

STATE OF INDIANA
INDIANA UTILITY REGULATORY COMMISSION

PETITION OF NORTHERN INDIANA PUBLIC SERVICE)
COMPANY LLC PURSUANT TO IND. CODE §§ 8-1-2-42.7,)
8-1-2-61, AND, 8-1-2.5-6 FOR (1) AUTHORITY TO MODIFY)
ITS RETAIL RATES AND CHARGES FOR ELECTRIC)
UTILITY SERVICE THROUGH A PHASE IN OF RATES;)
(2) APPROVAL OF NEW SCHEDULES OF RATES AND)
CHARGES, GENERAL RULES AND REGULATIONS, AND)
RIDERS (BOTH EXISTING AND NEW); (3) APPROVAL)
OF A NEW RIDER FOR VARIABLE NONLABOR O&M)
EXPENSES ASSOCIATED WITH COALFIRED)
GENERATION; (4) MODIFICATION OF THE FUEL COST)
ADJUSTMENT TO PASS BACK 100% OF OFF-SYSTEM)
SALES REVENUES NET OF EXPENSES; (5) APPROVAL)
OF REVISED COMMON AND ELECTRIC)
DEPRECIATION RATES APPLICABLE TO ITS)
ELECTRIC PLANT IN SERVICE; (6) APPROVAL OF)
NECESSARY AND APPROPRIATE ACCOUNTING)
RELIEF, INCLUDING BUT NOT LIMITED TO)
APPROVAL OF (A) CERTAIN DEFERRAL MECHANISMS)
FOR PENSION AND OTHER POSTRETIREMENT)
BENEFITS EXPENSES; (B) APPROVAL OF)
REGULATORY ACCOUNTING FOR ACTUAL COSTS OF)
REMOVAL ASSOCIATED WITH COAL UNITS)
FOLLOWING THE RETIREMENT OF MICHIGAN CITY)
UNIT 12, AND (C) A MODIFICATION OF JOINT)
VENTURE ACCOUNTING AUTHORITY TO COMBINE)
RESERVE ACCOUNTS FOR PURPOSES OF PASSING)
BACK JOINT VENTURE CASH, (7) APPROVAL OF)
ALTERNATIVE REGULATORY PLANS FOR THE (A))
MODIFICATION OF ITS INDUSTRIAL SERVICE)
STRUCTURE, AND (B) IMPLEMENTATION OF A LOW)
INCOME PROGRAM; AND (8) REVIEW AND)
DETERMINATION OF NIPSCO'S EARNINGS BANK FOR)
PURPOSES OF IND. CODE § 8-1-2-42.3.)

CAUSE NO. 45772

INDIANA OFFICE OF UTILITY CONSUMER COUNSELOR

PUBLIC'S EXHIBIT NO. 5

TESTIMONY OF OUCC WITNESS DAVID GARRETT

JANUARY 20, 2023

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'K. Earls', with a long horizontal stroke extending to the right.

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I. INTRODUCTION

1 **Q. State your name and occupation.**

2 A. My name is David J. Garrett. I am a consultant specializing in public utility regulation. I
3 am the managing member of Resolve Utility Consulting, PLLC. I focus my practice on
4 the primary capital recovery mechanisms for public utility companies: cost of capital and
5 depreciation.

6 **Q. Summarize your educational background and professional experience.**

7 A. I received a B.B.A. with a major in Finance, an M.B.A. and a Juris Doctor from the
8 University of Oklahoma. I worked in private legal practice for several years before
9 accepting a position as assistant general counsel at the Oklahoma Corporation Commission
10 in 2011. At the Oklahoma Commission, I worked in the Office of General Counsel in
11 regulatory proceedings. In 2012, I began working for the Public Utility Division as a
12 regulatory analyst providing testimony in regulatory proceedings. After leaving the
13 Oklahoma Commission, I formed Resolve Utility Consulting, PLLC, where I have
14 represented various consumer groups, state agencies, and municipalities in utility
15 regulatory proceedings, primarily in the areas of cost of capital and depreciation. I am a
16 Certified Depreciation Professional with the Society of Depreciation Professionals. I am
17 also a Certified Rate of Return Analyst with the Society of Utility and Regulatory Financial
18 Analysts. A more complete description of my qualifications and regulatory experience is
19 included in my curriculum vitae.¹

¹ Attachment DJG-2-1.

1 **Q. On whose behalf are you testifying in this proceeding?**

2 A. I am testifying on behalf of the Indiana Office of Utility Consumer Counselor ("OUCC").

3 **Q. Describe the scope and organization of your testimony.**

4 A. My direct testimony addresses rate of return and related issues in response to the direct
5 testimony of Northern Indiana Public Service Company LLC's ("NIPSCO" or
6 "Company") witnesses John Spanos and Jeffrey Kopp regarding the Company's proposed
7 depreciation rates.²

8 **Q. To the extent you do not address a position in the Company's testimony, should that**
9 **be construed to mean you agree with such position?**

10 A. No.

II. EXECUTIVE SUMMARY

11 **Q. Summarize the key points of your testimony.**

12 A. In this case, Mr. Spanos conducted a depreciation study on NIPSCO's assets as of
13 December 31, 2021 ("2021 Depreciation Study"). In addition, Mr. Spanos applied the
14 depreciation parameters he estimated in the 2021 Depreciation Study to projected plant and
15 reserve balances as of December 31, 2023 ("2023 Depreciation Study"). I conducted my
16 analysis in this case in a substantially similar fashion. First, I obtained the same historical
17 plant and net salvage data used in the 2021 Depreciation Study. Using statistical analysis,
18 I developed my own options as to the most reasonable service life and net salvage

² I have also filed direct testimony, Public's Exhibit No.3, addressing NIPSCO's proposed cost of capital in response to the direct testimony of Company witness Vincent V. Rea.

1 parameters for NIPSCO's assets.³ After developing my depreciation parameters as part of
 2 my analysis of the 2021 Depreciation Study, I applied them to the updated plant and reserve
 3 balances the Company provided in forming my adjustments to the 2023 Depreciation
 4 Study.⁴ The following table shows a summary of proposed depreciation accruals related
 5 to the 2023 Depreciation Study.⁵

**Figure 1:
 Summary Accrual Comparison – 2023 Depreciation Study**

2023 Depreciation Study				
Plant Function	Plant Balance 12/31/2023	NIPSCO Proposal	OUCC Proposal	OUCC Adjustment
Steam Production	\$ 2,606,488,068	\$ 178,927,039	\$ 182,022,675	\$ 3,095,636
Hydro Production	77,928,624	4,807,463	4,634,566	(172,897)
Other Production	255,486,367	7,641,719	7,459,380	(182,339)
Transmission	2,294,700,214	44,703,116	38,854,641	(5,848,475)
Distribution	3,111,535,218	71,954,537	66,124,037	(5,830,500)
General	129,779,494	8,089,642	8,183,550	93,908
Common	174,292,164	5,795,810	5,720,369	(75,441)
Total	\$ 8,650,210,147	\$ 321,919,326	\$ 312,999,216	\$ (8,920,110)

6 As shown in this table, adopting my proposed depreciation rates would reduce the
 7 Company's proposed annual accrual by \$8.9 million, when applied to projected plant
 8 balances at December 31, 2023.⁶

³ For depreciation rate calculations and impacts for plant as of December 31, 2021, *see* Attachment DJG-2-4 and Attachment DJG-2-5.

