook for this account. The current estimate for this account is 45-R2. Based on these considerations, the 40-S0.5 interim survivor curve is the most reasonable estimate for this account.

Similar studies were performed for the remaining plant accounts. Each of the judgments represented a consideration of statistical analyses of aged plant activity, management's outlook for the future, and the typical range of lives used by other electric companies.

#### Life Span Estimates

Inasmuch as production plant consists of large generating units, the life span technique was employed in conjunction with the use of interim survivor curves which reflect interim retirements that occur prior to the ultimate retirement of the major unit. An interim survivor curve was estimated for each plant account, inasmuch as the rate of interim retirements differs from account to account. The interim survivor curves estimated were based on the retirement rate method of life analysis which incorporated experienced aged retirements for the period, 1978 through 2020.

The depreciable life span for nuclear units is approximately 80 years which reflects a 20 year extension from prior life spans as the Company plans to extend the license dates for each unit.

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

Depreciable Group	Major Year in <u>Service</u>	Probable Retirement <u>Year</u>	<u>Life Span</u>
Nuclear Production Oconee McGuire Catawba	1973 1981 1985	2054 2063 2063	81 82 78

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# PART IV. NET SALVAGE CONSIDERATIONS

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#### PART IV. NET SALVAGE CONSIDERATIONS

#### SALVAGE ANALYSIS

The estimates of net salvage by account were based in part on historical data compiled through 2020. Cost of removal and gross salvage were expressed as percents of the original cost of plant retired, both on annual and three-year moving average bases. The most recent five-year average also was calculated for consideration. The net salvage estimates by account are expressed as a percent of the original cost of plant retired.

#### Net Salvage Considerations

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

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

Statistical analyses of historical data for the periods 2003 through 2020 for all plant accounts were analyzed. The analyses contributed significantly toward the net salvage estimates for all plant accounts, as follows:

#### NUCLEAR PRODUCTION PLANT

321.00	Structures and Improvements
322.00	Reactor Plant Equipment
323.00	Turbogenerator Units
324.00	Accessory Electric Equipment
325.00	Miscellaneous Power Plant Equipment

The overall net salvage estimates for each nuclear facility, for which the life span method is used, is based on estimates of both final net salvage and interim net salvage. Final net salvage is the net salvage experienced at the end of a production plant's life span and is not included in the overall weighted net salvage percent. Interim net salvage is the net salvage experienced for interim retirements that occur prior to the final retirement of the plant. The interim net salvage estimates were based in part on an analysis of historical interim retirement and net salvage data. Based on informed judgment that incorporated these interim net salvage analyses for each plant account, an interim net salvage estimate of negative 10 percent was utilized for most plant accounts.

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

The net salvage percents for the remaining accounts were based on judgment incorporating factors such as the statistical net salvage analysis, general knowledge of the property studied, and estimates of previous studies of this and other electric utilities.

# PART V. CALCULATION OF ANNUAL AND ACCRUED DEPRECIATION

# PART V. CALCULATION OF ANNUAL AND ACCRUED DEPRECIATION

#### **GROUP DEPRECIATION PROCEDURES**

A group procedure for depreciation is appropriate when considering more than a single item of property. Normally the items within a group do not have identical service lives but have lives that are dispersed over a range of time. There are two primary group procedures, namely, average service life and equal life group. In the average service life procedure, the rate of annual depreciation is based on the average life or average remaining life of the group, and this rate is applied to the surviving balances of the group's cost. A characteristic of this procedure is that the cost of plant retired prior to average life is not fully recouped at the time of retirement, whereas the cost of plant retired subsequent to average life is more than fully recouped. Over the entire life cycle, the portion of cost not recouped prior to average life is balanced by the cost recouped subsequent to average life.

#### Single Unit of Property

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

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

The accrued depreciation is:

$$(1 - \frac{6}{10}) = (400)$$

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#### **Remaining Life Annual Accruals**

For the purpose of calculating remaining life accruals as of December 31, 2020, the depreciation reserve for each plant account is allocated among vintages in proportion to the calculated accrued depreciation for the account. Explanations of remaining life accruals and calculated accrued depreciation follow. The detailed calculations as of December 31, 2020, are set forth in the Results of Study section of the report.

#### Average Service Life Procedure

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

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

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

### PART VI. RESULTS OF STUDY

#### PART VI. RESULTS OF STUDY

#### **QUALIFICATION OF RESULTS**

The calculated annual and accrued depreciation are the principal results of the study. Continued surveillance and periodic revisions are normally required to maintain continued use of appropriate annual depreciation accrual rates. An assumption that accrual rates can remain unchanged over a long period of time implies a disregard for the inherent variability in service lives and net salvage and for the change of the composition of property in service. The annual accrual rates were calculated in accordance with the straight-line remaining life method of depreciation, using the average service life procedure based on estimates which reflect considerations of current historical evidence and expected future conditions.

The annual depreciation accrual rates are applicable specifically to the nuclear plant in service as of December 31, 2020. For most plant accounts, the application of such rates to future balances that reflect additions subsequent to December 31, 2020, is reasonable for a period of three to five years assuming license extension is finalized.

#### DESCRIPTION OF STATISTICAL SUPPORT

The service life and net salvage estimates were based on judgment which incorporated statistical analyses of retirement data, discussions with management and consideration of estimates made for other electric utility companies. The results of the statistical analyses of service life are presented in the section titled "Service Life Statistics".

The estimated survivor curves for each account are presented in graphical form. The charts depict the estimated smooth survivor curve and original survivor curve(s), Sep 20 2021

when applicable, related to each specific group. For groups where the original survivor curve was plotted, the calculation of the original life table is also presented.

The analyses of interim net salvage data are presented in the section titled, "Net Salvage Statistics". The tabulations present annual cost of removal and gross salvage data, three-year moving averages and the most recent five-year average. Data are shown in dollars and as percentages of original costs retired.

#### DESCRIPTION OF DEPRECIATION TABULATIONS

A summary of the results of the study, as applied to the original cost of nuclear plant as of December 31, 2020, is presented on page VI-4 of this report. The schedule sets forth the original cost, the book reserve, future accruals, the calculated annual depreciation rate and amount, and the composite remaining life related to nuclear plant.

The tables of the calculated annual depreciation accruals are presented in account sequence in the section titled "Detailed Depreciation Calculations." The tables indicate the estimated survivor curve and net salvage percent for the account and set forth, for each installation year, the original cost, the calculated accrued depreciation, the allocated book reserve, future accruals, the remaining life and the calculated annual accrual amount.

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, NET SALVAGE PERCENT, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO NUCLEAR PLANT AS OF DECEMBER 31, 2020

	PROBABLE RETIREMENT	SURVIVOR	NET SALVAGE	ORIGINAL COST AS OF	BOOK	FUTURE		CALCULATED ANNUAL ACCRUAL	COMPOSITE
ACCOUNT (1)	DATE (2)	CURVE (3)	PERCENT (4)	DECEMBER 31, 2020 (5)	RESERVE (6)	ACCRUALS (7)	AMOUNT (8)	RATE (9)=(8)/(5)	LIFE (10)=(7)/(8)
STRUCTURES AND IMPROVEMENTS OCONEE MCGUIRE CATAWBA	07-2054 03-2063 12-2063	60-S1 60-S1 60-S1	* * (4) * (7) (7)	990,708,053.64 716,712,614.25 247,451,189.93	365,146,219 410,007,160 144,451,886	665,190,157 356,875,337 120,320,887	22,056,915 11,169,517 3,779,293	2.23 1.56 1.53	30.2 32.0 31.8
TOTAL STRUCTURES AND IMPROVEMENTS				1,954,871,857.82	919,605,265	1,142,386,381	37,005,725	1.89	30.9
REACTOR PLANT EQUIPMENT OCONEE MCGUIRE CATAWBA	07-2054 03-2063 12-2063	48-S0.5 48-S0.5 48-S0.5	* (4) * (7) (7)	1,997,235,543.83 1,585,934,310.15 384,368,309.59	755,584,080 910,778,751 232,691,363	1,321,540,886 786,170,961 178,582,728	47,537,837 27,277,456 6,345,684	2.38 1.72 1.65	27.8 28.8 28.1
TOTAL REACTOR PLANT EQUIPMENT				3,967,538,163.57	1,899,054,194	2,286,294,575	81,160,977	2.05	28.2
	07-2054 03-2063 12-2063	40-S0.5 40-S0.5 40-S0.5	* * (4) * (7)	430,252,886.93 563,581,727.07 104,018,510.29	113,669,510 202,909,634 52,460,849	333,793,492 400,122,814 58,838,957	13,022,988 15,263,020 2,663,095	3.03 2.71 2.56	25.6 26.2 22.1
TOTAL TURBOGENERATOR UNITS				1,097,853,124.29	369,039,993	792,755,263	30,949,103	2.82	25.6
ACCESSORY ELECTRIC EQUIPMENT OCONEE MCGUIRE CATAWBA	07-2054 03-2063 12-2063	50-R2.5 50-R2.5 50-R2.5	* * (4) * (7)	937,717,673.54 275,954,347.55 92,184,44	268,416,605 145,080,541 52,017,760	706,809,775 150,190,611 46,619,638	23,280,230 4,742,952 1,533,853	2.48 1.72 1.66	30.4 31.7 30.4
TOTAL ACCESSORY ELECTRIC EQUIPMENT				1,305,856,505.53	465,514,906	903,620,024	29,557,035	2.26	30.6
MISCELLANEOUS PLANT EQUIPMENT OCONEE MCGUIRE CATAWBA SHARED DEPARTMENT PLANT	07-2054 03-2063 12-2063 12-2063	55-R2 55-R2 55-R2 55-R2	* * * (4) * (7) (5)	261,374,656.02 291,721,197,86 51,590,372,94 1,471,401.91	111,328,295 133,418,303 25,088,105 469,924	160,501,347 178,723,379 30,113,594 1,075,048	5,401,042 5,202,556 884,615 29,595	2.07 1.78 1.71 2.01	29.7 34.4 36.3
TOTAL MISCELLANEOUS PLANT EQUIPMENT				606,157,628.73	270,304,627	370,413,368	11,517,808	1.90	32.2
TOTAL NUCLEAR PRODUCTION PLANT				8,932,277,279.94	3,923,518,985	5,495,469,611	190,190,648	2.13	
	07-2054 03-2063 12-2063	100-R4 100-R4 100-R4	000	425,003.00 74,882.00 456,656.68	344,995 48,238 258,890	80,008 26,644 197,767	2,579 667 4,777	0.61 0.89 1.05	31.0 39.9 41.4
				956,541.68	652,123	304,419	8,023	0.84	37.9
TOTAL DEPRECIABLE LAND RIGHTS				956,541.68	652,123	304,419	8,023	0.84	37.9
				8,933,233,821.62	3,924,171,108	5,495,774,030	190,198,671	2.13	

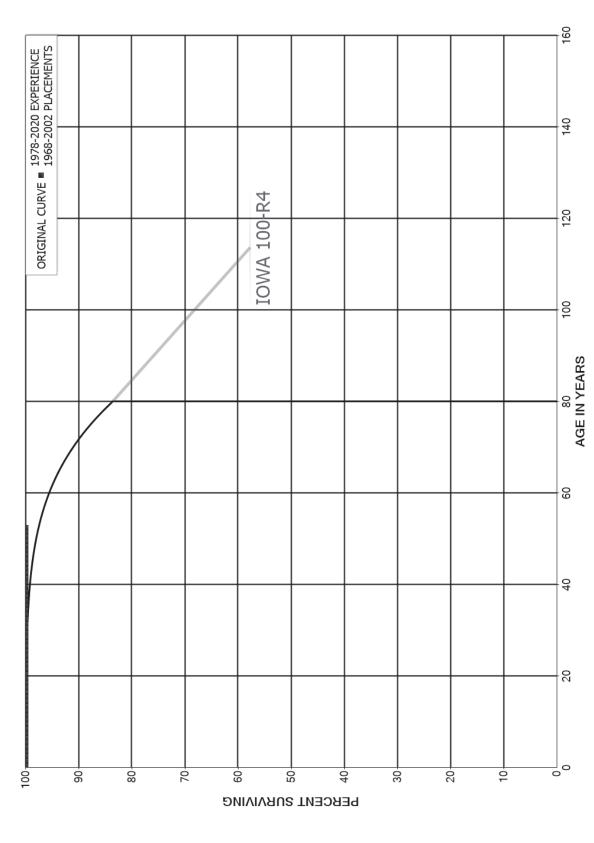
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	COMPOSITE REMAINING LIFE (10)=(7)/(8)				
	CALCULATED ANNUAL ACCRUAL UNT RATE (9)=(8)/(5)				
	CALC ANNUAL AMOUNT (8)				
TION RESERVE 1, 2020	FUTURE ACCRUALS (7)				
IST, BOOK DEPRECIA I AS OF DECEMBER 3	BOOK DEPRECIATION RESERVE (6)	(113,392,206)	(113,392,206)	3,810,778,902	
TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, NET SALVAGE PERCENT, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO NUCLEAR PLANT AS OF DECEMBER 31, 2020	ORIGINAL COST AS OF DECEMBER 31, 2020 (5)	2,084,901.52 (251,515,769.00)	(249,430,867.48)	8,683,802,954.14	
, NET SALVAGE CCRUALS REL/	NET SALVAGE PERCENT (4)				ment year.
VIVOR CURVE PRECIATION AC	SURVIVOR CURVE (3)				an individual probable retirement year.
DF ESTIMATED SUR .ATED ANNUAL DEF	PROBABLE RETIREMENT DATE (2)				issigned an individual
TABLE 1. SUMMARY C AND CALCUL	ACCOUNT (1)	NONDEPRECIABLE PLANT AND ACCOUNTS NOT STUDIED 320.00 LAND 326.00 ARO NUCLEAR PLANT	TOTAL NONDEPRECIABLE PLANT AND ACCOUNTS NOT STUDIED	TOTAL ELECTRIC PLANT	* Curve shown is interim survivor curve. Each facility in the account is assigned

# PART VII. SERVICE LIFE STATISTICS

DUKE ENERGY CAROLINAS ACCOUNT 320.00 RIGHTS OF WAY ORIGINAL AND SMOOTH SURVIVOR CURVES



EXPERIENCE BAND 1978-2020

#### DUKE ENERGY CAROLINAS

#### ACCOUNT 320.00 RIGHTS OF WAY

#### ORIGINAL LIFE TABLE

#### PLACEMENT BAND 1968-2002

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0 0.5 1.5 2.5 3.5 4.5 5.5 6.5 7.5 8.5	489,270 489,270 531,029 532,109 534,724 946,622 945,542 945,542 540,439 540,439		0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00
9.5 10.5 11.5 12.5 13.5 14.5 15.5 16.5 17.5 18.5	533,644 533,644 533,644 956,032 956,032 956,032 956,032 956,542 956,542 881,365		0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00
19.5 20.5 21.5 22.5 23.5 24.5 25.5 26.5 27.5 28.5	881,365 881,365 881,365 881,365 881,365 881,365 881,365 881,365 881,365 881,365		0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00
29.5 30.5 31.5 32.5 33.5 34.5 35.5 36.5 37.5 38.5	881,365 881,365 881,365 881,365 881,365 881,365 499,885 499,885 499,885		0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00