⁴ For depreciation rate calculations and impacts for plant as of December 31, 2023, *see* Attachment DJG-2-6 and Attachment DJG-2-7.

⁵ *See* Attachment DJG-2-2.

⁶ For OUCC's proposed adjustment to depreciation expense, please see the direct testimony and exhibits of OUCC witness Mark E. Garrett.

1 **Q. Please summarize the primary issues driving your proposed depreciation rate**
2 **adjustments.**

3 A. The primary factors driving my proposed depreciation rate adjustments are summarized as
4 follows:

5 1. Remove Demolition Contingency Costs

6 NIPSCO is proposing the recovery of contingency costs as part of its
7 demolition cost estimates. This proposal adds nearly \$30 million to
8 NIPSCO's estimated demolition costs. Contingency costs are not known or
9 measurable by definition, and they should be excluded from the calculation
10 of terminal net salvage rates.

11 2. Remove Demolition Cost Escalation Rates

12 NIPSCO proposes to escalate the present value of its demolition cost
13 estimates to the future retirement date of each of its generating units. This
14 proposal adds more than \$3 million to the annual depreciation accrual.
15 Terminal net salvage rates should be calculated based on present value
16 demolition cost estimates.

17 3. Mass Property Service Life Adjustments

18 For several of its mass property accounts, NIPSCO is proposing service
19 lives that are shorter than those indicated by the Company's historical
20 retirement data, which results in unreasonably high proposed depreciation
21 rates and expense for these accounts. Basing remaining service life
22 estimates primarily upon an objective analysis of historical retirement
23 patterns is particularly appropriate in this case in light of the substantial rate
24 increase requested by NIPSCO.

1 4. Mitigate Mass Property Net Salvage Increases

2 The historical net salvage data presented by the Company generally
3 supports an increase in negative net salvage rates, which has an increasing
4 effect on depreciation expense. However, I recommend the Commission
5 adopt a gradual approach regarding negative net salvage rate increases,
6 which is a reasonable option to consider in terms of mitigating the financial
7 impact of rate increases to customers. Specifically, I propose limiting
8 negative net salvage increases in this case to 25% of the Company's
9 proposed increase in favor of a more gradual approach. Thus, my proposed
10 net salvage rates for the accounts at issue also represent an increase from
11 current net salvage rates, but to a lesser extent than those proposed by the
12 Company.

13 5. Adding Ash Pond Compliance Costs Back to Demolition Costs

14 NIPSCO is seeking to track certain ash pond closure costs for its Michigan
15 City and Schahfer production facilities in two pending proceedings before
16 the Commission. The OUCC's position is that these costs should be
17 included in this rate case and recovered through terminal net salvage rates
18 along with the Company's other demolition costs. My terminal net salvage
19 rates include these costs.

20 The estimated impact to my overall depreciation accrual adjustment from each of these
21 issues is summarized in the table below.

**Figure 1:
Broad Issue Impacts**

<u>Issue</u>	<u>Impact (Mil)</u>
1. Remove Demolition Contingency Costs	\$(2.5)
2. Remove Demolition Cost Escalation Rates	\$(3.3)
5. Adjust Other Mass Property Service Lives	\$(7.1)
4. Mitigate Mass Property Net Salvage Increases	\$(4.6)
5. Add Ash Pond Compliance Costs	\$8.6
Total	\$8.9 million

22 Each of these issues will be further discussed in my testimony.

III. REGULATORY STANDARDS

1 **Q. Discuss the standard by which regulated utilities are allowed to recover depreciation**
2 **expense.**

3 A. In *Lindheimer v. Illinois Bell Telephone Co.*, the U.S. Supreme Court stated “depreciation
4 is the loss, not restored by current maintenance, which is due to all the factors causing the
5 ultimate retirement of the property. These factors embrace wear and tear, decay,
6 inadequacy, and obsolescence.”⁷ The *Lindheimer* Court also recognized that the original
7 cost of plant assets, rather than present value or some other measure, is the proper basis for
8 calculating depreciation expense.⁸ Moreover, the *Lindheimer* Court found:

9 [T]he company has the burden of making a convincing showing that the
10 amounts it has charged to operating expenses for depreciation have not been
11 excessive. That burden is not sustained by proof that its general accounting
12 system has been correct. The calculations are mathematical, but the
13 predictions underlying them are essentially matters of opinion.⁹

14 Thus, the Commission must ultimately determine if NIPSCO has met its burden of proof
15 by making a convincing showing that its proposed depreciation rates are not excessive.

16 **Q. Please describe why it is important not to overestimate depreciation rates.**

17 A. Under the regulatory model we use, the utility is allowed to recover the original cost of its
18 prudent investments required to provide service. Depreciation systems are designed to

⁷ *Lindheimer v. Illinois Bell Tel. Co.*, 292 U.S. 151, 167 (1934).

⁸ *Id.* (Referring to the straight-line method, the *Lindheimer* Court stated that “[a]ccording to the principle of this accounting practice, the loss is computed upon the actual cost of the property as entered upon the books, less the expected salvage, and the amount charged each year is one year’s pro rata share of the total amount.”). The original cost standard was reaffirmed by the Court in *Federal Power Commission v. Hope Natural Gas Co.*, 320 U.S. 591, 606 (1944). The *Hope* Court stated: “Moreover, this Court recognized in [*Lindheimer*], supra, the propriety of basing annual depreciation on cost. By such a procedure the utility is made whole and the integrity of its investment maintained. No more is required.”

⁹ *Id.* at 169.

1 allocate those costs in a systematic and rational manner – specifically, over the service lives
2 of the utility's assets. If depreciation rates are overestimated (i.e., service lives are
3 underestimated), it may unintentionally incent economic inefficiency. When an asset is
4 fully depreciated and no longer in rate base, but still being used, a utility may be incented
5 to retire and replace the asset to increase rate base, even though the retired asset may not
6 have reached the end of its economic useful life. If, on the other hand, an asset must be
7 retired and taken out of service before it is fully depreciated, there are regulatory
8 mechanisms that can ensure the utility fully recovers its prudent investment in the retired
9 asset. Thus, it is preferable for regulators to ensure that assets are not depreciated before
10 the end of their economic useful lives.

IV. DEPRECIATION SYSTEM

11 **Q. Please describe your approach to analyzing the Company's depreciable property in**
12 **this case.**

13 A. I obtained and reviewed the data used to conduct the Company's depreciation study. The
14 depreciation rates proposed by Mr. Spanos were developed based on depreciable property
15 recorded as of December 31, 2021. I used the same historical retirement data in my analysis
16 that Mr. Spanos used to conduct the 2021 Depreciation Study. In addition, I applied the
17 same updated plant and reserve balances Mr. Spanos used in the 2023 Depreciation Study
18 to develop my proposed adjustments to the Company's projected depreciation accruals.

1 **Q. Discuss the definition and purpose of a depreciation system as well as the depreciation**
2 **system you employed for this project.**

3 A. The legal and technical standards set forth above do not mandate a specific procedure for
4 conducting depreciation analysis. These standards, however, direct that analysts use a
5 system for estimating depreciation rates that will result in the “systematic and rational”
6 allocation of capital recovery for the utility. Over the years, analysts have developed
7 “depreciation systems” designed to analyze grouped property in accordance with this
8 standard. A depreciation system may be defined by several primary parameters: 1) a
9 method of allocation; 2) a procedure for applying the method of allocation; 3) a technique
10 of applying the depreciation rate; and 4) a model for analyzing the characteristics of vintage
11 property groups.¹⁰ In this case, I used the straight line method, the average life grouping
12 procedure, the remaining life technique, and the broad group model to analyze the
13 Company’s actuarial data; this system would be denoted as an “SL-AL-RL-BG” system. I
14 provide a more detailed discussion of depreciation system parameters, theories, and
15 equations in Appendix A.

16 **Q. Did Mr. Spanos use the same depreciation system as you did in this case?**

17 A. Yes. Pertinently, Mr. Spanos notes a change in the depreciation procedure in this case
18 from the equal life group (“ELG”) procedure to the average life group (“ALG”) procedure
19 (also referred to as average service life procedure).

¹⁰ Frank K. Wolf & W. Chester Fitch, *Depreciation Systems* 70, 140 (Iowa State University Press 1994).

1 **Q. Do you agree with the Company's decision to calculate depreciation rates under the**
2 **ALG procedure rather than the ELG procedure?**

3 A. Yes. In my experience, the ALG procedure is the most commonly used procedure by
4 depreciation analysts in utility rate proceedings. Under the ALG procedure, a constant
5 accrual rate based on the average life of all property in the group is applied to the surviving
6 property.¹¹ In the ELG procedure, property is divided into subgroups that each have a
7 common life. Pertinently, the ELG procedure results in higher depreciation rates in the
8 early years of a vintage's life compared to the ALG procedure.¹² For the ELG procedure
9 to be applied properly, depreciation rates developed under the ELG procedure would need
10 to be adjusted each year, which would require a separate depreciation study each year. If
11 there is any marginal benefit obtained in this process from using the ELG procedure over
12 the ALG procedure, it would be far outweighed by the marginal costs imposed from the
13 excessive time and expense associated with litigating depreciation studies every year.

V. LIFE SPAN PROPERTY ANALYSIS

14 **Q. Describe life span property.**

15 A. "Life span" property accounts usually consist of property within a production plant. The
16 assets within a production plant will be retired concurrently at the time the plant is retired,
17 regardless of their individual ages or remaining economic lives. For example, a production
18 plant will contain property from several accounts, such as structures, fuel holders, and
19 generators. When the plant is ultimately retired, all property associated with the plant will

¹¹ *Id.* at 74-75.

¹² *Id.* at 93 (emphasis added).

1 be retired together, regardless of the age of each individual unit. Analysts often use the
2 analogy of a car to explain the treatment of life span property. Throughout the life of a car,
3 the owner will retire and replace various components, such as tires, belts, and brakes.
4 When the car reaches the end of its useful life and is finally retired, all of the car's
5 individual components are retired together. Some of the components may still have some
6 useful life remaining, but they are nonetheless retired along with the car. Thus, the various
7 accounts of life span property are scheduled to retire concurrently as of the production
8 unit's probable retirement date.

9 **Q. Describe the approach to analyzing life span property.**

10 A. For life span property, there are essentially three steps to the analytical process. First, I
11 reviewed the Company's proposed life spans for each of its production units and compared
12 them to life span estimates of other similar production units in other jurisdictions. Second,
13 I examined the Company's proposed interim retirement curves for each account in order to
14 assess the remaining lives and depreciation rates for each production unit. Finally, I
15 analyzed the weighted net salvage for each account, which involved reviewing the
16 Company's weighting of interim and terminal retirements for each production account, as
17 well as analyzing the Company's proposed interim and terminal net salvage rates.

A. Interim Retirements

18 **Q. Discuss the concept of interim retirements.**

19 A. The individual components within a generating unit are retired and replaced throughout the
20 life of the unit. This retirement rate is measured by "interim" survivor curves. Thus, a

1 production plant's remaining life and depreciation rate are not only affected by the terminal
2 retirement date of the entire plant, but also by the retirement rate of the plant's individual
3 components, which are retired during the "interim" of the plant's useful life.

4 **Q. Did you make any adjustments to the Company's proposed interim retirements?**

5 A. No. I accepted the Company's proposed interim retirement curves as well as the
6 Company's proposed weighting of interim and terminal retirements because they are within
7 a reasonable range given the Company's data provided in this case.

B. Terminal Net Salvage (Demolition Costs)

8 **Q. Describe terminal net salvage.**

9 A. When a production plant reaches the end of its useful life, a utility may decide to dismantle
10 the plant. In that case, the utility may sell some of the remaining assets. The proceeds
11 from this transaction are called "gross salvage." The corresponding expense associated
12 with plant demolition is called "cost of removal." The term "net salvage" equates to gross
13 salvage less the cost of removal. When net salvage refers to production plants, it is often
14 called "terminal net salvage," because the transaction will occur at the end of the plant's
15 life.

16 **Q. Did NIPSCO provide demolition studies in this case as part of its proposed terminal**
17 **net salvage rates?**

18 A. Yes. The demolition studies were conducted by Burns & McDonnell and sponsored in the
19 direct testimony of Mr. Kopp.¹³

¹³ Petitioner's Exhibit No. 14, Direct Testimony of Jeffrey T. Kopp, Attachment 14-B.

1 **Q. Are you proposing any adjustments to the Company's proposed demolition cost**
2 **estimates?**

3 A. Yes. As discussed in more detail below, I propose removing the contingency factors from
4 the demolition cost estimates, and removing any escalation rates of the demolition cost
5 estimates applied by Mr. Spanos in calculating terminal net salvage rates.

1. Contingency Factor

6 **Q. Describe the contingency factor applied by Mr. Kopp.**

7 A. NIPSCO's demolition studies include direct and indirect cost estimates to dismantle
8 NIPSCO's generating facilities, which include labor, material, and scrap value estimates.
9 However, in addition to these cost estimates, Mr. Kopp applied a 20% contingency on the
10 demolition costs estimated in the study.¹⁴ The total amount of the contingency costs is
11 nearly \$30 million.¹⁵

12 **Q. Do you agree that contingency factors should be included in the demolition cost**
13 **estimates and charged to customers?**

14 A. No. Mr. Kopp argues that applying contingency costs is a standard industry practice that
15 are designed to cover uncertainties in demolition cost estimates.¹⁶ The problem with this
16 argument regarding "uncertainty" is that it does not meet the regulatory standard for
17 charging costs to utility customers in the context of ratemaking. If a projected cost is
18 "uncertain" by definition, an equally viable argument could be made for applying a

¹⁴ Petitioner's Exhibit No. 14, Direct Testimony of Jeffrey T. Kopp, pp. 17-19.