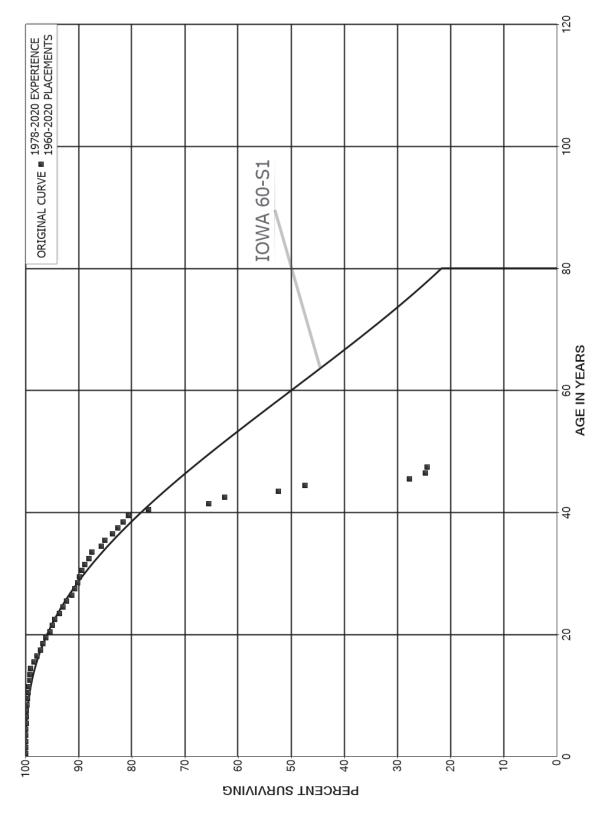
#### ACCOUNT 320.00 RIGHTS OF WAY

#### ORIGINAL LIFE TABLE, CONT.

#### PLACEMENT BAND 1968-2002

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5 40.5 41.5 42.5 43.5 44.5 45.5 46.5 47.5 48.5 49.5 50.5 51.5 52.5	425,003 425,003 425,003 425,003 425,003 425,003 425,003 422,388 422,388 422,388 422,388 422,388 422,388		0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00

DUKE ENERGY CAROLINAS ACCOUNT 321.00 STRUCTURES AND IMPROVEMENTS ORIGINAL AND SMOOTH SURVIVOR CURVES



Sep 20 2021

#### ACCOUNT 321.00 STRUCTURES AND IMPROVEMENTS

#### ORIGINAL LIFE TABLE

PLACEMENT BAND 1960-2020

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0 0.5 1.5 2.5 3.5 4.5 5.5 6.5 7.5 8.5	2,045,109,525 2,010,286,054 1,955,127,075 1,934,085,799 1,990,279,362 1,923,961,748 1,794,774,786 1,728,611,093 1,580,104,702 1,540,875,537	49,648 243,452 1,480,202 352,463 407,876 332,581 721,786 1,247,954 1,578,749	0.0000 0.0001 0.0008 0.0002 0.0002 0.0002 0.0004 0.0008 0.0010	1.0000 1.0000 0.9999 0.9992 0.9998 0.9998 0.9998 0.9996 0.9992 0.9990	100.00 100.00 99.99 99.91 99.89 99.87 99.85 99.81 99.73
9.5	1,404,765,522	1,446,961	0.0010	0.9990	99.63
10.5	1,369,628,759	1,354,899	0.0010	0.9990	99.53
11.5	1,306,168,456	2,787,750	0.0021	0.9979	99.43
12.5	1,271,383,872	650,177	0.0005	0.9995	99.22
13.5	1,224,605,893	1,646,269	0.0013	0.9987	99.16
14.5	1,177,218,237	8,024,467	0.0068	0.9932	99.03
15.5	1,139,878,440	6,483,068	0.0057	0.9943	98.36
16.5	1,100,781,821	7,507,534	0.0068	0.9932	97.80
17.5	1,083,770,347	4,147,125	0.0038	0.9962	97.13
18.5	1,070,602,201	6,442,566	0.0038	0.9940	96.76
19.5	1,056,525,481	8,208,457	0.0078	0.9922	96.18
20.5	1,037,997,839	5,772,571	0.0056	0.9944	95.43
21.5	1,030,231,737	3,817,682	0.0037	0.9963	94.90
22.5	1,005,623,350	9,952,730	0.0099	0.9901	94.55
23.5	992,766,909	6,743,681	0.0068	0.9932	93.61
24.5	984,148,974	7,732,425	0.0079	0.9921	92.97
25.5	966,553,744	9,874,878	0.0102	0.9898	92.24
26.5	949,182,288	5,556,812	0.0059	0.9941	91.30
27.5	937,912,795	5,742,548	0.0061	0.9939	90.77
28.5	928,271,404	3,883,099	0.0042	0.9958	90.21
29.5	911,221,145	4,916,881	0.0054	0.9946	89.83
30.5	903,941,494	5,369,275	0.0059	0.9941	89.35
31.5	861,776,387	7,046,796	0.0082	0.9918	88.82
32.5	841,588,054	5,406,967	0.0064	0.9936	88.09
33.5	821,249,208	17,149,665	0.0209	0.9791	87.53
34.5	625,651,639	4,780,885	0.0076	0.9924	85.70
35.5	515,715,994	8,989,876	0.0174	0.9826	85.04
36.5	293,220,287	3,214,820	0.0110	0.9890	83.56
37.5	275,215,231	3,249,873	0.0118	0.9882	82.65
38.5	266,610,104	3,323,126	0.0125	0.9875	81.67

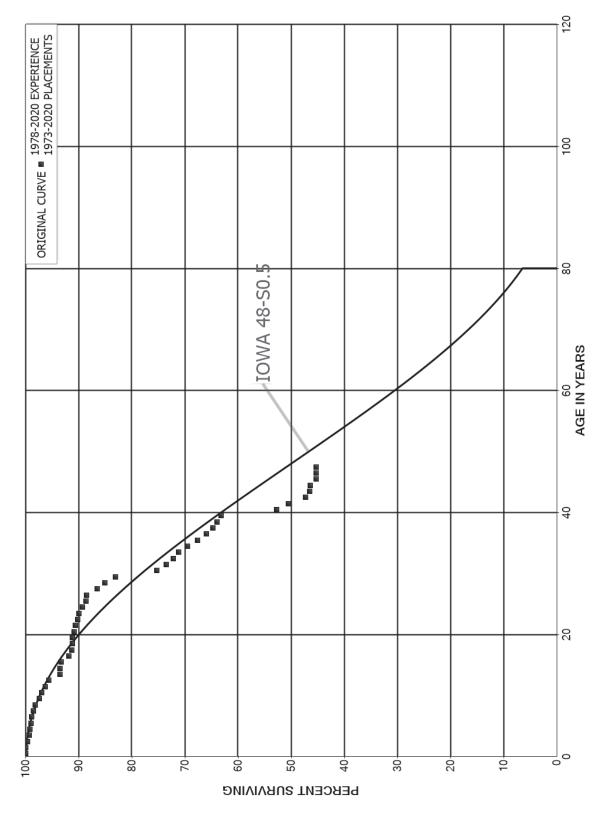
#### ACCOUNT 321.00 STRUCTURES AND IMPROVEMENTS

#### ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1960-2020

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5 40.5 41.5 42.5 43.5 44.5 45.5 46.5 47.5	71,880,187 67,975,870 57,533,074 54,476,674 42,873,767 38,012,315 22,078,659 10,978,169	3,417,033 10,042,674 2,567,424 8,864,032 4,042,862 15,762,741 2,435,570 135,994	0.0475 0.1477 0.0446 0.1627 0.0943 0.4147 0.1103 0.0124	0.9525 0.8523 0.9554 0.8373 0.9057 0.5853 0.8897 0.9876	80.65 76.82 65.47 62.55 52.37 47.43 27.76 24.70 24.39

DUKE ENERGY CAROLINAS ACCOUNT 322.00 REACTOR PLANT EQUIPMENT ORIGINAL AND SMOOTH SURVIVOR CURVES



#### ACCOUNT 322.00 REACTOR PLANT EQUIPMENT

#### ORIGINAL LIFE TABLE

PLACEMENT BAND 1973-2020

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	4,460,072,267	3,853	0.0000	1.0000	100.00
0.5	4,363,923,317	2,556,952	0.0006	0.9994	100.00
1.5	4,229,107,686	15,588,361	0.0037	0.9963	99.94
2.5	4,114,951,879	13,691,927	0.0033	0.9967	99.57
3.5	4,175,483,849	3,984,843	0.0010	0.9990	99.24
4.5	4,152,309,062	8,074,347	0.0019	0.9981	99.15
5.5	3,688,832,806	4,886,241	0.0013	0.9987	98.95
6.5	3,526,820,487	10,353,443	0.0029	0.9971	98.82
7.5	3,360,843,927	11,508,763	0.0034	0.9966	98.53
8.5	3,214,268,652	27,637,545	0.0086	0.9914	98.20
9.5 10.5 11.5 12.5 13.5 14.5 15.5 16.5 17.5 18.5	2,970,528,349 2,863,802,836 2,790,199,529 2,716,870,579 2,596,044,988 2,549,590,312 2,515,308,822 2,153,951,728 1,981,012,042 1,942,503,146	11,503,697 19,280,495 20,176,083 59,241,237 1,520,308 6,328,131 37,335,365 13,484,733 1,658,525 1,776,218	0.0039 0.0067 0.0218 0.0006 0.0025 0.0148 0.0063 0.0008 0.0008	0.9961 0.9933 0.9928 0.9782 0.9994 0.9975 0.9852 0.9937 0.9992 0.9991	97.35 96.97 96.32 95.62 93.54 93.48 93.25 91.87 91.29 91.22
19.5	1,926,556,495	6,819,205	0.0035	0.9965	91.13
20.5	1,898,607,790	4,858,371	0.0026	0.9974	90.81
21.5	1,881,347,723	8,751,466	0.0047	0.9953	90.58
22.5	1,863,929,935	4,638,664	0.0025	0.9975	90.16
23.5	1,582,901,722	10,674,207	0.0067	0.9933	89.93
24.5	1,551,013,615	11,527,848	0.0074	0.9926	89.33
25.5	1,527,776,608	2,856,622	0.0019	0.9981	88.66
26.5	1,512,981,590	33,687,348	0.0223	0.9777	88.50
27.5	1,468,563,482	25,627,386	0.0175	0.9825	86.53
28.5	1,433,077,522	32,428,439	0.0226	0.9774	85.02
29.5	1,388,916,216	130,021,305	0.0936	0.9064	83.09
30.5	1,250,207,936	30,893,907	0.0247	0.9753	75.31
31.5	1,206,987,637	20,182,701	0.0167	0.9833	73.45
32.5	1,165,637,350	17,161,593	0.0147	0.9853	72.22
33.5	1,144,210,472	27,343,886	0.0239	0.9761	71.16
34.5	901,316,025	23,636,434	0.0262	0.9738	69.46
35.5	760,121,355	19,132,191	0.0252	0.9748	67.64
36.5	334,214,602	6,152,213	0.0184	0.9816	65.94
37.5	326,869,513	4,180,141	0.0128	0.9872	64.72
38.5	316,918,056	3,309,524	0.0104	0.9896	63.90

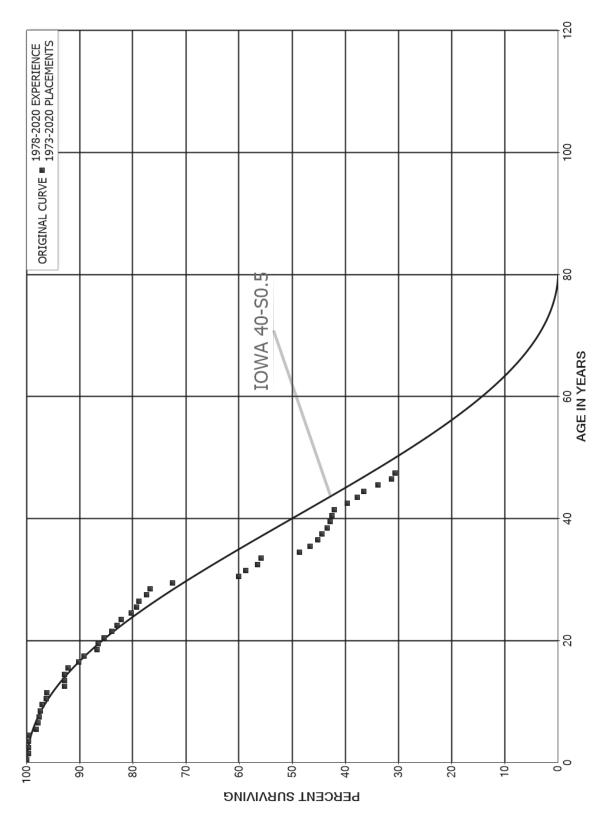
#### ACCOUNT 322.00 REACTOR PLANT EQUIPMENT

#### ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1973-2020

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5 40.5 41.5 42.5 43.5 44.5 45.5 46.5 47.5	10,083,623 7,889,986 4,696,148 4,387,384 3,773,961 3,766,700 3,650,079 640,196	1,670,047 329,147 305,190 69,551 7,261 91,621 4,173	0.1656 0.0417 0.0650 0.0159 0.0019 0.0243 0.0011 0.0000	0.8344 0.9583 0.9350 0.9841 0.9981 0.9757 0.9989 1.0000	63.23 52.76 50.56 47.27 46.52 46.43 45.30 45.25 45.25

DUKE ENERGY CAROLINAS ACCOUNT 323.00 TURBOGENERATOR UNITS ORIGINAL AND SMOOTH SURVIVOR CURVES



EXPERIENCE BAND 1978-2020

#### DUKE ENERGY CAROLINAS

#### ACCOUNT 323.00 TURBOGENERATOR UNITS

#### ORIGINAL LIFE TABLE

PLACEMENT BAND 1973-2020

31.5

32.5

33.5

34.5

35.5

36.5

37.5

38.5

339,442,170

312,245,020

308,490,822

209,059,795

171,311,750

85,028,237

81,760,507

79,948,075

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0 0.5 1.5 2.5 3.5 4.5 5.5 6.5 7.5 8.5	1,353,857,554 1,229,024,739 1,165,897,139 1,161,317,857 1,223,190,240 1,215,156,956 1,192,909,499 1,059,467,572 1,006,968,166 853,341,148	4,245,517 2,990 18,180,861 3,507,631 3,348,850 1,392,253 3,073,234	0.0000 0.0035 0.0000 0.0000 0.0000 0.0150 0.0029 0.0032 0.0014 0.0036	1.0000 0.9965 1.0000 1.0000 1.0000 0.9850 0.9971 0.9968 0.9986 0.9964	100.00 100.00 99.65 99.65 99.65 98.16 97.87 97.57 97.43
9.5 10.5 11.5 12.5 13.5 14.5 15.5 16.5 17.5 18.5	836,112,406 801,076,038 746,997,869 707,326,473 692,066,818 665,484,547 640,255,661 605,792,841 594,567,296 573,959,428	7,159,231 550,130 25,738,125 65,014 5,050,515 13,686,145 6,557,698 16,485,515 1,413,560	0.0086 0.0007 0.0345 0.0001 0.0000 0.0076 0.0214 0.0108 0.0277 0.0025	0.9914 0.9993 0.9655 0.9999 1.0000 0.9924 0.9786 0.9892 0.9723 0.9775	97.08 96.25 96.18 92.87 92.86 92.86 92.15 90.18 89.21 86.74
19.5 20.5 21.5 22.5 23.5 24.5 25.5 26.5 27.5 28.5	570,665,496 563,272,620 545,973,142 524,172,456 518,958,698 507,436,900 498,800,831 486,505,424 474,575,073 469,828,220	7,356,564 9,676,224 6,603,526 4,872,415 11,521,798 6,513,031 3,228,835 8,882,451 4,142,854 25,480,502	0.0129 0.0172 0.0121 0.0093 0.0222 0.0128 0.0065 0.0183 0.0087 0.0542	0.9871 0.9828 0.9879 0.9907 0.9778 0.9872 0.9935 0.9817 0.9913 0.9458	86.52 85.41 83.94 82.92 82.15 80.33 79.30 78.78 77.35 76.67
29.5 30.5	419,456,893 347,545,274	71,708,354 8,103,104	0.1710 0.0233	0.8290 0.9767	72.51 60.12

12,736,036

40,066,297

8,642,251

5,039,615

1,659,202

1,795,902

978,694

3,602,396

0.0375

0.0115

0.1299

0.0413

0.0294

0.0195

0.0220

0.0122

0.9625

0.9885

0.8701

0.9587

0.9706

0.9805

0.9780

0.9878

58.71

56.51

55.86

48.60

46.60

45.22

44.34

43.37

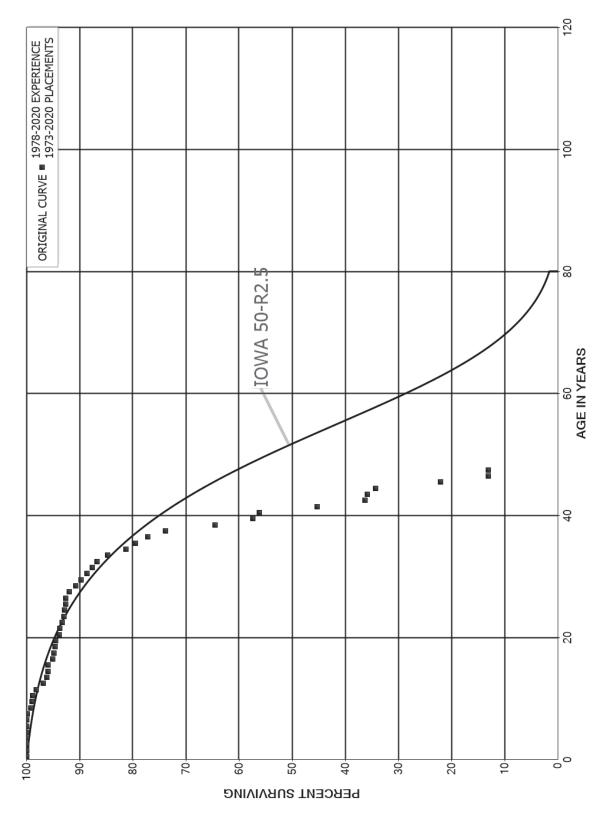
#### ACCOUNT 323.00 TURBOGENERATOR UNITS

#### ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1973-2020

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5 40.5 41.5 42.5 43.5 44.5 45.5 46.5 47.5	45,219,756 44,899,864 42,800,597 35,604,708 33,847,901 32,688,279 30,107,274 13,536,257	317,793 472,058 2,469,072 1,712,711 1,159,622 2,328,557 2,297,374 289,025	0.0070 0.0105 0.0577 0.0481 0.0343 0.0712 0.0763 0.0214	0.9930 0.9895 0.9423 0.9519 0.9657 0.9288 0.9237 0.9786	42.84 42.54 42.09 39.66 37.75 36.46 33.86 31.28 30.61

DUKE ENERGY CAROLINAS ACCOUNT 324.00 ACCESSORY ELECTRIC EQUIPMENT ORIGINAL AND SMOOTH SURVIVOR CURVES



🎽 Gannett Fleming

EXPERIENCE BAND 1978-2020

#### DUKE ENERGY CAROLINAS

#### ACCOUNT 324.00 ACCESSORY ELECTRIC EQUIPMENT

#### ORIGINAL LIFE TABLE

PLACEMENT BAND 1973-2020

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0 0.5 1.5 2.5 3.5 4.5 5.5 6.5 7.5 8.5	1,378,636,873 1,360,860,610 1,299,225,347 1,217,654,064 1,213,868,964 1,203,132,654 1,067,930,151 1,012,298,187 572,973,982 534,087,137	958 133,331 1,651 334,332 1,253,220 4,091,598 1,083,766	0.0000 0.0000 0.0000 0.0001 0.0000 0.0003 0.0012 0.0071 0.0020	1.0000 1.0000 1.0000 0.9999 1.0000 0.9997 0.9988 0.9929 0.9980	100.00 100.00 100.00 100.00 99.99 99.99 99.99 99.96 99.83 99.12
9.5 10.5 11.5 12.5 13.5 14.5 15.5 16.5 17.5 18.5	528,385,291 519,492,560 498,752,141 469,040,394 433,111,844 412,446,819 408,568,069 396,835,830 384,299,818 375,787,630	224,965 3,953,760 6,436,988 3,196,326 1,310,745 7,330 3,456,579 926,144 1,120,472 257,959	0.0004 0.0129 0.0068 0.0030 0.0000 0.0085 0.0023 0.0029 0.0007	0.9996 0.9924 0.9871 0.9932 0.9970 1.0000 0.9915 0.9977 0.9971 0.9993	98.92 98.88 98.13 96.86 96.20 95.91 95.91 95.09 94.87 94.60
19.5 20.5 21.5 22.5 23.5 24.5 25.5 26.5 27.5 28.5	370,885,980 366,326,316 348,723,014 343,022,290 305,415,802 304,057,171 301,275,096 299,853,874 293,684,560 289,783,795	2,530,949 679,747 1,495,852 1,293,688 395,351 702,855 97,975 2,060,138 3,799,261 3,338,955	0.0068 0.0019 0.0043 0.0038 0.0013 0.0023 0.0003 0.0069 0.0129 0.0115	0.9932 0.9981 0.9957 0.9962 0.9987 0.9977 0.9997 0.9931 0.9871 0.9885	94.53 93.89 93.71 93.31 92.96 92.84 92.62 92.59 91.96 90.77
29.5 30.5 31.5 32.5 33.5 34.5 35.5 36.5 37.5 38.5	275,635,685 271,611,299 267,184,347 262,897,020 256,745,628 193,931,997 162,534,381 98,776,451 93,764,656 81,854,518	3,380,796 3,058,667 2,631,061 6,056,865 10,495,810 4,145,803 4,879,685 4,282,586 11,798,598 9,040,689	0.0123 0.0113 0.0098 0.0230 0.0409 0.0214 0.0300 0.0434 0.1258 0.1104	0.9877 0.9887 0.9902 0.9770 0.9591 0.9786 0.9700 0.9566 0.8742 0.8896	89.72 88.62 87.62 86.76 84.76 81.30 79.56 77.17 73.82 64.53

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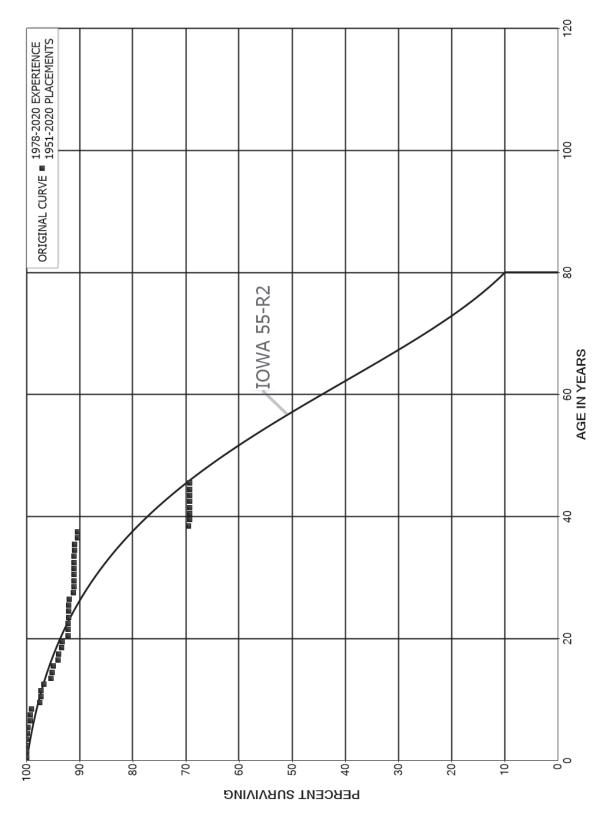
#### ACCOUNT 324.00 ACCESSORY ELECTRIC EQUIPMENT

#### ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1973-2020

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5 40.5 41.5 42.5 43.5 44.5 45.5 46.5 47.5	16,913,769 16,554,344 13,331,854 10,694,661 10,556,459 10,100,530 6,506,274 222,790	359,426 3,222,303 2,637,192 138,202 455,929 3,594,256 2,663,454	0.0213 0.1946 0.1978 0.0129 0.0432 0.3558 0.4094 0.0000	0.9787 0.8054 0.8022 0.9871 0.9568 0.6442 0.5906 1.0000	57.41 56.19 45.25 36.30 35.83 34.28 22.08 13.04 13.04

DUKE ENERGY CAROLINAS ACCOUNT 325.00 MISCELLANEOUS POWER PLANT EQUIPMENT ORIGINAL AND SMOOTH SURVIVOR CURVES



#### ACCOUNT 325.00 MISCELLANEOUS POWER PLANT EQUIPMENT

#### ORIGINAL LIFE TABLE

PLACEMENT BAND 1951-2020

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0 0.5 1.5 2.5 3.5 4.5 5.5 6.5 7.5 8.5	636,288,318 604,802,355 551,752,712 535,902,937 530,517,005 507,959,035 472,096,960 441,066,433 420,138,320 404,230,492	24,650 75,774 179,631 323,744 611,432 2,114,965 194,556 1,095,170 6,108,563	0.0000 0.0001 0.0003 0.0006 0.0012 0.0045 0.0004 0.0026 0.0151	1.0000 1.0000 0.9999 0.9997 0.9994 0.9988 0.9955 0.9996 0.9974 0.9849	100.00 100.00 99.98 99.95 99.89 99.77 99.32 99.28 99.02
9.5 10.5 11.5 12.5 13.5 14.5 15.5 16.5 17.5 18.5	383,697,594 363,299,823 342,778,072 329,402,474 310,809,168 296,604,857 288,080,416 278,318,835 272,969,534 262,653,976	765,482 103,203 2,028,875 4,450,201 672,950 674,576 2,867,995 282,277 1,601,155 310,805	0.0020 0.0003 0.0059 0.0135 0.0022 0.0023 0.0100 0.0010 0.0059 0.0012	0.9980 0.9997 0.9941 0.9865 0.9978 0.9977 0.9900 0.9990 0.9941 0.9988	97.52 97.33 97.30 96.72 95.42 95.21 94.99 94.05 93.95 93.40
19.5 20.5 21.5 22.5 23.5 24.5 25.5 26.5 27.5 28.5	254,110,502 244,209,450 239,127,157 232,793,797 222,126,247 210,439,112 199,917,849 182,657,293 166,040,662 153,694,040	3,108,510 7,014 58,650 47,786 44,986 6,244 256,063 1,647,353 144,903 20,766	0.0122 0.0000 0.0002 0.0002 0.0002 0.0000 0.0013 0.0090 0.0009 0.0001	0.9878 1.0000 0.9998 0.9998 0.9998 1.0000 0.9987 0.9910 0.9991 0.9999	93.29 92.15 92.15 92.12 92.11 92.09 92.08 91.97 91.14 91.06
29.5 30.5 31.5 32.5 33.5 34.5 35.5 36.5 37.5 38.5	142,808,744 126,478,084 120,775,302 115,333,432 109,862,116 95,394,828 80,538,722 58,241,942 56,164,021 42,656,570	4,159 2,399 18,059 89,134 57,922 473,298 326 12,989,069 119,465	0.0000 0.0001 0.0000 0.0008 0.0006 0.0059 0.0000 0.2313 0.0028	1.0000 1.0000 0.9999 1.0000 0.9992 0.9994 0.9941 1.0000 0.7687 0.9972	91.04 91.04 91.03 91.03 90.95 90.90 90.36 90.36 69.46

#### ACCOUNT 325.00 MISCELLANEOUS POWER PLANT EQUIPMENT

#### ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1951-2020

EXPERIENCE	BAND	1978-2020

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5 40.5 41.5 42.5 43.5 44.5 45.5	2,438,759 2,323,848 1,921,810 1,434,653 1,015,037 984,906	83	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	69.27 69.27 69.27 69.27 69.27 69.27 69.27

# PART VIII. NET SALVAGE STATISTICS

#### TABLE 1. CALCULATION OF TERMINAL AND INTERIM RETIREMENTS AS A PERCENT OF TOTAL RETIREMENTS

	TOTAL PROJECTED	TOTAL TERMINAL RETIREMENTS		TOTAL INTERIM RETIREMENTS	
LOCATION	RETIREMENTS	AMOUNT	(%)	AMOUNT	(%)
(1)	(2)	(3)	(4)=(3)/(2)	(6)	(7)=(6)/(2)
NUCLEAR PRODUCTION PLANT					
OCONEE	(4,617,288,813.96)	(2,879,935,656.43)	62.37	(1,737,353,157.53)	37.63
MCGUIRE	(3,433,904,196.88)	(1,065,946,923.66)	31.04	(2,367,957,273.22)	68.96
CATAWBA	(879,612,867.19)	(254,121,175.75)	28.89	(625,491,691.44)	71.11
TOTAL NUCLEAR PRODUCTION PLANT	(8,930,805,878.03)	(4,200,003,755.84)	47.03	(4,730,802,122.19)	52.97

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#### TABLE 2. CALCULATION OF WEIGHTED NET SALVAGE PERCENT

	TERMINAL RI	ETIREMENTS	INTERIM RE	TIREMENTS	WEIGHTED
ACCOUNT (1)	RETIREMENTS (%) (2)	NET SALVAGE (%) (3)	RETIREMENTS (%) (4)	NET SALVAGE (%) (5)	AVERAGE NET SALVAGE % (6)=(2)*(3)+(4)*(5)
NUCLEAR PRODUCTION PLANT					
OCONEE	62.37	0	37.63	(10)	(4)
MCGUIRE CATAWBA	31.04 28.89	0	68.96 71.11	(10) (10)	(7) (7)