¹⁵ See Attachment DJG-2-9.

¹⁶ Petitioner's Exhibit No. 14, Direct Testimony of Jeffrey T. Kopp, pp. 17-19.

1 negative 20% contingency to ensure that ratepayers are not overcharged. However, an
2 even fairer approach would be to simply disallow contingency adjustments in either
3 direction, which is what I propose in this case.

4 **Q. Are you aware of other cases where regulatory commissions rejected such**
5 **contingency factors in proposed demolition costs?**

6 A. Yes. In Public Service Company of Oklahoma's 2015 rate case, the Administrative Law
7 Judge ("ALJ") specifically addressed the company's request for contingency costs in its
8 demolition studies:

9 In its demolition cost study, [Sargent & Lundy] applied a 15% contingency
10 factor to its cost estimates, and a negative 15% contingency factor to its
11 scrap metal value estimates. The Company provides little justification for
12 this contingency factor other than the plants might experience uncertainties
13 and unplanned occurrences. This reasoning fails to consider the fact that
14 certain occurrences could reduce estimated costs.¹⁷

15 NIPSCO is essentially making the same arguments in this case, as discussed above, and for
16 the same reasons the Company's arguments should be rejected in this case.

17 **Q. Has the IURC addressed contingency costs in prior cases?**

18 A. Yes. For example, in Cause No. 45235, the Commission allowed contingency costs to be
19 included in demolition cost estimates because parties had not shown why a change would
20 be warranted.¹⁸ While Commission Orders are not precedential, the Commission can view

¹⁷ Before the Oklahoma Corporation Commission, Report and Recommendation of the Administrative Law Judge p. 164, filed May 31, 2016 in Cause No. PUD 201500208.

¹⁸ Cause No. 45235, *Petition of Indiana Michigan Power Company*, Order, p. 32 (March 11, 2020).

1 this concern taking into consideration NIPSCO's overall rate increase, and the economic
2 impact and fairness on ratepayers.¹⁹

3 **Q. What is the central issue concerning contingency costs in this case?**

4 A. The issue is whether it is fair to charge customers for a future cost that is unknown and
5 arbitrary on its face. While the inclusion of contingency costs is undoubtedly a positive
6 factor for the utility, it is clearly unfair in terms of sound ratemaking principals.
7 Contingency costs are entirely unknown, unmeasurable, and arbitrary – the exact opposite
8 of the types of costs that customers should be charged for.

9 **Q. Are other unknown costs and parameters in rate proceedings increased arbitrarily**
10 **because they are unknown?**

11 A. No. I cannot think of any other costs or parameters that are typically at issue in a rate
12 proceeding that are treated the same way as demolition contingency costs. Some pertinent
13 examples include the depreciation parameters of service life and net salvage. Remaining
14 life and future net salvage are unknown by definition, but I cannot recall any witness or
15 regulator who has suggested such parameter should be increased or decreased by an
16 arbitrary amount simply because the parameter is unknown. Likewise, the cost of equity
17 is also a cost that cannot be directly measured. However, even the most aggressive utility
18 ROE witnesses do not suggest the cost of equity should be increased by 20% simply
19 because it is unknown.

¹⁹ “Although the Commission attempts to be consistent in its decisions, the Commission’s orders do not set precedent. The Commission is an impartial agency that is required by state law to evaluate each individual case based on the evidence provided by the parties in that case. Each case is unique due to the differing evidence provided.” IURC, *Indiana Utility Guide*, p. 11, located at: <https://www.in.gov/iurc/files/IURC-Utility-Guide-WEB-version.pdf>

1 **Q. Are you recommending the Commission change course on this issue?**

2 A. Yes. It is unreasonable to impose on customers a cost that is completely unknown,
3 unmeasurable, and arbitrary.

2. Escalation Factor

4 **Q. Describe the cost escalation factor applied by Mr. Spanos.**

5 A. To calculate his proposed net salvage rates for NIPSCO's production accounts, NIPSCO
6 indicated it applied a 2.5% escalation rate to the terminal net salvage calculation.²⁰

7 **Q. How much additional costs would the escalation factor add to NIPSCO's proposed**
8 **demolition costs if approved?**

9 A. The escalation factor adds approximately more than \$3 million to the depreciation accrual,
10 when applied to projected plant balances at December 31, 2023.

11 **Q. Do you agree with Mr. Spanos's proposal to escalate the proposed demolition costs?**

12 A. No. To the extent Mr. Spanos has applied an annual inflation factor to the present value
13 demolition cost estimates, I disagree with this approach. There are two reasons the
14 Commission should disallow the cost escalation factor applied by Mr. Spanos. First, it is
15 unreasonable in my opinion to escalate a cost that is so remotely uncertain. Second, it is
16 unreasonable to charge current ratepayers for a future cost that has not been discounted to
17 present value. The "time value of money" concept is a cornerstone of finance and
18 valuation. For example, the DCF Model, which is used to estimate the cost of equity,

²⁰ See NIPSCO's Response to Industrial Group's DR 6-017(b), included as Attachment DJG-2-18.

1 applies a growth rate to a company's dividends many years into the future. However, that
2 dividend stream is then discounted back to the current year by a discount rate in order to
3 arrive at the present value of an asset. Likewise, accounting for asset retirement obligations
4 involves escalating the present value of an estimated future cost, but the cost is then
5 discounted back to present value by using a discount rate. In contrast to these calculations,
6 NIPSCO proposes to escalate the present value of its demolition costs as much as 40 years
7 into the future and expects current ratepayers to pay the future value of these costs with
8 present-day dollars. This proposal completely disregards the elemental "time value of
9 money" principle. For these reasons, the Commission should exclude the escalation factor
10 applied by Mr. Spanos when determining appropriate net salvage and depreciation rates
11 for NIPSCO's production accounts.

12 **Q. Are you aware of other cases where regulatory commissions rejected similar**
13 **escalation factors to proposed demolition costs?**

14 A. Yes. In Public Service Company of Oklahoma's 2015 rate case, the ALJ specifically
15 addressed the company's request for the same type of escalation factor being requested in
16 this case:

1 The ALJ adopts Staff witness Garrett's recommendation that the
2 Commission should deny the proposed escalation of demolition costs in this
3 case because (1) the escalated costs do not appear to be calculated in the
4 same manner as other calculations; (2) the Company did not offer any
5 testimony in support of the escalation factor; (3) an escalation factor that
6 does not consider any improvements in technology or economic efficiencies
7 likely overstates future costs; (4) it is inappropriate to apply an escalation
8 factor to demolition costs that are likely overstated; (5) asking ratepayers to
9 pay for future costs that may not occur, are not known and measurable
10 changes within the meaning of 17 O.S. § 284; and (6) the Commission has
11 not approved escalated demolition costs in previous cases.²¹

12 While some of the ALJ's reasoning would not be applicable in this case, the IURC
13 should be aware that another commission has rejected the request for escalation factors.
14 Furthermore, the ALJ's reasons for denying the escalation cost in Oklahoma do not even
15 address what I believe to be the most pertinent reason to reject escalation factors – the time
16 value of money concept discussed above.