#### ACCOUNT 321.00 STRUCTURES AND IMPROVEMENTS

#### SUMMARY OF BOOK SALVAGE

	REGULAR	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	
YEAR	RETIREMENTS	AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
2003	2,993,967	23,195	1		0	23,195-	1-
2004	17,280,991	5 <b>,</b> 591	0		0	5,591-	0
2005	7,992,284	10,932	0		0	10,932-	0
2006	11,142,930	26,623	0		0	26,623-	0
2007	15,046,388	20,549	0		0	20,549-	0
2008	13,774,412	19,910	0		0	19,910-	0
2009	5,133,126	722,480	14	5 <b>,</b> 575	0	716,905-	14-
2010	3,876,195		0		0		0
2011	6,244,032	1,784,789	29	30,815-	0	1,815,604-	29-
2012	5,248,258	57 <b>,</b> 263	1		0	57 <b>,</b> 263-	1-
2013	7,287,183	2,267,458	31	9,803-	0	2,277,261-	31-
2014	10,417,495	2,205,100	21	248,126-	2-	2,453,226-	24-
2015	10,620,623	2,745,808	26	32 <b>,</b> 537-	0	2,778,345-	26-
2016	8,180,399	4,650,518	57	26,113-	0	4,676,631-	57-
2017	18,010,801	1,527,547	8	5 <b>,</b> 751-	0	1,533,298-	9-
2018	8,037,360	375,104	5	12,617-	0	387 <b>,</b> 722-	5-
2019	23,940,191	5,310,670	22	6,247-	0	5,316,917-	22-
2020	16,674,430	3,682,931	22	25,028-	0	3,707,959-	22-
TOTAL	191,901,064	25,436,467	13	391,462-	0	25,827,929-	13-
THREE-YE	AR MOVING AVERAC	GES					
03-05	9,422,414	13,239	0		0	13,239-	0
04-06	12,138,735	14,382	0		0	14,382-	0
05-07	11,393,867	19 <b>,</b> 368	0		0	19 <b>,</b> 368-	0
06-08	13,321,243	22,361	0		0	22,361-	0
07-09	11,317,975	254,313	2	1,858	0	252 <b>,</b> 455-	2-
08-10	7,594,578	247,463	3	1,858	0	245,605-	3-
09-11	5,084,451	835 <b>,</b> 756	16	8,413-	0	844,170-	17-
10-12	5,122,828	614,017	12	10,272-	0	624,289-	12-
11-13	6,259,824	1,369,837	22	13,539-	0	1,383,376-	22-
12-14	7,650,979	1,509,940	20	85,976-	1-	1,595,917-	21-
13-15	9,441,767	2,406,122	25	96 <b>,</b> 822-	1-	2,502,944-	27-
14-16	9,739,506	3,200,475	33	102,259-	1-	3,302,734-	34-
15-17	12,270,608	2,974,624	24	21,467-	0	2,996,091-	24-
16-18	11,409,520	2,184,390	19	14,827-	0	2,199,217-	19-

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#### ACCOUNT 321.00 STRUCTURES AND IMPROVEMENTS

## SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT		
THREE-YE	AR MOVING AVERAGE	S							
17-19	16,662,784	2,404,440	14	8,205-	0	2,412,645-	14-		
18-20	16,217,327	3,122,902	19	14,631-	0	3,137,532-	19-		
FIVE-YEA	FIVE-YEAR AVERAGE								
16-20	14,968,636	3,109,354	21	15 <b>,</b> 151-	0	3,124,505-	21-		

#### ACCOUNT 322.00 REACTOR PLANT EQUIPMENT

#### SUMMARY OF BOOK SALVAGE

		COST OF		GROSS		NET	
	REGULAR	REMOVAL		SALVAGE		SALVAGE	
YEAR	RETIREMENTS	AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
2003	48,400,613	27,955,625	58		0	27,955,625-	58-
2004	98,169,973	2,367,890	2		0	2,367,890-	2-
2005	11,670,976	1,190,179	10		0	1,190,179-	10-
2006	7,527,213	1,340,795	18	699,649	9	641,146-	9-
2007	14,564,570	1,562,678	11	1,006,988	7	555,690-	4-
2008	31,862,483	3,652,862	11	2,437,882	8	1,214,980-	4-
2009	16,467,918	1,557,316	9	12,860	0	1,544,456-	9-
2010	23,718,799	25,318	0		0	25,318-	0
2011	27,787,436	2,850,589	10	634,519	2	2,216,070-	8-
2012	25,180,737	278,262	1	2,202-	0	280,464-	1-
2013	31,518,098	2,909,936-	9-	31,334-	0	2,878,602	9
2014	13,575,759	4,938,911	36	2,511,680-	19-	7,450,590-	55-
2015	19,431,909	15,951,654	82	1,054,596	5	14,897,058-	77-
2016	27,978,941	3,372,337	12	92,494	0	3,279,843-	12-
2017	27,702,416	7,935,416	29	56 <b>,</b> 517	0	7,878,899-	28-
2018	31,534,989	86 <b>,</b> 327	0	10,908,160	35	10,821,833	34
2019	39,584,304	7,560,999	19	8,268,516	21	707 <b>,</b> 517	2
2020	27,305,313	5,469,630	20	1,230,232	5	4,239,398-	16-
TOTAL	523,982,448	85,186,852	16	23,857,196	5	61,329,656-	12-
THREE-YE	AR MOVING AVERAC	GES					
03-05	52,747,187	10,504,565	20		0	10,504,565-	20-
04-06	39,122,721	1,632,955	4	233,216	1	1,399,738-	4-
05-07	11,254,253	1,364,551	12	568,879	5	795,672-	7-
06-08	17,984,755	2,185,445	12	1,381,506	8	803,939-	4-
07-09	20,964,990	2,257,619	11	1,152,577	5	1,105,042-	5-
08-10	24,016,400	1,745,165	7	816,914	3	928,251-	4-
09-11	22,658,051	1,477,741	7	215,793	1	1,261,948-	6-
10-12	25,562,324	1,051,390	4	210,772	1	840,617-	3-
11-13	28,162,090	72 <b>,</b> 972	0	200,328	1	127,356	0
12-14	23,424,865	769 <b>,</b> 079	3	848,405-	4-	1,617,484-	7-
13-15	21,508,589	5,993,543	28	496,139-	2-	6,489,682-	30-
14-16	20,328,870	8,087,634	40	454,863-	2-	8,542,497-	42-
15-17	25,037,755	9,086,469	36	401,202	2	8,685,266-	35-
16-18	29,072,115	3,798,027	13	3,685,724	13	112,303-	0

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#### ACCOUNT 322.00 REACTOR PLANT EQUIPMENT

## SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT		
THREE-YE	CAR MOVING AVERAGE	S							
17-19	32,940,570	5,194,247	16	6,411,064	19	1,216,817	4		
18-20	32,808,202	4,372,319	13	6,802,303	21	2,429,984	7		
FIVE-YEA	FIVE-YEAR AVERAGE								
16-20	30,821,193	4,884,942	16	4,111,184	13	773,758-	3-		

#### ACCOUNT 323.00 TURBOGENERATOR UNITS

## SUMMARY OF BOOK SALVAGE

		COST OF		GROSS		NET	
	REGULAR	REMOVAL		SALVAGE		SALVAGE	
YEAR	RETIREMENTS	AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
2003	22,939,734	16,026,461	70		0	16,026,461-	70-
2004	10,557,152	308,007	3		0	308,007-	3-
2005	7,587,256	935,882	12		0	935 <b>,</b> 882-	12-
2006	7,082,848	1,526,044	22	987 <b>,</b> 518	14	538,526-	8-
2007	10,544,205	1,298,573	12	1,037,722	10	260,851-	2-
2008	8,564,905	1,077,695	13	891,940	10	185,755-	2-
2009	12,656,242	391,900	3	3,024	0	388,877-	3-
2010	14,638,737		0		0		0
2011	2,168,154	530,248	24	9,235-	0	539 <b>,</b> 482-	25-
2012	1,170,120	94,417	8	18,689	2	75 <b>,</b> 728-	6-
2013	14,240,814	1,027,409	7	158,429	1	868,980-	6-
2014	62,283,557	2,420,696	4	6,090-	0	2,426,786-	4-
2015	45,084,098	4,890,398	11	141,605	0	4,748,793-	11-
2016	8,067,212	1,244,188-	15-	147,564	2	1,391,751	17
2017	5,658,832	937,568	17	181,800	3	755 <b>,</b> 769-	13-
2018	975 <b>,</b> 790	10,038	1		0	10,038-	1-
2019	22,221,848	542,230	2	9,082-	0	551 <b>,</b> 312-	2-
2020	45,185,276	1,778,022	4	1,197,625	3	580,397-	1-
TOTAL	301,626,779	32,551,401	11	4,741,509	2	27,809,893-	9-
THREE-YE	AR MOVING AVERAG	GES					
03-05	13,694,714	5,756,783	42		0	5,756,783-	42-
04-06	8,409,085	923,311	11	329,173	4	594,138-	7-
05-07	8,404,770	1,253,500	15	675,080	8	578,420-	7-
06-08	8,730,653	1,300,771	15	972,393	11	328,377-	4-
07-09	10,588,451	922,723	9	644,229	6	278,494-	3-
08-10	11,953,294	489,865	4	298,321	2	191,544-	2-
09-11	9,821,044	307,383	3	2,070-	0	309,453-	3-
10-12	5,992,337	208,221	3	3,151	0	205,070-	3-
11-13	5,859,696	550,691	9	55 <b>,</b> 961	1	494,730-	8-
12-14	25,898,163	1,180,841	5	57,009	0	1,123,831-	4-
13-15	40,536,156	2,779,501	7	97,982	0	2,681,520-	7-
14-16	38,478,289	2,022,302	5	94,360	0	1,927,943-	5-
15-17	19,603,381	1,527,926	8	156,989	1	1,370,937-	7-
16-18	4,900,612	98,860-	2-	109,788	2	208,648	4

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#### ACCOUNT 323.00 TURBOGENERATOR UNITS

## SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT		
THREE-YE	AR MOVING AVERAGE	S							
17-19	9,618,823	496,612	5	57 <b>,</b> 573	1	439,040-	5-		
18-20	22,794,305	776 <b>,</b> 763	3	396,181	2	380,582-	2-		
FIVE-YEA	FIVE-YEAR AVERAGE								
16-20	16,421,792	404,734	2	303,581	2	101,153-	1-		

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#### ACCOUNT 324.00 ACCESSORY ELECTRIC EQUIPMENT

#### SUMMARY OF BOOK SALVAGE

	REGULAR	COST OF REMOVAL		GROSS SALVAGE		NET SALVAGE	2.67
YEAR	RETIREMENTS	AMOUNT	PCT	AMOUNT	PCT	AMOUNT	PCT
2003	2,017,140	730,763	36		0	730,763-	36-
2004	5,600,030	108,757	2		0	108,757-	2-
2005	618,204	62,074-	10-		0	62,074	10
2006	1,486,737	166,106	11	69,096	5	97,010-	7-
2007	4,306,631	275,031	6	141,281	3	133,750-	3-
2008	6,463,117	436,314	7	232,127	4	204,187-	3-
2009	1,865,496	246,594	13	1,903	0	244,691-	13-
2010	227,512		0		0		0
2011	4,776,515	533 <b>,</b> 264	11	238-	0	533,503-	11-
2012	8,645,354	6,016	0		0	6,015-	0
2013	10,194,964	565 <b>,</b> 104	6	14,212	0	550,892-	5-
2014	5,129,965	909,590	18	2,447-	0	912,037-	18-
2015	9,412,979	2,625,011	28	36,423	0	2,588,588-	28-
2016	3,396,598	205,013	6	523-	0	205,536-	6-
2017	7,341,862	155,234	2		0	155,234-	2-
2018	9,626,196	148,432	2	106	0	148,326-	2-
2019	8,086,772	875 <b>,</b> 359	11	41,804-	1-	917 <b>,</b> 163-	11-
2020	5,342,472	468,300	9	11,607-	0	479,907-	9-
TOTAL	94,538,543	8,392,813	9	438,528	0	7,954,285-	8-
THREE-YE	AR MOVING AVERAG	ES					
03-05	2,745,125	259 <b>,</b> 149	9		0	259,149-	9-
04-06	2,568,324	70 <b>,</b> 930	3	23,032	1	47,898-	2-
05-07	2,137,191	126 <b>,</b> 354	6	70 <b>,</b> 126	3	56 <b>,</b> 229-	3-
06-08	4,085,495	292,484	7	147,501	4	144,982-	4-
07-09	4,211,748	319,313	8	125,104	3	194,209-	5-
08-10	2,852,042	227 <b>,</b> 636	8	78,010	3	149,626-	5-
09-11	2,289,841	259 <b>,</b> 953	11	555	0	259,398-	11-
10-12	4,549,794	179 <b>,</b> 760	4	79-	0	179,839-	4-
11-13	7,872,278	368,128	5	4,658	0	363,470-	5-
12-14	7,990,094	493 <b>,</b> 570	6	3,922	0	489,648-	6-
13-15	8,245,969	1,366,568	17	16,063	0	1,350,506-	16-
14-16	5,979,847	1,246,538	21	11,151	0	1,235,387-	21-
15-17	6,717,146	995 <b>,</b> 086	15	11,967	0	983 <b>,</b> 119-	15-
16-18	6,788,219	169 <b>,</b> 560	2	139-	0	169,699-	2-

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#### ACCOUNT 324.00 ACCESSORY ELECTRIC EQUIPMENT

## SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT		
THREE-YE	AR MOVING AVERAGE	S							
17-19	8,351,610	393,008	5	13,899-	0	406,908-	5-		
18-20	7,685,147	497,364	6	17,768-	0	515,132-	7-		
FIVE-YEA	FIVE-YEAR AVERAGE								
16-20	6,758,780	370,468	5	10,766-	0	381,233-	6-		

#### ACCOUNT 325.00 MISCELLANEOUS POWER PLANT EQUIPMENT

#### SUMMARY OF BOOK SALVAGE

	REGULAR	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
YEAR	RETIREMENTS	AMOUNT PCT	AMOUNT PCT	AMOUNT PCT
2003	234,223	108,030- 46-	0	108,030 46
2004	3,812,103	73,425- 2-	0	73,425 2
2005				
2006	3,842	546- 14-	0	546 14
2007	1,981,446	161,101- 8-	0	161,101 8
2008	2,411,117	200,288- 8-	0	200,288 8
2009	7,448	231,470	1,786 24	229,684-
2010	1,323,573	0	0	0
2011	2,325,751	28,322 1	0	28,322- 1-
2012	10,157,360	7,311 0	0	7,311- 0
2013	106,097	138,554 131	0	138,554- 131-
2014	88,983	227,283 255	5,542- 6-	232,825- 262-
2015	116,962	12,546 11	0	12,546- 11-
2016	1,048,928	129,331 12	196- 0	129,527- 12-
2017	2,048,226	283,699 14	945- 0	284,644- 14-
2018	623,188	79,433 13	0	79,433- 13-
2019	683 <b>,</b> 287	48,876 7	0	48,876- 7-
2020	377,220	306,721 81	36,495 10	270,226- 72-
TOTAL	27,349,754	950,156 3	31,597 0	918,558- 3-
THREE-YE	CAR MOVING AVERAG	ES		
03-05	1,348,775	60,485- 4-	0	60,485 4
04-06	1,271,982	24,657- 2-	0	24,657 2
05-07	661 <b>,</b> 763	53,882- 8-	0	53,882 8
06-08	1,465,468	120,645- 8-	0	120,645 8
07-09	1,466,670	43,306- 3-	595 0	43,902 3
08-10	1,247,379	10,394 1	595 0	9,799- 1-
09-11	1,218,924	86,597 7	595 0	86,002- 7-
10-12	4,602,228	11,878 0	0	11,878- 0
11-13	4,196,403	58,062 1	0	58,062- 1-
12-14	3,450,813	124,383 4	1,847- 0	126,230- 4-
13-15	104,014	126,128 121	1,847- 2-	127,975- 123-
14-16	418,291	123,053 29	1,913- 0	124,966- 30-
15-17	1,071,372	141,858 13	380- 0	142,239- 13-
16-18	1,240,114	164,154 13	380- 0	164,535- 13-