17 **Q. Has the IURC addressed escalation costs in prior cases?**

18 A. Yes. For example, in Cause No. 45235, the Commission adhered to its precedent of
19 allowing escalation costs to be applied to demolition cost estimates.²² According to the
20 Commission, “[i]nflation has been a fact of life in the American economy for many years.
21 Not factoring inflation into dismantlement costs to be incurred in the future would
22 understate those costs.”²³ Both of these statements are true. When estimating a future cost
23 such as demolition costs, an inflation factor should be applied. *However*, the crux of the
24 issue is not the future cost estimate itself, but how much to charge current customers for

²¹ Report and Recommendation of the Administrative Law Judge p. 164, filed May 31, 2016 in Cause No. PUD 201500208.

²² Cause No. 45235, Order p. 33 (March 11, 2020).

²³ *Id.*

1 the future cost. Under the time value of money principle, present-value dollars are worth
2 more than future dollars. If current customers are charged dollar-for-dollar for a future
3 cost, then by the time the future cost is actually incurred (assuming the estimate was exactly
4 correct), then the utility will have collected the exact amount on a dollar-for-dollar basis,
5 but will have over-collected in terms of having interest-free access to customer capital in
6 the interim. If an inflation rate is applied to a future cost estimate, it should be then
7 discounted to back to present value.

C. Ash Pond Compliance Costs

8 **Q. Do the Company's demolition cost estimates exclude certain costs associated with ash**
9 **pond compliance?**

10 A. Yes. The demolition studies used to determine the Company's proposed terminal net
11 salvage rates exclude certain costs associated with ash pond compliance for the Company's
12 Michigan City and Schahfer production facilities. NIPSCO is proposing to track these
13 costs in two pending cases before the Commission. The OUCC is proposing these costs
14 be recovered in this case along with the other costs included in the Company's demolition
15 cost estimates.

16 **Q. Do your proposed net salvage rates include these ash pond compliance costs?**

17 A. Yes.²⁴ Adding these costs to the terminal net salvage rates increases the annual accrual by
18 \$8.6 million.²⁵

²⁴ Attachment DJG-2-9.

²⁵ See the Public's Exhibit No., **X**, Direct Testimony of Cynthia Armstrong for more details on OUCC's position regarding ash pond compliance costs.

1 **Q. Please summarize your final proposed terminal net salvage rates.**

2 A. Adding the pond compliance costs to the demolition cost estimates and removing
3 contingency costs results in my proposed terminal net salvage rate for each of the
4 Company's generating units.²⁶ Applying these terminal net salvage rates along with the
5 unadjusted interim net salvage rates and weightings of interim and terminal net salvage
6 results in my proposed weighted net salvage rates for each of the Company's generating
7 units.²⁷

VI. MASS PROPERTY ANALYSIS

8 **Q. Describe mass property.**

9 A. Unlike life span property accounts, "mass" property accounts usually contain a large
10 number of small units that will not be retired concurrently. For example, poles, conductors,
11 transformers, and other transmission and distribution plant are usually classified as mass
12 property. Estimating the service life of any single unit contained in a mass account would
13 not require any actuarial analysis or curve-fitting techniques. Since we must develop a
14 single rate for an entire group of assets, however, actuarial analysis is required to calculate
15 the average remaining life of the group.

16 **Q. How did you determine the depreciation rates for the mass property accounts?**

17 A. To develop depreciation rates for the Company's mass property accounts, I obtained the
18 Company's historical plant data to develop observed life tables for each account. I used

²⁶ Attachment DJG-2-9.

²⁷ Attachment DJG-2-8.

1 Iowa curves to smooth and complete the observed data to calculate the average remaining
2 life of each account. Finally, I analyzed the Company's proposed net salvage rates for each
3 mass account by reviewing the historical salvage data. After estimating the remaining life
4 and salvage rates for each account, I calculated the corresponding depreciation rates.
5 Further details about the actuarial analysis and curve-fitting techniques involved in this
6 process are presented in the attached appendices.

7 **Q. Please summarize your recommended adjustments to NIPSCO's proposed service life**
8 **and net salvage parameters to its mass property accounts.**

9 A. The following table summarizes my proposed mass property parameter adjustments.²⁸

²⁸ See also Attachment DJG-2-3.

**Figure 2:
Mass Property Parameter Comparison**

Account No.	Description	NIPSCO Proposal			OUCC Proposal		
		<u>Iowa Curve Type</u>	<u>AL</u>	<u>Salvage Rate</u>	<u>Iowa Curve Type</u>	<u>AL</u>	<u>Salvage Rate</u>
	Transmission						
352.00	STRUCTURES AND IMPROVEMENTS	R1.5 - 65		-15%	R1.5 - 65		-11%
353.00	STATION EQUIPMENT	S0 - 50		-15%	L0.5 - 55		-11%
354.00	TOWERS AND FIXTURES	R4 - 70		-30%	R4 - 70		-26%
355.00	POLES AND FIXTURES	R1 - 60		-35%	R0.5 - 69		-35%
356.00	OVERHEAD CONDUCTORS AND DEVICES	R2 - 65		-40%	R2 - 71		-33%
	Distribution						
362.00	STATION EQUIPMENT	R1.5 - 50		-15%	R1.5 - 50		-11%
364.10	CUSTOMER TRANSFORMER STATION	S0 - 50		-55%	S0 - 50		-51%
364.20	POLES, TOWERS AND FIXTURES	R1 - 47		-55%	R1 - 47		-51%
365.00	OVERHEAD CONDUCTORS AND DEVICES	R1.5 - 60		-60%	R1 - 68		-60%
367.00	UNDERGROUND CONDUCTORS AND DEVICES	R2.5 - 52		-35%	R2 - 57		-31%
368.00	LINE TRANSFORMERS	S0 - 47		-10%	S0 - 47		-6%
369.10	OVERHEAD SERVICES	R1 - 47		-40%	R1 - 47		-29%
369.20	UNDERGROUND SERVICES	R3 - 70		-40%	R3 - 70		-29%
370.10	CUSTOMER METERING STATIONS	R2 - 50		-5%	R2 - 50		-3%
370.20	METERS	L0 - 24		-5%	L0 - 24		-3%
371.00	INSTALLATIONS ON CUSTOMERS' PREMISES	O1 - 20		-30%	O1 - 20		-26%
373.00	STREET LIGHTING AND SIGNAL SYSTEMS	L0 - 31		-30%	O3 - 42		-30%

1 My service life and net salvage rate adjustments are discussed in more detail below.

A. Service Life

2 **Q. Describe the methodology used to estimate the service lives of grouped depreciable**
3 **assets.**