VIII-12

Sep 20 2021

Duke Energy Carolinas December 31, 2020

#### ACCOUNT 325.00 MISCELLANEOUS POWER PLANT EQUIPMENT

## SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT PCT
THREE-YE	AR MOVING AVERAGE:	S				
17-19	1,118,234	137 <b>,</b> 336	12	315-	0	137,651- 12-
18-20	561,232	145,010	26	12,165	2	132,845- 24-
FIVE-YEAR AVERAGE						
16-20	956 <b>,</b> 170	169,612	18	7,071	1	162,541- 17-

# PART IX. DETAILED DEPRECIATION CALCULATIONS

#### ACCOUNT 320.00 RIGHTS OF WAY

YEAR (1)		CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)				
OCONEE INTERIM SURVIVOR CURVE IOWA 100-R4 PROBABLE RETIREMENT YEAR 7-2054 NET SALVAGE PERCENT 0										
1968 1974	-	263,591 1,545	342,985 2,010	79,403 605	31.02 31.78	2,560 19				
	425,003.00	265,136	344,995	80,008		2,579				
MCGUIRE INTERIM SURVIVOR CURVE IOWA 100-R4 PROBABLE RETIREMENT YEAR 3-2063 NET SALVAGE PERCENT 0										
1981	74,882.00	37,072	48,238	26,644	39.92	667				
	74,882.00	37,072	48,238	26,644		667				
PROBA	BA IM SURVIVOR CURVI BLE RETIREMENT YI ALVAGE PERCENT	EAR 12-206								
1985 2002	•	176,175 22,788	229,238 29,652	152,241 45,525		3,705 1,072				
	456,656.68	198,963	258,890	197 <b>,</b> 767		4,777				
	956,541.68	501,171	652 <b>,</b> 123	304,419		8,023				
	COMPOSITE REMAIN	ING LIFE AND	ANNUAL ACCRUA	L RATE, PERCEN	I 37.	9 0.84				

#### ACCOUNT 321.00 STRUCTURES AND IMPROVEMENTS

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)				
INTER] PROBAE	OCONEE INTERIM SURVIVOR CURVE IOWA 60-S1 PROBABLE RETIREMENT YEAR 7-2054 NET SALVAGE PERCENT4									
1973	10,842,175.20	7,070,191	9,319,857	1,956,005	21.51	90,935				
1974	8,664,919.72	5,597,323	7,378,337	1,633,180	21.77	75,020				
1975	170,915.81	109,341	144,132	33,620	22.03	1,526				
1976	818,589.00	518,419	683 <b>,</b> 375	167 <b>,</b> 958	22.29	7,535				
1977	2,738,874.23	1,716,777	2,263,039	585,390	22.55	25,960				
1978	425,668.00	264,050	348,068	94,627	22.80	4,150				
1979	400,122.06	245,444	323,542	92,585	23.06	4,015				
1980	487,284.00	295,567	389,614	117,162	23.31	5,026				
1981	990 <b>,</b> 866.00	594 <b>,</b> 073	783 <b>,</b> 101	247,399	23.56	10,501				
1982	3,328,847.90	1,971,956	2,599,413	862,589	23.81	36,228				
1983	14,693,476.26	8,595,225	11,330,142	3,951,073	24.06	164,217				
1984	1,902,111.22	1,098,591	1,448,152	530,044	24.30	21,813				
1985	694,241.00	395,517	521 <b>,</b> 367	200,644	24.55	8,173				
1986	94,956,878.23	53,351,484	70,327,406	28,427,747	24.79	1,146,743				
1987	8,184,764.45	4,531,956	5,973,980	2,538,175	25.03	101,405				
1988	5,558,592.16	3,030,309	3,994,524	1,786,412	25.28	70,665				
1989	24,386,676.13	13,082,808	17,245,630	8,116,513	25.52	318,045				
1990	1,868,336.61	985,661	1,299,289	643,781	25.76	24,991				
1991	1,210,357.34	627,686	827,410	431,362	25.99	16,597				
1992	1,050,145.00	534,597	704,701	387,450	26.23	14,771				
1993	2,337,774.97	1,166,920	1,538,223	893,063	26.47	33,739				
1994	1,547,017.67	756,729	997,513	611,386	26.70	22,898				
1995	269,354.00	128,893	169,905	110,223	26.94	4,091				
1996	843,889.00	394,747	520,352	357,293	27.17	13,150				
1998	10,906,791.00	4,852,902	6,397,048	4,946,015	27.63	179,009				
1999	868,503.00	376,020	495,666	407,577	27.86	14,629				
2000	6,230,965.25	2,619,558	3,453,076	3,027,128	28.09	107,765				
2001	6,269,822.00	2,553,603	3,366,135	3,154,480	28.32	111,387				
2002	9,757,934.00	3,843,650	5,066,662	5,081,589	28.54	178,051				
2003	9,684,610.30	3,676,681	4,846,565	5,225,430	28.77	181,628				
2004	18,641,157.91	6,805,156	8,970,490	10,416,314	28.99	359,307				
2005	19,390,993.70	6,784,862	8,943,739	11,222,894	29.21	384,214				
2006	26,601,115.43	8,883,560	11,710,222	15,954,938	29.43	542,132				
2007	20,920,743.51	6,644,110	8,758,201	12,999,372	29.64	438,575				
2008	19,871,285.52	5,963,007	7,860,378	12,805,759	29.86	428,860				
2009	51,457,765.06	14,514,095	19,132,339	34,383,737	30.07	1,143,457				
2010	12,236,443.19	3,218,380	4,242,437	8,483,464	30.28	280,167				
	124,293,637.32	30,270,075	39,901,718	89,363,665	30.48	2,931,879				
2012	17,923,860.28	3,995,472	5,266,792	13,374,022	30.68	435,920				
	132,705,462.76	26,679,425	35,168,558	102,845,123	30.88	3,330,477				
2014	48,447,252.41	8,650,625	11,403,170	38,981,973	31.07	1,254,650				

#### ACCOUNT 321.00 STRUCTURES AND IMPROVEMENTS

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)				
INTER PROBA	OCONEE INTERIM SURVIVOR CURVE IOWA 60-S1 PROBABLE RETIREMENT YEAR 7-2054 NET SALVAGE PERCENT4									
2015 2016 2017 2018 2019 2020	85,062,517.42 86,539,550.47 24,841,643.51 12,058,274.10 27,055,617.94 30,570,231.60	13,153,864 11,224,941 2,568,030 914,336 1,261,701 487,387 277,005,704	17,339,295 14,796,608 3,385,152 1,205,269 1,663,162 642,469 365,146,219	71,125,723 75,204,525 22,450,157 11,335,336 26,474,681 31,150,572 665,190,157	31.26 31.44 31.62 31.79 31.95 32.11	2,275,295 2,392,001 709,999 356,569 828,629 970,121 22,056,915				
INTER PROBA	MCGUIRE INTERIM SURVIVOR CURVE IOWA 60-S1 PROBABLE RETIREMENT YEAR 3-2063 NET SALVAGE PERCENT7									
1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991	190,415,924.96 2,026,405.00 96,760.00 211,603,719.85 1,235,088.00 14,512,113.39 5,312,830.01 3,362,930.78 12,385,420.69 340,959.00 11,552,367.59	111,002,335 1,164,677 54,806 118,080,462 678,415 7,842,086 2,823,718 1,755,880 6,350,948 171,476 5,695,841	146,322,196 1,535,266 72,245 155,652,514 894,280 10,337,361 3,722,198 2,314,584 8,371,758 226,038 7,508,202	57,422,844 632,987 31,288 70,763,466 427,264 5,190,600 1,962,531 1,283,752 4,880,642 138,788 4,852,831	26.31 26.66 27.01 27.35 27.70 28.05 28.39 28.74 29.08 29.43 29.77	2,182,548 23,743 1,158 2,587,330 15,425 185,048 69,128 44,668 167,835 4,716 163,011				
1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005	1, 07, 053, 01 3, 362, 794, 00 1, 334, 745, 79 6, 714, 074, 34 487, 726, 33 3, 005, 751, 43 9, 459, 152, 50 1, 009, 586, 00 4, 076, 236, 00 1, 294, 406, 50 223, 328, 00 363, 095, 00 13, 305, 005, 85 2, 160, 124, 00	5,695,841 534,645 1,588,925 616,145 3,025,064 214,221 1,284,886 3,929,491 407,116 1,591,407 488,079 81,144 126,822 4,454,414 690,441	7,308,202 704,764 2,094,505 812,196 3,987,610 282,384 1,693,724 5,179,817 536,656 2,097,777 643,381 106,963 167,176 5,871,765 910,133	4,832,831 479,783 1,503,684 615,982 3,196,450 239,483 1,522,430 4,941,476 543,601 2,263,795 741,634 131,998 221,336 8,364,591 1,401,200	29.77 30.11 30.45 30.80 31.14 31.48 31.82 32.16 32.49 32.83 33.17 33.51 33.84 34.17 34.51	15,934 49,382 19,999 102,648 7,607 47,845 153,653 16,731 68,955 22,359 3,939 6,541 244,793 40,603				
2006	12,052,068.69	3,662,512	4,827,888	8,067,826	34.84	231,568				

#### ACCOUNT 321.00 STRUCTURES AND IMPROVEMENTS

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
PROBA	RE IM SURVIVOR CURV BLE RETIREMENT Y ALVAGE PERCENT	EAR 3-2063	1			
2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020	17,063,972.15 12,445,917.49 7,596,694.12 20,028,682.26 8,930,149.35 17,024,122.78 6,640,883.98 13,136,819.97 32,843,221.56 20,717,791.66 8,253,523.05 8,718,014.89 27,779,447.29 2,733,706.99	4,914,627 3,375,493 1,928,640 4,725,467 1,939,049 3,368,468 1,181,117 2,063,479 4,441,629 2,335,403 736,440 568,558 1,106,625 36,973	6,478,413 4,449,542 2,542,314 6,229,065 2,556,035 4,440,282 1,556,937 2,720,058 5,854,912 3,078,505 970,768 749,468 1,458,742 48,737	11,780,037 8,867,590 5,586,148 15,201,625 6,999,224 13,775,530 5,548,809 11,336,339 29,287,335 19,089,532 7,860,502 8,578,808 28,265,266 2,876,329	35.16 35.49 35.81 36.13 36.45 36.76 37.07 37.37 37.67 37.96 38.25 38.52 38.79 39.05	335,041 249,862 155,994 420,748 192,023 374,742 149,685 303,354 777,471 502,885 205,503 222,710 728,674 73,658
PROBA		EAR 12-206		356,875,337		11,169,517
1978 1980 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000	7,965.58 7,855.71 97,763,077.24 66,100,905.62 2,364,144.90 7,137,349.91 39,999.26 238,937.70 680,854.63 1,146,978.62 25,196.09 599,226.39 130,115.23 969,890.15 31,481.08 1,228,677.17 233,050.94 48,609.63	4,626 53,457,056 35,562,730 1,250,297 3,708,663 20,407 119,533 333,842 550,748 11,834 275,005 58,284 423,311 13,373 507,087 93,292	6,350 6,098 70,466,570 46,878,444 1,648,129 4,888,723 26,900 157,567 440,067 725,991 15,599 362,509 76,829 558,004 17,628 668,437 122,977 24,827	2,173 2,308 34,139,922 23,849,525 881,506 2,748,241 15,899 98,096 288,447 501,276 11,360 278,663 62,394 479,778 16,057 646,247 126,388 27,186	25.42 26.14 27.92 28.27 28.63 28.98 29.33 29.69 30.04 30.39 30.74 31.09 31.44 31.79 32.14 32.49 32.84 33.19	85 88 1,222,777 843,634 30,790 94,832 542 3,304 9,602 16,495 370 8,963 1,985 15,092 500 19,891 3,849 819

#### ACCOUNT 321.00 STRUCTURES AND IMPROVEMENTS

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
PROBAI	BA IM SURVIVOR CURVE BLE RETIREMENT YE ALVAGE PERCENT	AR 12-2063				
2001	127,614.47	47,767	62,966	73 <b>,</b> 581	33.53	2,194
2002	522,021.61	188,230	248,123	310,440	33.88	9,163
2003	2,175,190.45	754,048	993,979	1,333,475	34.22	38,968
2004	2,114,040.48	701,815	925,126	1,336,898	34.57	38,672
2005	3,260,349.56	1,033,211	1,361,969	2,126,605	34.91	60,917
2006	3,627,655.72	1,093,211	1,441,060	2,440,532	35.25	69 <b>,</b> 235
2007	5,785,999.67	1,650,773	2,176,033	4,014,987	35.59	112,812
2008	5,550,000.39	1,491,751	1,966,412	3,972,089	35.92	110 <b>,</b> 582
2009	3,044,861.16	765 <b>,</b> 174	1,008,645	2,249,357	36.26	62,034
2010	1,347,929.67	314,649	414,767	1,027,518	36.59	28,082
2011	1,344,156.41	288,958	380,902	1,057,346	36.91	28,647
2012	3,071,976.16	601 <b>,</b> 425	792,793	2,494,222	37.24	66 <b>,</b> 977
2013	8,382,271.16	1,472,894	1,941,555	7,027,476	37.56	187,100
2014	316,893.19	49,149	64,788	274,288	37.87	7,243
2015	11,770,703.08	1,573,198	2,073,774	10,520,878	38.18	275 <b>,</b> 560
2016	2,259,283.05	251 <b>,</b> 582	331,633	2,085,800	38.48	54,205
2017	8,150,682.90	720 <b>,</b> 199	949,359	7,771,871	38.77	200,461
2018	393,991.14	25 <b>,</b> 357	33,425	388,145	39.06	9 <b>,</b> 937
2019	2,836,170.29	111 <b>,</b> 465	146,932	2,887,770	39.34	73 <b>,</b> 405
2020	2,615,083.52	34,893	45,996	2,752,144	39.61	69,481
	247,451,189.93	109,583,488	144,451,886	120,320,887		3,779,293
	1,954,871,857.82	697,627,116	919,605,265	1,142,386,381		37,005,725
	COMPOSITE REMAINI	NG LIFE AND 2	ANNUAL ACCRUA	L RATE, PERCENT	30.9	9 1.89