4 A. The process used to study the industrial property retirement is rooted in the actuarial
5 process used to study human mortality. Just as actuarial analysts study historical human
6 mortality data to predict how long a group of people will live, depreciation analysts study

1 historical plant data to estimate the average lives of property groups. The most common
2 actuarial method used by depreciation analysts is called the “retirement rate method.” In
3 the retirement rate method, original property data, including additions, retirements,
4 transfers, and other transactions, are organized by vintage and transaction year.²⁹ The
5 retirement rate method is ultimately used to develop an “observed life table,” (“OLT”)
6 which shows the percentage of property surviving at each age interval. This pattern of
7 property retirement is described as a “survivor curve.” The survivor curve derived from
8 the observed life table, however, must be fitted and smoothed with a complete curve in
9 order to determine the ultimate average life of the group.³⁰ The most widely used survivor
10 curves for this curve fitting process were developed at Iowa State University in the early
11 1900s and are commonly known as the “Iowa curves.”³¹ A more detailed explanation of
12 how the Iowa curves are used in the actuarial analysis of depreciable property is set forth
13 in Appendix C.

14 **Q. Describe how you statistically analyzed NIPSCO’s historical retirement data in order**
15 **to determine the most reasonable Iowa curve to apply to each account.**

16 A. I used the aged property data provided by the Company to create an OLT for each account.
17 The data points on the OLT can be plotted to form a curve (the “OLT curve”). The OLT
18 curve is not a theoretical curve; rather, it is actual observed data from the Company’s

²⁹ The “vintage” year refers to the year that a group of property was placed in service (aka “placement” year). The “transaction” year refers to the accounting year in which a property transaction occurred, such as an addition, retirement, or transfer (aka “experience” year).

³⁰ See Appendix C for a more detailed discussion of the actuarial analysis used to determine the average lives of grouped industrial property.

³¹ See Appendix B for a more detailed discussion of the Iowa curves.

1 records that indicate the rate of retirement for each property group. An OLT curve by
2 itself, however, is rarely a smooth curve, and is often not a “complete” curve (i.e., it does
3 not end at zero percent surviving). In order to calculate average life (the area under a
4 curve), a complete survivor curve is required. The Iowa curves are empirically derived
5 curves based on the extensive studies of the actual mortality patterns of many different
6 types of industrial property. The curve-fitting process involves selecting the best Iowa
7 curve to fit the OLT curve. This can be accomplished through a combination of visual and
8 mathematical curve-fitting techniques, as well as professional judgment. The first step of
9 my approach to curve-fitting involves visually inspecting the OLT curve for any
10 irregularities. For example, if the “tail” end of the curve is erratic and shows a sharp decline
11 over a short period of time, it may indicate that this portion of the data is less reliable, as
12 further discussed below. After inspecting the OLT curve, I use a mathematical curve-
13 fitting technique which essentially involves measuring the distance between the OLT curve
14 and the selected Iowa curve to get an objective, mathematical assessment of how well the
15 curve fits. After selecting an Iowa curve, I observe the OLT curve along with the Iowa
16 curve on the same graph to determine how well the curve fits. As part of my analysis, I
17 may repeat this process several times for any given account to ensure that the most
18 reasonable Iowa curve is selected.

19 **Q. Should every portion of the OLT curve be given equal weight?**

20 A. Not necessarily. Many analysts have observed that the points comprising the “tail end” of
21 the OLT curve may often have less analytical value than other portions of the curve. In
22 fact, “[p]oints at the end of the curve are often based on fewer exposures and may be given

1 less weight than points based on larger samples. The weight placed on those points will
2 depend on the size of the exposures.”³² In accordance with this standard, an analyst may
3 decide to truncate the tail end of the OLT curve at a certain percent of initial exposures,
4 such as one percent. Using this approach puts greater emphasis on the most valuable
5 portions of the curve. For my analysis in this case, I not only considered the entirety of the
6 OLT curve, but also conducted further analyses that involved fitting Iowa curves to the
7 most significant part of the OLT curve for certain accounts. In other words, to verify the
8 accuracy of my curve selection, I narrowed the focus of my additional calculation to
9 consider approximately the top 99% of the “exposures” (i.e., dollars exposed to retirement)
10 and to eliminate the tail end of the curve representing the bottom 1% of exposures for some
11 accounts, if necessary. I will illustrate an example of this approach in the discussion below.

12 **Q. Generally, describe the differences between the Company’s service life proposals and**
13 **your service life proposals.**

14 A. For each of the accounts to which I propose adjustments, the Company’s proposed average
15 service life, as estimated through an Iowa curve, is too short to provide the most reasonable
16 mortality characteristics of the account. Generally, for the accounts in which I propose a
17 longer service life, that proposal is based on the objective approach of choosing an Iowa
18 curve that provides a better mathematical fit to the observed historical retirement pattern
19 derived from the Company’s plant data.

³² Wolf *supra* n. 7, at 46.

1 **Q. In support of its service life estimates, did NIPSCO present substantial evidence in**
2 **addition to the historical plant data for each account?**

3 A. No. It appears that NIPSCO is relying primarily on its historical retirement data in order
4 to make predictions about the remaining average life for the assets in each account.
5 Therefore, I think the Commission should focus primarily on this historical data and
6 objective Iowa curve fitting when assessing fair and reasonable depreciation rates for
7 NIPSCO. The service lives I propose in this case are based on Iowa curves that provide
8 better mathematical fits to NIPSCO's historical retirement data, and they result in more
9 reasonable service life estimates and depreciation rates for the accounts to which I propose
10 adjustments.

11 **Q. Do you always select the mathematically best-fitting curve?**

12 A. No. Mathematical fitting is an important part of the curve-fitting process because it
13 promotes objective, unbiased results; however, it may not always yield the optimum result.
14 For example, if there is insufficient historical data in a particular account and the OLT
15 curve derived from that data is relatively short and flat, the mathematically "best" curve
16 may be one with a very long average life. However, when there is sufficient data available,
17 mathematical curve fitting can be used as part of an objective service life analysis.