#### ACCOUNT 322.00 REACTOR PLANT EQUIPMENT

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
PROBAB	M SURVIVOR CURVE LE RETIREMENT YE LVAGE PERCENT	AR 7-2054	).5			
1973	637,955.35	428,597	602,589	60,885	16.89	3,605
1974	2,982,741.90	1,981,001	2,785,202	316,850	17.22	18,400
1975	4,703.59	3,087	4,340	552	17.55	. 31
1977	512,505.89	328,438	461,770	71,237	18.20	3,914
1978	230,446.98	145,865	205,080	34,585	18.52	1,867
1979	3,069,378.82	1,919,219	2,698,339	493,815	18.83	26,225
1980	2,700,385.94	1,666,562	2,343,114	465,287	19.15	24,297
1981	2,138,080.80	1,302,543	1,831,319	392 <b>,</b> 285	19.46	20,159
1982	3,347,816.78	2,012,161	2,829,011	652 <b>,</b> 718	19.77	33,016
1983	108,447.00	64,314	90,423	22,362	20.07	1,114
1984	8,273,583.24	4,836,604	6,800,056	1,804,471	20.38	88,541
1985	2,958,817.53	1,704,814	2,396,895	680 <b>,</b> 276	20.68	32 <b>,</b> 895
1986	75,501,762.83	42,848,579	60,243,245	18,278,588	20.98	871 <b>,</b> 239
1987	416,000.00	232,505	326,892	105,748	21.27	4,972
1988	16,835,655.27	9,257,577	13,015,752	4,493,329	21.57	208,314
1989	5,929,603.00	3,207,284	4,509,302	1,657,485	21.86	75 <b>,</b> 823
1990	8,215,527.41	4,367,342	6,140,294	2,403,855	22.15	108,526
1991	6,343,148.00	3,311,631	4,656,010	1,940,864	22.44	86,491
1992	7,558,958.49	3,871,856	5,443,662	2,417,655	22.73	106,364
1993	7,283,590.40	3,658,996	5,144,390	2,430,544	23.01	105,630
1994	6,912,382.43	3,400,986	4,781,639	2,407,239	23.30	103 <b>,</b> 315
1995	4,739,149.87	2,281,355	3,207,486	1,721,230	23.58	72 <b>,</b> 995
1997	15,207,721.32	6,984,201	9,819,484	5,996,546	24.14	248,407
1998	3,934,886.00	1,761,727	2,476,912	1,615,370	24.42	66,149
1999	2,874,852.00	1,252,207	1,760,549	1,229,297	24.70	49,769
2000	18,326,608.07	7,757,858	10,907,212	8,152,460	24.97	326,490
2001	10,290,931.60	4,221,949	5,935,877	4,766,692	25.25	188,780
2002	30,311,345.29	12,027,590	16,910,270	14,613,529	25.53	572,406
2003	155,096,612.37	59,402,127	83,516,817	77,783,660	25.80	3,014,871
2004	316,934,111.98	116,807,715	164,226,586	165,384,890	26.07	6,343,878
2005	29,865,827.79	10,561,178	14,848,559	16,211,902	26.34	615,486
2006	25,721,856.30	8,686,230	12,212,463	14,538,268	26.62	546,141
2007	39,271,806.46	12,617,120	17,739,124	23,103,555	26.89	859,188
2008	49,860,996.84	15,168,752	21,326,608	30,528,829	27.16	1,124,036
2009	21,330,013.25	6,107,039	8,586,232 9 781 518	13,596,982	27.43	495,697
2010 2011	25,985,131.79	6,957,197	9,781,518	17,243,020	27.69	622,717 3 164 048
	127,994,052.13 86,815,185.51	31,755,632 19,741,426	44,647,043	88,466,772	27.96	3,164,048
2012 2013	98,516,855.66	20,278,394	27,755,590 28,510,543	62,532,203 73,946,987	28.23 28.49	2,215,098 2,595,542
2013 2014	105,298,316.03	19,266,138	28,510,543	73,946,987 82,422,893	28.49 28.76	2,395,342 2,865,886
2014 2015	399,059,763.65	63,477,638	27,087,333 89,246,809	325,775,346	20.70	11,225,891
ZUIJ	55,055,705.05	00, 11, 000	0,240,009	525,115,540	27.02	,J, UJI

#### ACCOUNT 322.00 REACTOR PLANT EQUIPMENT

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
OCONEE INTERI	M SURVIVOR CURVE	IOWA 48-S	).5			
PROBAB	LE RETIREMENT YE	AR 7-2054				
NET SA	LVAGE PERCENT	-4				
2016	40,699,760.79	5,429,381	7,633,474	34,694,277	29.29	1,184,509
2017	56,869,465.15	6,070,565	8,534,951	50,609,292	29.55	1,712,666
2018	53,098,978.41	4,178,167	5,874,322	49,348,616	29.81	1,655,438
2019	65,740,315.15	3,207,233	4,509,231	63,860,697	30.07	2,123,735
2020	51,429,508.77	867 <b>,</b> 554	1,219,743	52,266,946	30.33	1,723,276
1	,997,235,543.83	537,416,334	755,584,080	1,321,540,886		47,537,837
MCGUIR	E					
	M SURVIVOR CURVE		0.5			
PROBAB	LE RETIREMENT YE	AR 3-2063				
NET SA	LVAGE PERCENT	-7				
1981	298,855,342.78	181,418,074	255,065,952	64,709,265	20.66	3,132,104
1982	2,423,498.43	1,448,011	2,035,841	557 <b>,</b> 303	21.06	26,463
1983	1,084,429.42	637 <b>,</b> 537	896,349	263,990	21.46	12,301
1984	393,764,198.79	227,672,845	320,098,156	101,229,537	21.86	4,630,811
1985	2,662,944.00	1,513,489	2,127,900	721,450	22.26	32,410
1986	13,331,767.82	7,444,043	10,466,002	3,798,990	22.66	167 <b>,</b> 652
1987	2,424,551.39	1,329,226	1,868,834	725,436	23.06	31,459
1988	3,535,003.00	1,902,460	2,674,776	1,107,677	23.45	47,236
1989	6,161,972.00	3,251,821	4,571,919	2,021,391	23.85	84,754
1990	4,524.00	2,341	3,291	1,549	24.24	64
1991	5,062,153.10	2,564,715	3,605,878	1,810,626	24.64	73,483
1992	2,060,096.00	1,021,342	1,435,963	768,340	25.03	30,697
1993	3,200,680.00	1,550,991	2,180,626	1,244,101	25.43	48,923
1994	144,356.00	68,341	96,084	58,376	25.82	2,261
1995	1,462,720.79	675,659	949,947	615,164 760,005	26.21	23,471
1996 1997	1,739,624.28	782,736	1,100,493	760,905	26.61	28,595
1997	261,030,503.64 4,406,542.00	114,287,847 1,874,778	160,683,761 2,635,857	118,618,878 2,079,143	27.00 27.39	4,393,292 75,909
1990	8,710,790.00	3,595,960	5,055,764	4,264,781	27.39	153,520
2000	2,732,435.79	1,092,238	1,535,639	1,388,067	28.17	49,275
2000	3,528,137.85	1,362,248	1,915,262	1,859,846	28.57	65,098
2001	6,004,021.42	2,235,914	3,143,598	3,280,705	28.96	113,284
2002	3,807,257.78	1,363,164	1,916,550	2,157,216	29.35	73,500
2003	4,308,066.87	1,479,692	2,080,383	2,529,249	29.74	85,045
2005	1,579,939.86	518,521	729,018	961,518	30.13	31,912
2006	5,189,777.42	1,622,660	2,281,390	3,271,672	30.52	107,198
2007	2,778,519.79	822,723	1,156,713	1,816,303	30.92	58,742

#### ACCOUNT 322.00 REACTOR PLANT EQUIPMENT

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
PROBABI	E M SURVIVOR CURVE LE RETIREMENT YE LVAGE PERCENT	AR 3-2063	.5			
2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020	14,988,143.19 19,657,957.14 59,692,078.62 74,759,499.17 35,353,461.64 50,239,972.45 57,328,523.04 37,607,558.88 36,756,333.20 32,237,523.92 27,307,433.51 57,181,122.82 40,830,848.35	4,186,220 5,150,809 14,553,538 16,804,059 7,260,745 9,300,459 9,398,134 5,320,947 4,355,324 3,042,384 1,877,610 2,424,102 586,306	5,885,644 7,241,814 20,461,644 23,625,779 10,208,293 13,076,042 13,213,369 7,481,021 6,123,397 4,277,460 2,639,838 3,408,182 824,321 910,778,751	10,151,669 13,792,200 43,408,880 56,366,885 27,619,911 40,680,728 48,128,150 32,759,067 33,205,880 30,216,691 26,579,116 57,775,619 42,864,687	31.31 31.70 32.09 32.49 32.88 33.27 33.66 34.06 34.45 34.84 35.24 35.63 36.03	324,231 435,085 1,352,723 1,734,900 840,022 1,222,745 1,429,832 961,805 963,886 867,299 754,231 1,621,544 1,189,694
PROBABI	A M SURVIVOR CURVE LE RETIREMENT YE LVAGE PERCENT	AR 12-2063				
1985 1986 1987 1988 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2001	109, 106, 159.97 118, 679, 664.58 3, 053, 208.41 1, 717, 559.70 385, 463.59 765, 983.81 574, 100.89 390, 726.43 405, 054.00 164, 924.61 1, 349, 725.59 23, 865, 586.42 330, 676.74 521, 588.48 267, 495.71 115, 873.18 585, 483.02 1, 003, 654.22 709, 822.21	61,883,443 66,103,208 1,669,337 921,614 202,767 394,901 289,858 192,947 195,497 77,747 620,633 10,692,253 144,045 220,723 109,800 46,059 224,864 371,530 252,484	87,005,440 92,938,246 2,347,015 1,295,749 285,082 555,214 407,528 271,275 274,860 109,309 872,583 15,032,844 202,521 310,327 154,374 64,757 316,149 522,355 354,982	29,738,152 34,048,995 919,918 542,040 127,364 264,389 206,760 146,802 158,547 67,160 571,623 10,503,333 151,303 247,773 131,846 59,227 310,318 551,555 404,528	22.75 23.16 23.56 23.97 24.37 24.77 25.18 25.58 25.98 26.38 26.38 26.78 27.19 27.59 27.99 28.39 28.79 29.19	1,331,162 1,496,659 39,720 23,007 5,313 10,849 8,347 5,830 6,198 2,585 21,669 392,208 5,565 8,981 4,710 2,086 10,779 18,895 13,666

#### ACCOUNT 322.00 REACTOR PLANT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2020

YEAF (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
PROB	WBA RIM SURVIVOR CURV ABLE RETIREMENT Y SALVAGE PERCENT	EAR 12-2063				
2004	1,798,971.22	613,658	862,777	1,062,123	30.00	35,404
2005	=,,=	589,855	829,311	1,106,735	30.40	36,406
2006		2,271,831	3,194,096	4,639,804	30.80	150,643
2007		2,298,955	3,232,231	5,130,038	31.20	164,424
2008	7,866,345.35	2,180,169	3,065,223	5,351,766	31.61	169,306
2009	13,341,224.38	3,464,997	4,871,636	9,403,474	32.01	293 <b>,</b> 767
2010	9,540,351.79	2,306,435	3,242,748	6,965,429	32.41	214,916
2011	3,865,141.08	861,839	1,211,708	2,923,993	32.82	89,092
2012	8,224,407.90	1,673,342	2,352,646	6,447,470	33.22	194,084
2013	6,219,631.84	1,138,405	1,600,548	5,054,458	33.63	150 <b>,</b> 296
2014	, ,	339 <b>,</b> 366	477,134	1,761,724	34.03	51 <b>,</b> 770
2015	, ,	692 <b>,</b> 286	973 <b>,</b> 324	4,311,703	34.43	125 <b>,</b> 231
2016	2,805,226.56	328,404	461,722	2,539,871	34.84	72 <b>,</b> 901
2017	2,724,047.76	254,398	357 <b>,</b> 673	2,557,059	35.24	72 <b>,</b> 561
2018		1,306,451	1,836,813	18,714,564	35.65	524 <b>,</b> 953
2019	9,787,740.17	410,328	576 <b>,</b> 903	9,895,979	36.05	274 <b>,</b> 507
2020	11,017,912.77	159 <b>,</b> 507	224,260	11,564,907	36.46	317,194
	384,368,309.59	165,503,936	232,691,363	178,582,728		6,345,684
	3,967,538,163.57	1,350,720,283	1,899,054,194	2,286,294,575		81,160,977

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 28.2 2.05

#### ACCOUNT 323.00 TURBOGENERATOR UNITS

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
PROBA	E IM SURVIVOR CURV BLE RETIREMENT Y ALVAGE PERCENT	YEAR 7-2054				
1973	13,247,231.73	9,867,863	10,624,261	3,152,860	11.35	277,785
1974	14,273,643.00	10,487,702	11,291,612	3,552,976	11.74	302,639
1975	252,448.00	182,929	196,951	65,595	12.13	5,408
1977	44,096.00	31,047	33,427	12,433	12.92	962
1978	4,726,817.74	3,279,735	3,531,135	1,384,755	13.31	104,039
1979	1,627,209.00	1,111,975	1,197,211	495 <b>,</b> 087	13.71	36,111
1980	2,099.00	1,413	1,521	662	14.10	47
1982	16,530.00	10,781	11,607	5,584	14.89	375
1984	971.00	613	660	350	15.68	22
1986	3,586,649.16	2,188,011	2,355,728	1,374,387	16.45	83,549
1987	66,647.00	39,934	42,995	26,318	16.84	1,563
1988	13,150,578.00	7,738,358	8,331,524	5,345,077	17.22	310,399
1992	495,548.00	269,554	290,216	225,154	18.74	12,015
1993	105,467.00	56,145	60,449	49,237	19.12	2,575
1994	7,498,940.00	3,905,454	4,204,817	3,594,080	19.49	184,406
1995	630,147.00	320,513	345,081	310,272	19.87	15,615
1998	14,480,756.08	6,823,379	7,346,409	7,713,577	20.98	367,663
1999	7,623,253.44	3,491,334	3,758,954	4,169,230	21.35	195,280
2001	1,876,728.00	807 <b>,</b> 556	869,457	1,082,340	22.09	48,997
2002	4,027,409.25	1,675,612	1,804,052	2,384,454	22.45	106,212
2003	4,667,847.00	1,872,550	2,016,086	2,838,475	22.82	124,385
2004	15,327,865.22	5,909,162	6,362,115	9,578,865	23.19	413,060
2005	20,170,257.32	7,457,348	8,028,974	12,948,094	23.55	549 <b>,</b> 813
2006	4,883,529.10	1,723,819	1,855,954	3,222,916	23.92	134,737
2007	3,203,057.39	1,075,705	1,158,161	2,173,019	24.28	89,498
2008	4,626,866.49	1,469,759	1,582,420	3,229,521	24.65	131,015
2009	43,188,149.58	12,911,460	13,901,158	31,014,518	25.01	1,240,085
2010	14,398,200.14	4,018,757	4,326,805	10,647,323	25.38	419,516
2011	4,569,498.83	1,181,844	1,272,435	3,479,843	25.74	135,192
2012	6,735,726.41	1,597,456	1,719,905	5,285,250	26.10	202,500
2013	17,305,751.20	3,708,664	3,992,943	14,005,038	26.47	529 <b>,</b> 091
2014	3,984,663.48	760 <b>,</b> 475	818,767	3,325,283	26.83	123,939
2015	477 <b>,</b> 171.69	79 <b>,</b> 004	85,060	411,199	27.20	15,118
2016	28,297,016.62	3,939,941	4,241,948	25,186,949	27.56	913 <b>,</b> 895
2017	7,654,685.33	852,848	918,221	7,042,652	27.92	252,244
2018	590,484.04	48,410	52,121	561 <b>,</b> 983	28.28	19 <b>,</b> 872
2019	55,402,775.50	2,793,940	3,008,103	54,610,784	28.65	1,906,136
2020	107,036,173.19	1,885,720	2,030,265	109,287,355	29.01	3,767,230
	430,252,886.93	105,576,770	113,669,510	333,793,492		13,022,988

#### ACCOUNT 323.00 TURBOGENERATOR UNITS

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)	
PROBAI	RE IM SURVIVOR CURV BLE RETIREMENT N ALVAGE PERCENT	YEAR 3-2063					
1981	33,749,624.48	22,940,210	24,698,638	11,413,460	14.59	782,280	
1983	1,608,527.80	1,056,340	1,137,311	583,813	15.45	37,787	
1984	85,979,707.18	55,428,968	59,677,746	32,320,541	15.90	2,032,738	
1985	6,009.00	3,803	4,095	2,335	16.34	143	
1986	18,330,680.36	11,373,863	12,245,700	7,368,128	16.80	438,579	
1987	429.00	261	281	178	17.25	10	
1988	1,278,143.34	761,802	820,196	547,417	17.71	30,910	
1990	203,266.00	116,016	124,909	92,586	18.64	4,967	
1991	24,781,049.21	13,825,563	14,885,329	11,630,394	19.11	608,603	
1993	367,602.00	195,483	210,467	182,867	20.05	9,121	
1997	341,343.00	162 <b>,</b> 899	175,386	189 <b>,</b> 851	21.96	8,645	
1998	716,404.00	331,542	356,956	409,597	22.45	18,245	
2000	36,312.00	15,741	16,948	21,906	23.42	935	
2004	162,898.00	60,359	64,986	109,315	25.39	4,305	
2006	18,923,811.04	6,365,514	6,853,448	13,395,030	26.39	507,580	
2007	6,292,940.08	2,004,749	2,158,418	4,575,028	26.89	170,139	
2008	13,574,648.53	4,074,808	4,387,153	10,137,721	27.39	370,125	
2009	8,409,186.11	2,363,550	2,544,722	6,453,107	27.90	231,294	
2010	12,390,240.69	3,240,280	3,488,656	9,768,901	28.41	343,854	
2011	7,771,911.75	1,873,499	2,017,108	6,298,838	28.92	217,802	
2012	144,239,964.92	31,742,442	34,175,584	120,161,178	29.43	4,082,949	
2013	31,341,668.49	6,205,089	6,680,726	26,854,860	29.95	896,656	
2014	125,154,497.29	21,908,545	23,587,893	110,327,419	30.47	3,620,854	
2015	1,564,314.41	236,527	254,657	1,419,159	30.99	45,794	
2016	11,606,212.01	1,466,766	1,579,198	10,839,449	31.51	344,000	
2017	1,798,701.59	181,241	195,134	1,729,477	32.03	53,996	
2018	3,646,996.47	267,892	288,427	3,613,860	32.56	110,991	
2019	3,906,982.15	176,667	190,209	3,990,262	33.09	120,588	
2020	5,397,656.17	82,994	89,356	5,686,136	33.62	169,130	
	563,581,727.07	188,463,413	202,909,634	400,122,814		15,263,020	
INTER: PROBAI	CATAWBA INTERIM SURVIVOR CURVE IOWA 40-S0.5 PROBABLE RETIREMENT YEAR 12-2063 NET SALVAGE PERCENT7						
1985 1986	27,553,408.79 36,700,237.92			10,714,670 14,747,233	16.35 16.80	655,331 877,811	

#### ACCOUNT 323.00 TURBOGENERATOR UNITS

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
CATAV	VBA					
	RIM SURVIVOR CURVE	IOWA 40-SC	).5			
PROBA	ABLE RETIREMENT YE	AR 12-2063	3			
NET S	SALVAGE PERCENT	-7				
1987		85,433	91,982	58 <b>,</b> 326	17.26	3,379
1988	,	31,714	34,145	22,803	17.72	1,287
1991		100,602	108,313	84,769	19.13	4,431
1992	,	101,022	108,766	89,796	19.61	4,579
1993		2,249,559	2,421,994	2,110,026	20.09	105,029
1994	•	53 <b>,</b> 707	57,824	53,185	20.57	2,586
2001		2,500	2,692	3,724	24.01	155
2002	•	1,355	1,459	2,151	24.51	88
2004		2,127,551	2,290,633	3,879,758	25.52	152,028
2005	•	21,283	22,914	41 <b>,</b> 752	26.03	1,604
2006	-	34,010	36 <b>,</b> 617	72 <b>,</b> 052	26.54	2,715
2007	2,408,920.15	763 <b>,</b> 752	822 <b>,</b> 296	1,755,249	27.05	64,889
2008		459 <b>,</b> 435	494,652	1,150,359	27.56	41,740
2009	, ,	539 <b>,</b> 669	581 <b>,</b> 036	1,483,180	28.08	52,820
2010	1,089,715.01	283,325	305,043	860 <b>,</b> 952	28.60	30,103
2011	1,722,262.48	412,460	444,076	1,398,745	29.13	48,017
2012	1,259,073.54	275,154	296,245	1,050,963	29.65	35,446
2013	387,441.49	76,230	82,073	332,489	30.18	11,017
2014	910,829.72	158,400	170,542	804,046	30.71	26,182
2015	1,988,541.06	299,118	322,046	1,805,693	31.24	57,801
2016	456,521.18	57 <b>,</b> 259	61 <b>,</b> 648	426,830	31.78	13,431
2017	995,893.08	99,261	106,870	958 <b>,</b> 736	32.32	29,664
2018	553,858.60	40,340	43,432	549 <b>,</b> 197	32.86	16,713
2019	1,245,073.03	55 <b>,</b> 794	60 <b>,</b> 071	1,272,157	33.40	38,089
2020	12,443,082.55	189,460	203,983	13,110,116	33.95	386,160
	104,018,510.29	48,725,881	52,460,849	58,838,957		2,663,095
	1,097,853,124.29	342,766,064	369,039,993	792,755,263		30,949,103
					~ -	c
	COMPOSITE REMAINI	NG LIFE AND A	ANNUAL ACCRUAI	RATE, PERCENT	25.0	6 2.82

#### ACCOUNT 324.00 ACCESSORY ELECTRIC EQUIPMENT

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
PROBAE	E IM SURVIVOR CURV BLE RETIREMENT Y ALVAGE PERCENT	EAR 7-2054				
1973	222,789.78	171,040	226,350	5,352	13.08	409
1974	2,647,424.09	2,005,326	2,653,795	99,527	13.57	7,334
1981	115,963.00	78,621	104,045	16,557	17.30	, 957
1982	110,442.00	73,557	97,343	17,516	17.85	981
1983	389,271.00	254,455	336 <b>,</b> 739	68,103	18.41	3,699
1984	134,304.75	86,116	113 <b>,</b> 964	25,713	18.97	1 <b>,</b> 355
1985	1,713.00	1,077	1,425	356	19.53	18
1986	21,850,180.88	13,456,355	17,807,779	4,916,410	20.09	244,719
1987	536,548.61	323,585	428,224	129,787	20.64	6,288
1988	1,366,761.76	806 <b>,</b> 478	1,067,271	354,161	21.19	16,714
1989	962,115.00	555 <b>,</b> 133	734,648	265 <b>,</b> 952	21.73	12,239
1990	627 <b>,</b> 189.98	353 <b>,</b> 567	467,901	184,377	22.27	8,279
1991	9,436,718.00	5,194,943	6,874,848	2,939,339	22.79	128 <b>,</b> 975
1992	39,697.00	21,328	28,225	13,060	23.30	561
1993	531,825.76	278,452	368,496	184,603	23.81	7,753
1994	728,466.88	371,651	491,833	265,773	24.29	10,942
1995	1,543,919.00	766,245	1,014,028	591,648	24.77	23,886
1996	580,762.00	280,180	370,783	233,210	25.23	9,243
1997	17,379,589.60	8,141,601	10,774,376	7,300,397	25.67	284,394
1998	4,204,872.00	1,910,024	2,527,674	1,845,392	26.10	70 <b>,</b> 705
1999	16,436,713.90	7,226,224	9,562,991	7,531,192	26.52	283,982
2000	868,637.00	369,212	488,605	414,777	26.91	15,413
2001	2,647,459.52	1,085,814	1,436,937	1,316,421	27.29	48,238
2002	6,207,232.00	2,450,129	3,242,435	3,213,086	27.66	116,164
2003	10,434,838.35	3,958,786	5,238,951	5,613,281	28.00	200,474
2004	6,849,779.83	2,489,615	3,294,690	3,829,081	28.33	135,160
2005	2,825,962.95	980,363	1,297,386	1,641,615	28.65	57,299
2006	17,032,325.77	5,624,783	7,443,687	10,269,932	28.95	354,747
2007	29,573,516.66	9,254,003	12,246,499	18,509,958	29.23	633,252
2008	19,333,684.42	5,706,577	7,551,931	12,555,101	29.50	425,597
2009	14,107,224.55	3,907,611	5,171,227	9,500,286	29.75	319,337
2010	55,852.93	14,390	19,043	39,044	30.00	1,301
2011	614,456.39	146,262	193,559	445,475	30.22	14,741
2012	24,170,751.92	5,257,525	6,957,667	18,179,915	30.44	597,238
	430,360,907.87	84,394,807	111,685,819	335,889,525	30.64	10,962,452
2014	40,435,668.40	7,020,344	9,290,535	32,762,561	30.84	1,062,340
	124,726,385.70	18,776,310	24,848,064	104,867,377	31.02	3,380,638
2016	18,144,356.33	2,286,305	3,025,635	15,844,496	31.19	507,999
2017	25,442,369.06	2,561,334	3,389,601	23,070,463	31.35	735,900

#### ACCOUNT 324.00 ACCESSORY ELECTRIC EQUIPMENT

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
PROBAE	E IM SURVIVOR CURV BLE RETIREMENT Y ALVAGE PERCENT	EAR 7-2054				
2018 2019 2020	26,247,500.28 45,676,087.59 12,115,408.03	1,932,656 2,067,336 187,488	2,557,625 2,735,857 248,117	24,739,775 44,767,274 12,351,908	31.50 31.65 31.78	785,390 1,414,448 388,669
	937,717,673.54	202,827,608	268,416,605	706,809,775		23,280,230
PROBAE	RE IM SURVIVOR CURV BLE RETIREMENT Y ALVAGE PERCENT	YEAR 3-2063				
1981	62,164,898.83	43,022,169	56,934,382	9,582,059	17.65	542 <b>,</b> 893
1982	1,098.00	745	986	189	18.26	10
1983	339,938.00	226,151	299 <b>,</b> 282	64 <b>,</b> 452	18.89	3,412
1984	58,743,939.61	38,264,856	50,638,682	12,217,333	19.53	625 <b>,</b> 567
1986	138,689.00	86,413	114 <b>,</b> 357	34,041	20.83	1,634
1987	840,762.00	511 <b>,</b> 818	677 <b>,</b> 326	222,289	21.48	10,349
1989	270,605.00	156 <b>,</b> 767	207,461	82,086	22.81	3,599
1991	1,060,316.00	582,472	770,828	363,710	24.14	15,067
1993	3,552,759.69	1,843,058	2,439,053	1,362,399	25.47	53,490
1996	175,317.00	82,787	109,558	78,031	27.42	2,846
1997	15,913,014.00	7,262,494	9,610,989	7,415,936	28.06	264,289
1999	237,094.00	100,568	133,089	120,602	29.31	4,115
2000	1,160,078.00	473,152	626 <b>,</b> 157	615,127	29.92	20,559
2001	1,996,231.00	781 <b>,</b> 679	1,034,453	1,101,514	30.51	36,103
2002	1,504,926.00	564,239	746,699	863,572	31.09	27,777
2003	939,332.00	336,291	445,038	560,047	31.66	17,689
2004	881,197.00	300,732	397,981	544,900	32.20	16,922
2005	982,382.00	318,372	421,325	629,824	32.73	19,243
2006	1,108,125.82	339,500	449,285	736,409	33.25	22,148
2007	1,321,398.17	381 <b>,</b> 554	504,938	908 <b>,</b> 958	33.74	26,940
2008	4,854,589.64	1,313,355	1,738,059	3,456,352	34.22	101,004
2009	1,408,341.23	355,137	469,979	1,036,946	34.67	29,909
2010	7,913,611.88	1,846,268	2,443,301	6,024,263	35.11	171,583
2011	3,409,858.83	730,221	966,355	2,682,194	35.53	75,491
2012	9,783,379.68	1,900,505	2,515,077	7,953,139	35.93	221,351
2013	4,810,032.12	837,837	1,108,771	4,037,963	36.31	111,208
2014	12,200,481.30	1,869,668	2,474,268	10,580,247	36.67	288,526
2015	5,383,906.37	710,880	940,759	4,820,020	37.01	130,236
2016	5,262,878.07	577,882	764,754	4,866,526	37.34	130,330

#### ACCOUNT 324.00 ACCESSORY ELECTRIC EQUIPMENT

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
PROBAI	RE IM SURVIVOR CURVE BLE RETIREMENT YE ALVAGE PERCENT	EAR 3-2063				
2017 2018 2019 2020	8,669,040.87 38,758,695.28 14,738,929.02 5,428,502.14	753,757 2,457,619 568,847 71,561	997,502 3,252,347 752,797 94,702	8,278,372 38,219,457 15,017,857 5,713,795	37.65 37.94 38.22 38.48	219,877 1,007,366 392,932 148,487
	275,954,347.55	109,629,354	145,080,541	150,190,611		4,742,952
PROBAI	BA IM SURVIVOR CURVE BLE RETIREMENT YE ALVAGE PERCENT	EAR 12-206				
1979	307.59	221	292	37	16.45	2
1981	103.57	72		16	17.65	1
1985	27,011,730.67	17,207,134		6,131,093	20.20	303,519
1986	23,748,661.78	14,786,192		5,843,419	20.86	280,126
1987	490,685.59	298,424		130,107	21.52	6,046
1988	466,577.49	276 <b>,</b> 977	366,544	132,694	22.18	5,983
1989	223,053.53	129,114	170,866	67,801	22.85	2,967
1990	26,878.36	15 <b>,</b> 152	20,052	8,708	23.53	370
1991	465,580.18	255 <b>,</b> 452	338 <b>,</b> 058	160,112	24.20	6,616
1992	100,215.01	53 <b>,</b> 453	70 <b>,</b> 738	36,492	24.87	1,467
1993	38,354.51	19,869	26,294	14,745	25.54	577
1996	311,234.45	146,536	193 <b>,</b> 922	139,099	27.54	5,051
1997	3,354,038.35	1,525,823		1,569,588	28.19	55,679
2003	237,388.20	84,561	111,906	142,100	31.88	4,457
2004	526,529.67	178,706		326,892	32.44	10,077
2005	397,275.84	127,976	-	255,725	32.99	7,752
2006	425,018.02	129,464	171,329	283,440	33.52	8,456
2007	459,028.91	131,611	174,170	316,990	34.04	9,312
2008	1,380,925.95	371,082	491,080	986 <b>,</b> 511	34.53	28,570
2009	1,270,551.90	317,781	420,543	938,948	35.01	26,819
2010	274,473.48	63,474		209,687	35.47	5,912
2011	701,489.67	148,843	196,975	553 <b>,</b> 619	35.90	15,421
2012	1,379,505.52	265,619	351,513	1,124,558	36.32	30,962
2013	2,491,503.87	429,398	568,254	2,097,655	36.72	57,126
2014	2,675,453.68	405,936	537,205	2,325,531	37.10	62,683
2015	5,296,430.77	690,773	914,150	4,753,030	37.46	126,883
2016	1,901,189.69	206,479	273,249	1,761,024	37.80	46,588
2017	3,842,506.55	329,330	435,826	3,675,656	38.13	96,398