18 **Q. Do you also incorporate professional judgment in the process of selecting Iowa**
19 **curves?**

20 A. Yes. In addition to statistical analyses, I also take into account all of the information
21 presented in the Company's depreciation study, testimony, and discovery. I also consider
22 industry ranges and my experience in other cases. As discussed above, simply selecting
23 the closest fitting Iowa curve from a mathematical standpoint can sometimes yield

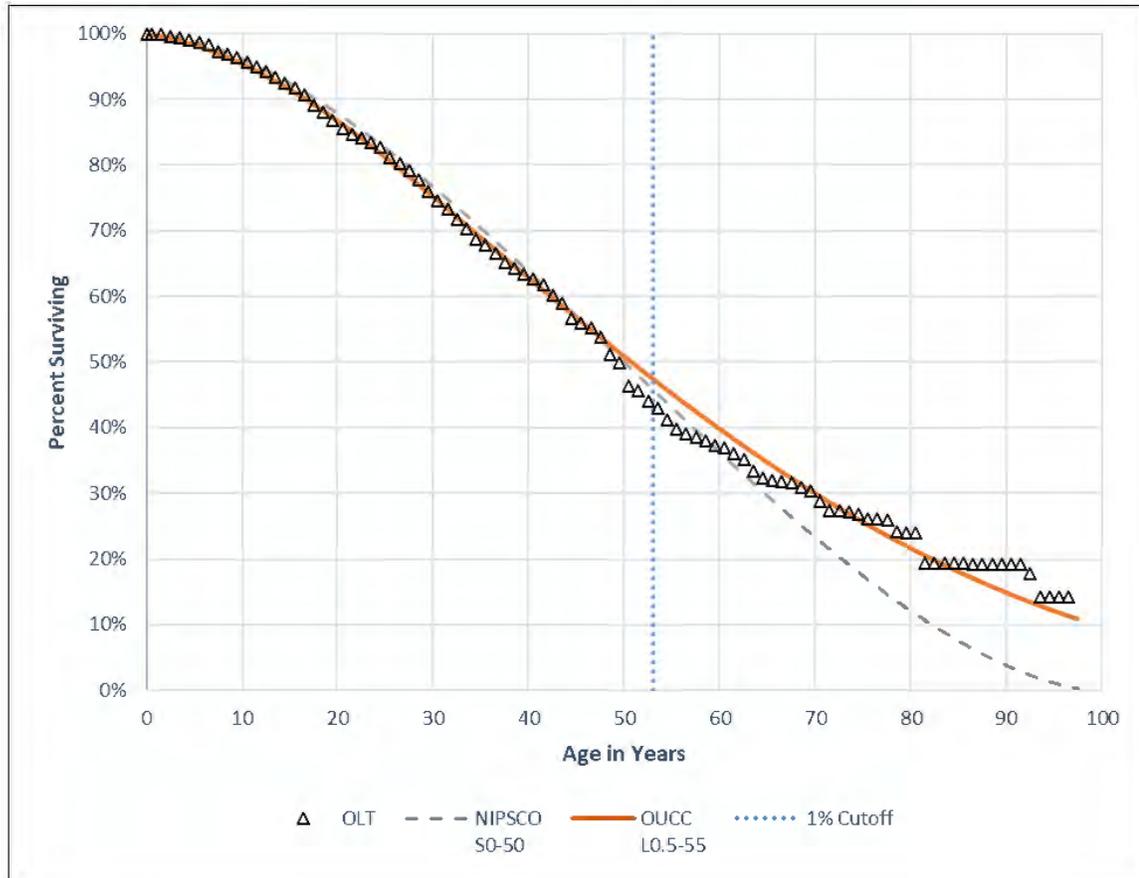
1 unreasonable results. For example, the closest fitting Iowa curve for Account 356
2 (discussed in more detail below) has an average life of about 150 years. However, when
3 there is no compelling evidence presented beyond the statistical analysis, I believe it is
4 important to primarily consider the results of statistical analysis and observed industry
5 ranges when determining the most reasonable service life estimate.

1. Account 353 – Station Equipment

6 **Q. Describe your service life estimate for this account and compare it with the**
7 **Company's estimate.**

8 A. The OLT curve derived from the Company's data for this account is presented in the graph
9 below. The graph also shows the Iowa curves Mr. Spanos and I selected to represent the
10 average remaining life of the assets in this account. For this account, Mr. Spanos selected
11 the S0-50 Iowa curve, and I selected the L0.5-55 Iowa curve. Both Iowa curves are shown
12 in the graph below along with the OLT curve.

**Figure 3:
Account 353 – Station Equipment**



1 The OLT curve for this account is particularly well suited for conventional Iowa curve
 2 fitting techniques. This is because this OLT curve has a substantial amount of retirement
 3 history, it is relatively smooth, and it follows a retirement pattern typically observed in the
 4 retirement rates of utility property. The data points to the right of the vertical line represent
 5 the points that would be truncated under the 1% exposure benchmark discussed above.

1 **Q. Does your selected Iowa curve provide a better mathematical fit to the relevant**
2 **portion of the OLT curve?**

3 A. Yes. Although for this account it is clear from a visual standpoint that the Iowa curve I
4 selected results in a closer fit to the observed data, we can use mathematical curve fitting
5 techniques to confirm the results. While visual curve-fitting techniques (though not
6 exclusively) can help identify the most statistically relevant portions of the OLT curve for
7 this account, mathematical curve-fitting techniques can help determine which Iowa curves
8 provides a better fit. Mathematical curve-fitting essentially involves measuring the
9 “distance” between the OLT curve and the selected Iowa curve. The best mathematically
10 fitted curve is the one that minimizes the distance between the OLT curve and the Iowa
11 curve, thus providing the closest fit. The distance between the curves is calculated using
12 the “sum-of-squared differences” (“SSD”) technique. In this account, the SSD, or distance
13 between the Company’s curve and the truncated OLT curve is 0.0073, and the SSD
14 between the L0.5-55 Iowa curve I selected and the OLT curve is 0.0063.³³ Thus, the L0.5-
15 55 curve results in a closer mathematical fit to the historical data, and it results in a more
16 reasonable service life estimate and calculated depreciation rate for this account.

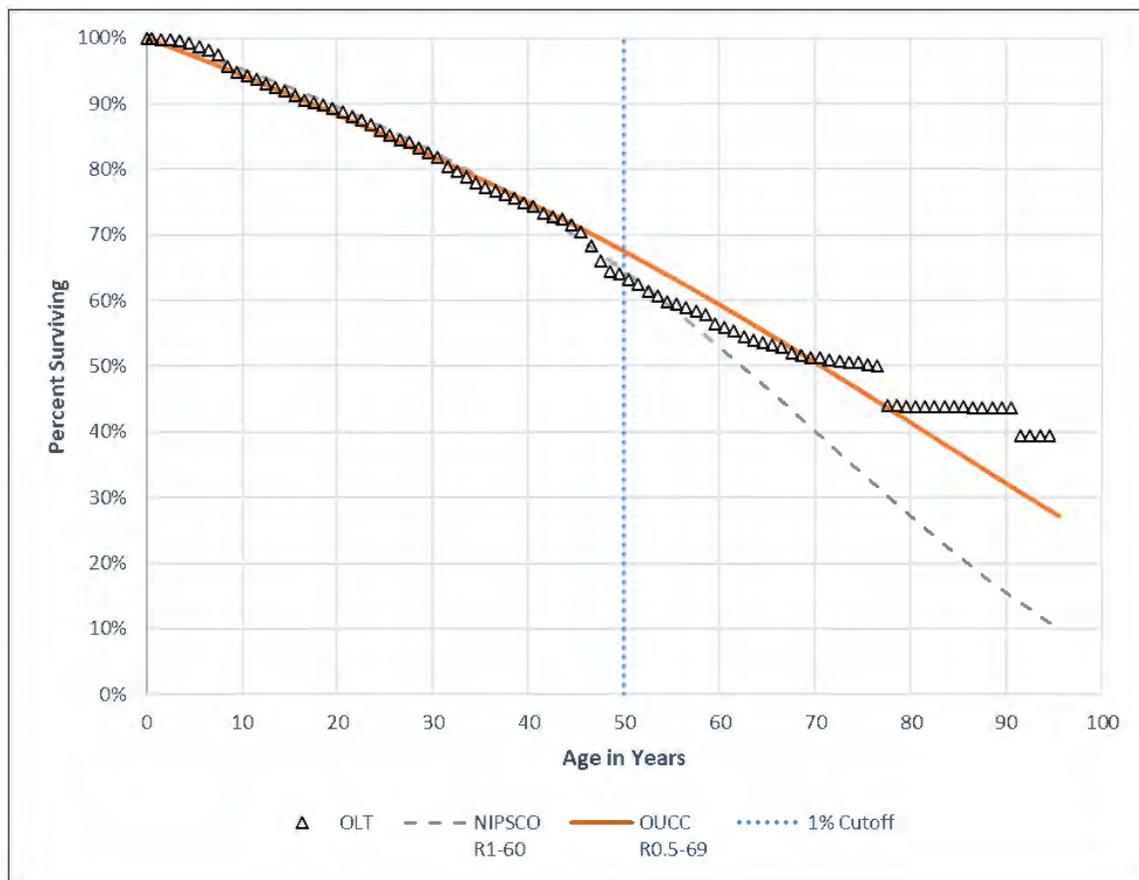
³³ Attachment DJG-2-10.