#### ACCOUNT 324.00 ACCESSORY ELECTRIC EQUIPMENT

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
PROBA	IBA RIM SURVIVOR CURVE ABLE RETIREMENT YE GALVAGE PERCENT	AR 12-2063				
2018 2019 2020	1,227,233.37	651,510 46,761 13,226	862,191 61,882 17,503	10,312,932 1,251,257 1,070,171	38.44 38.73 39.00	268,286 32,307 27,440
	92,184,484.44	39,306,949	52,017,760	46,619,638		1,533,853
	1,305,856,505.53	351,763,911	465,514,906	903,620,024		29,557,035
	COMPOSITE REMAINI	NG LIFE AND A	ANNUAL ACCRUAL	RATE, PERCENT	30.6	5 2.26

ACCOUNT 325.00 MISCELLANEOUS POWER PLANT EQUIPMENT

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
PROBAE	M SURVIVOR CURVE BLE RETIREMENT YE ALVAGE PERCENT	EAR 7-2054	2			
1975	982,088.00	659,969	942,972	78,399	19.21	4,081
1976	30,131.00	19,971	28,535	2,801	19.65	143
1977	419,344.00	274,096	391,632	44,486	20.08	2,215
1978	421,781.00	271,653	388,141	50,511	20.52	2,462
1979	388,898.00	246,782	352,605	51,849	20.95	2,475
1980	103,120.00	64,463	92,106	15,139	21.37	708
1981	604,951.00	372,324	531,981	97,168	21.79	4,459
1982	395,677.00	239,722	342,518	68,986	22.20	3,107
1983	1,854,930.00	1,105,525	1,579,589	349,539	22.61	15,459
1984	2,674,151.00	1,567,271	2,239,337	541,780	23.01	23,545
1985	1,087,173.00	626,329	894,907	235,753	23.40	10,075
1986	6,585,615.00	3,727,727	5,326,225	1,522,814	23.78	64,038
1987	3,081,476.00	1,712,610	2,447,000	757,735	24.16	31,363
1988	1,990,417.00	1,085,981	1,551,664	518,370	24.52	21,141
1989	2,230,226.00	1,193,210	1,704,874	614,561	24.88	24,701
1990	6,613,873.00	3,468,241	4,955,468	1,922,960	25.23	76,217
1991	3,341,819.00	1,716,406	2,452,423	1,023,068	25.57	40,010
1992	8,515,954.00	4,279,860	6,115,120	2,741,472	25.90	105,848
1993	9,416,240.31	4,627,532	6,611,879	3,181,011	26.22	121,320
1994	10,465,131.00	5,026,654	7,182,149	3,701,587	26.52	139,577
1995	4,704,873.00	2,205,550	3,151,319	1,741,749	26.82	64,942
1996	7,035,376.00	3,215,071	4,593,736	2,723,055	27.11	100,445
1997	3,843,775.00	1,709,782	2,442,959	1,554,567	27.39	56 <b>,</b> 757
1998	3,090,632.00	1,336,617	1,909,776	1,304,481	27.66	47,161
1999	2,682,033.00	1,125,739	1,608,471	1,180,844	27.93	42,279
2000	3,241,010.00	1,318,261	1,883,549	1,487,102	28.18	52 <b>,</b> 772
2001	3,929,463.00	1,545,772	2,208,619	1,878,022	28.42	66,081
2002	4,496,013.00	1,707,481	2,439,671	2,236,182	28.65	78 <b>,</b> 052
2003	3,224,970.29	1,178,752	1,684,216	1,669,753	28.88	57 <b>,</b> 817
2004	3,525,732.00	1,237,569	1,768,255	1,898,506	29.09	65 <b>,</b> 263
2005	3,985,448.00	1,338,211	1,912,053	2,232,812	29.30	76 <b>,</b> 205
2006	7,394,568.78	2,367,398	3,382,569	4,307,782	29.50	146,027
2007	5,456,545.47	1,658,462	2,369,632	3,305,175	29.69	111,323
2008	7,438,991.49	2,137,068	3,053,471	4,683,080	29.87	156 <b>,</b> 782
2009	14,348,088.37	3,869,278	5,528,475	9,393,537	30.05	312 <b>,</b> 597
2010	8,658,616.99	2,177,850	3,111,741	5,893,221	30.22	195,011
2011	11,419,422.80	2,655,637	3,794,409	8,081,791	30.38	266,023
2012	11,943,100.77	2,539,810	3,628,914	8,791,911	30.54	287,882
2013	11,328,601.72	2,175,382	3,108,214	8,673,531	30.69	282,617
2014	11,976,458.93	2,040,463	2,915,440	9,540,077	30.83	309,441
2015	11,148,834.01	1,647,735	2,354,305	9,240,482	30.97	298,369

ACCOUNT 325.00 MISCELLANEOUS POWER PLANT EQUIPMENT

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)		
PROBAI	E IM SURVIVOR CURV BLE RETIREMENT Y ALVAGE PERCENT	EAR 7-2054						
2016 2017 2018 2019 2020	16,540,330.25 7,710,748.04 12,372,170.22 15,018,776.45 3,657,081.13	2,050,988 764,468 901,080 670,078 55,795	2,930,479 1,092,282 1,287,475 957,416 79,721	14,271,465 6,926,896 11,579,582 14,662,111 3,723,644	31.10 31.22 31.34 31.46 31.57	458,890 221,874 369,483 466,056 117,949		
INTER: PROBAI	261,374,656.02 77,916,623 111,328,295 160,501,347 5,401,042 MCGUIRE INTERIM SURVIVOR CURVE IOWA 55-R2 PROBABLE RETIREMENT YEAR 3-2063 NET SALVAGE PERCENT7							
1975	2,818.00	1,914	2,735	281	20.04	14		
1977	272.00	179	256	35	21.11	2		
1978	65,293.00	42,237	60,349	9,515	21.65	439		
1979	13,140.00	8,353	11,935	2,125	22.20	96		
1980	11,791.00	7,364	10,522	2,095	22.74	92		
1981	39,493,394.85	24,223,937	34,611,479	7,646,453	23.28	328,456		
1982	122,686.00	73,856	105,526	25,748	23.82	1,081		
1983	220,369.00	130,130	185,931	49,863	24.36	2,047		
1984	18,909,341.94	10,946,253	15,640,150	4,592,846	24.90	184,452		
1985	777,748.00	441,236	630,444	201,747	25.43	7,933		
1986 1987	3,501,052.00 2,004,725.00	1,945,213 1,089,860	2,779,346 1,557,206	966,780 587,849	25.96 26.49	37,241 22,191		
1987	2,890,222.00	1,536,775	2,195,764	896,773	20.49	33,202		
1989	3,210,058.00	1,668,264	2,383,638	1,051,125	27.52	38,195		
1990	9,187,217.02	4,662,620	6,662,013	3,168,309	28.03	113,033		
1991	6,838,773.00	3,387,997	4,840,815	2,476,672	28.52	86,840		
1992	2,744,403.00	1,325,541	1,893,950	1,042,561	29.01	35,938		
1993	4,893,824.00	2,302,284	3,289,534	1,946,858	29.49	66,018		
1994	4,875,918.00	2,231,567	3,188,492	2,028,740	29.97	67,692		
1995	4,771,387.46	2,122,921	3,033,257	2,072,127	30.43	68,095		
1996	4,058,035.00	1,753,122	2,504,884	1,837,214	30.88	59,495		
1997	4,433,696.00	1,857,250	2,653,663	2,090,392	31.32	66,743		
1998	2,597,290.00	1,053,362	1,505,057	1,274,043	31.75	40,127		
1999	2,163,258.00	848,008	1,211,645	1,103,041	32.17	34,288		
2000	3,130,204.00	1,183,783	1,691,405	1,657,914	32.58	50,887		
2001	3,978,953.00	1,449,544	2,071,128	2,186,352	32.97	66,313		
2002	3,483,339.00	1,218,823	1,741,470	1,985,702	33.36	59,523		

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ACCOUNT 325.00 MISCELLANEOUS POWER PLANT EQUIPMENT

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
PROBAI	RE IM SURVIVOR CURV BLE RETIREMENT Y ALVAGE PERCENT	EAR 3-2063				
2003 2004 2005 2006 2007 2008 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020	2,978,837.00 2,654,131.00 3,214,887.00 3,846,446.57 4,706,781.52 7,296,344.80 8,289,835.40 8,285,578.40 7,760,321.21 7,769,071.35 12,932,386.31 19,287,695.63 26,848,300.40 13,247,272.64 12,032,811.82 9,501,617.16 9,139,369.59 3,550,301.79	999,077 850,755 981,515 1,114,778 1,288,425 1,878,151 1,993,826 1,850,244 1,593,035 1,451,766 2,172,235 2,856,483 3,428,362 1,413,064 1,016,490 584,892 345,594 45,928	1,427,494 1,215,570 1,402,402 1,592,809 1,840,919 2,683,527 2,848,805 2,643,653 2,276,149 2,074,302 3,103,718 4,081,380 4,898,489 2,019,004 1,452,374 835,701 493,789 65,623	1,759,861 1,624,350 2,037,528 2,522,888 3,195,338 5,123,562 6,021,319 6,221,916 6,027,394 6,238,604 10,733,935 16,556,454 23,829,193 12,155,577 11,422,734 9,331,029 9,285,336 3,733,200	33.73 34.09 34.44 34.78 35.11 35.42 35.73 36.02 36.31 36.58 36.84 37.10 37.34 37.57 37.80 38.01 38.22 38.42	52,175 47,649 59,162 72,538 91,009 144,652 168,523 172,735 165,998 170,547 291,366 446,266 638,168 323,545 302,189 245,489 242,944 97,168
	291,721,197.86 BA IM SURVIVOR CURV BLE RETIREMENT Y			178,723,379		5,202,556
NET S2 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995	ALVAGE PERCENT 32.63 3,779.17 242,087.70 8,192,191.98 3,174,319.85 635,188.44 998,543.37 426,968.84 848,977.55 1,121,652.46 1,542,910.72 976,309.46 1,536,887.00 1,414,554.73	-7 20 2,228 139,860 4,635,799 1,758,515 344,359 529,359 221,146 429,394 553,338 741,904 457,254 700,083 626,271	29 3,183 199,834 6,623,690 2,512,589 492,025 756,355 315,976 613,524 790,617 1,060,042 653,331 1,000,288 894,824	6 860 59,200 2,141,955 883,933 187,627 312,086 140,880 294,882 409,552 590,872 391,321 644,181 618,749	23.91 24.45 25.00 25.55 26.09 26.62 27.15 27.68 28.19 28.71 29.21 29.70 30.19 30.66	35 2,368 83,834 33,880 7,048 11,495 5,090 10,461 14,265 20,228 13,176 21,338 20,181

ACCOUNT 325.00 MISCELLANEOUS POWER PLANT EQUIPMENT

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
PROBAB	A M SURVIVOR CURV LE RETIREMENT Y LVAGE PERCENT	EAR 12-206				
1996	883,657.83	379,586	542,357	403,156	31.13	12,951
1997	1,567,649.92	652,989	932,999	744,386	31.58	23,571
1998	870,345.03	350,725	501,120	430,149	32.03	13,430
1999	377,219.05	146,931	209,937	193 <b>,</b> 687	32.46	5 <b>,</b> 967
2000	682,157.20	256,271	366,163	363,745	32.88	11,063
2001	488,365.14	176,643	252,390	270,161	33.29	8,115
2002	757 <b>,</b> 071.95	263 <b>,</b> 037	375,831	434,236	33.69	12,889
2003	706,657.44	235,124	335,948	420,175	34.08	12,329
2004	444,506.04	141,269	201,847	273 <b>,</b> 774	34.46	7,945
2005	717,907.43	217,351	310,554	457 <b>,</b> 607	34.82	13,142
2006	529,049.13	151,914	217,057	349,026	35.17	9,924
2007	872,575.19	236,700	338,200	595 <b>,</b> 455	35.51	16,769
2008	1,992,947.48	508 <b>,</b> 078	725,949	1,406,505	35.84	39,244
2009	1,637,575.15	389,918	557 <b>,</b> 120	1,195,085	36.16	33,050
2010	1,731,561.70	382,245	546 <b>,</b> 157	1,306,614	36.47	35,827
2011	1,347,505.62	273,616	390,946	1,050,885	36.76	28,588
2012	1,231,925.42	227,541	325,114	993 <b>,</b> 047	37.05	26,803
2013	2,090,274.70	346,851	495,585	1,741,009	37.32	46,651
2014	1,075,230.88	157 <b>,</b> 227	224,648	925 <b>,</b> 849	37.59	24,630
2015	3,731,679.96	470,124	671 <b>,</b> 719	3,321,178	37.84	87 <b>,</b> 769
2016	1,851,567.40	194,690	278,176	1,703,001	38.08	44,722
2017	1,618,816.35	134,656	192,398	1,539,735	38.32	40,181
2018	753 <b>,</b> 283.90	45 <b>,</b> 765	65 <b>,</b> 390	740 <b>,</b> 624	38.54	19,217
2019	1,948,430.94	72 <b>,</b> 677	103,842	1,980,979	38.76	51,109
2020	568,008.19	7,245	10,352	597 <b>,</b> 417	38.97	15,330
	51,590,372.94	17,558,703	25,088,105	30,113,594		884,615
INTERII PROBABI	DEPARTMENT PLA M SURVIVOR CURV LE RETIREMENT Y LVAGE PERCENT	E IOWA 55-R Ear 12-206				
1997	61,696.00	25,219	36,033	28,748	31.58	910
1998	48,736.00	19,272	27,536	23,637	32.03	738
2006	7,273.00	2,049	2,928	4,709	35.17	134
2010	1,273,168.53	275,801	394,068	942,759	36.47	25,850
	=, = : 0, ± 00 • 00	,	001,000	512,105		20,000

ACCOUNT 325.00 MISCELLANEOUS POWER PLANT EQUIPMENT

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
INTER PROBA	D DEPARTMENT PLA IM SURVIVOR CURV BLE RETIREMENT Y ALVAGE PERCENT	YE IOWA 55-R YEAR 12-206				
2015	39,614.09	4,897	6,997	34,598	37.84	914
2018	6,783.00	404	577	6,545	38.54	170
2019	34,131.29	1,249	1,785	34,053	38.76	879
	1,471,401.91	328,891	469,924	1,075,048		29,595
	606,157,628.73	189,181,230	270,304,627	370,413,368		11,517,808
	COMPOSITE REMAIN	NING LIFE AND	ANNUAL ACCRUAL	RATE, PERCENT	32.	2 1.90