2. Account 355 – Poles and Fixtures

1 Q. Describe your service life estimate for this account and compare it with the
2 Company's estimate.

3 A. For this account, Mr. Spanos selected the R1-60 Iowa curve, and I selected the R0.5-59
4 Iowa curve. These Iowa curves are illustrated in the graph below along with the OLT
5 curve.

**Figure 4:
Account 355 – Poles and Fixtures**



6 As with Account 353 discussed above, the OLT curve for Account 355 is well suited for
7 conventional Iowa curve fitting techniques.

1 **Q. Does your selected Iowa curve provide a better mathematical fit to the relevant**
2 **portion of the OLT curve?**

3 A. When measuring the entire OLT curve, the R0.5-69 Iowa curve I selected results in a closer
4 mathematical fit, but the SSD for this Iowa curve is slightly longer than the SSD for the
5 Company's Iowa curve when considering the truncated OLT curve strictly based on the
6 1% exposure benchmark.³⁴ However, given the stability of the OLT curve from a visual
7 standpoint, I believe the R0.5-69 curve would be a reasonable selection at this time.

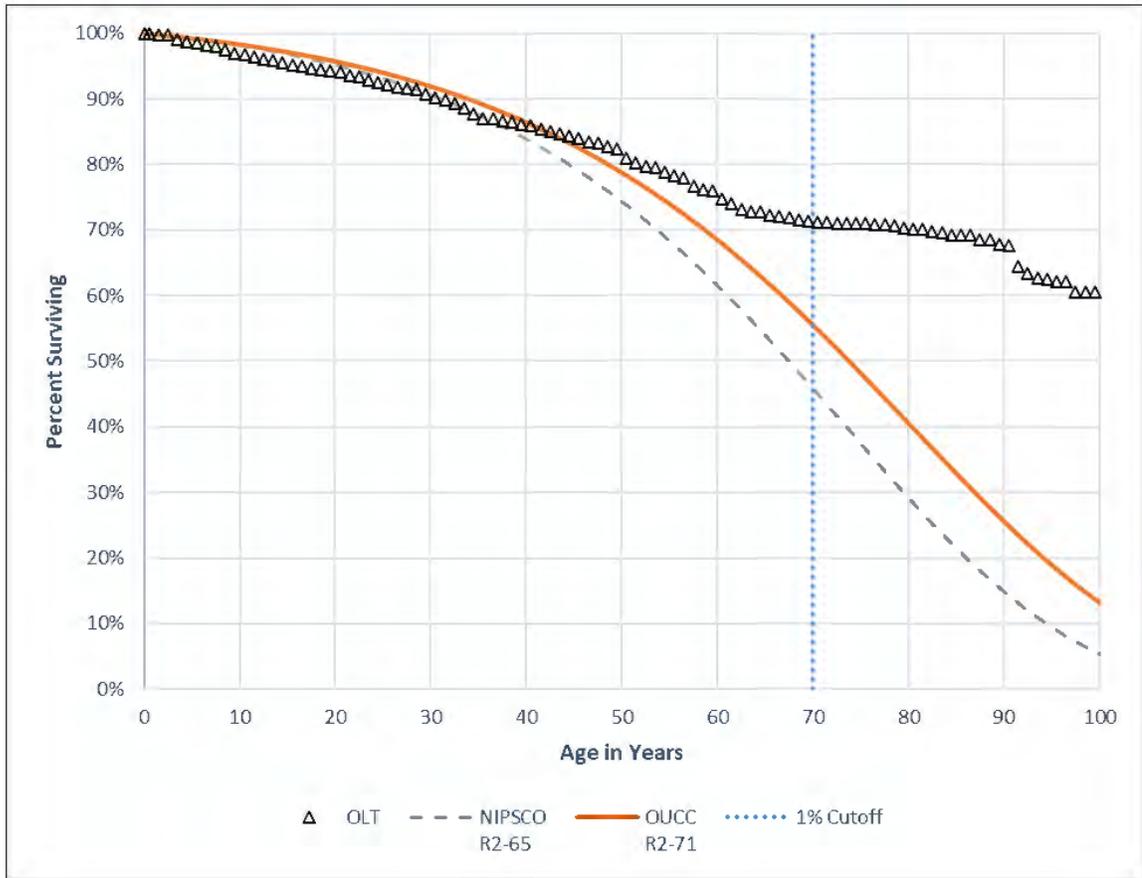
3. Account 356 – Transmission Overhead Conductors and Devices

8 **Q. Describe your service life estimate for this account and compare it with the**
9 **Company's estimate.**

10 A. For this account, Mr. Spanos selected the R2-65 curve, and I selected the R2-71 curve.
11 Both Iowa curves are displayed in the graph below along with the OLT curve.

³⁴ Attachment DJG-2-11.

Figure 5:
Account 356 – Transmission Overhead Conductors and Devices



1 As shown in this graph, both Iowa curves correctly “ignore” a number of insignificant data
2 points occurring after the truncation benchmark. However, the R2-65 curve selected by
3 Mr. Spanos ignores too much of the relevant data occurring between the 40-70-year age
4 intervals. As a result, the depreciation rate he proposes for this account is unreasonably
5 high.

1 **Q. Does the Iowa curve you selected for this account provide a better mathematical fit**
2 **to the OLT curve?**

3 A. Yes. Specifically, the SSD between the Company's curve and the truncated OLT curve is
4 0.5006, and the SSD between the R2-71 Iowa curve I selected and the truncated OLT curve
5 is 0.1518, which means it results in the closer fit to the observed data.³⁵

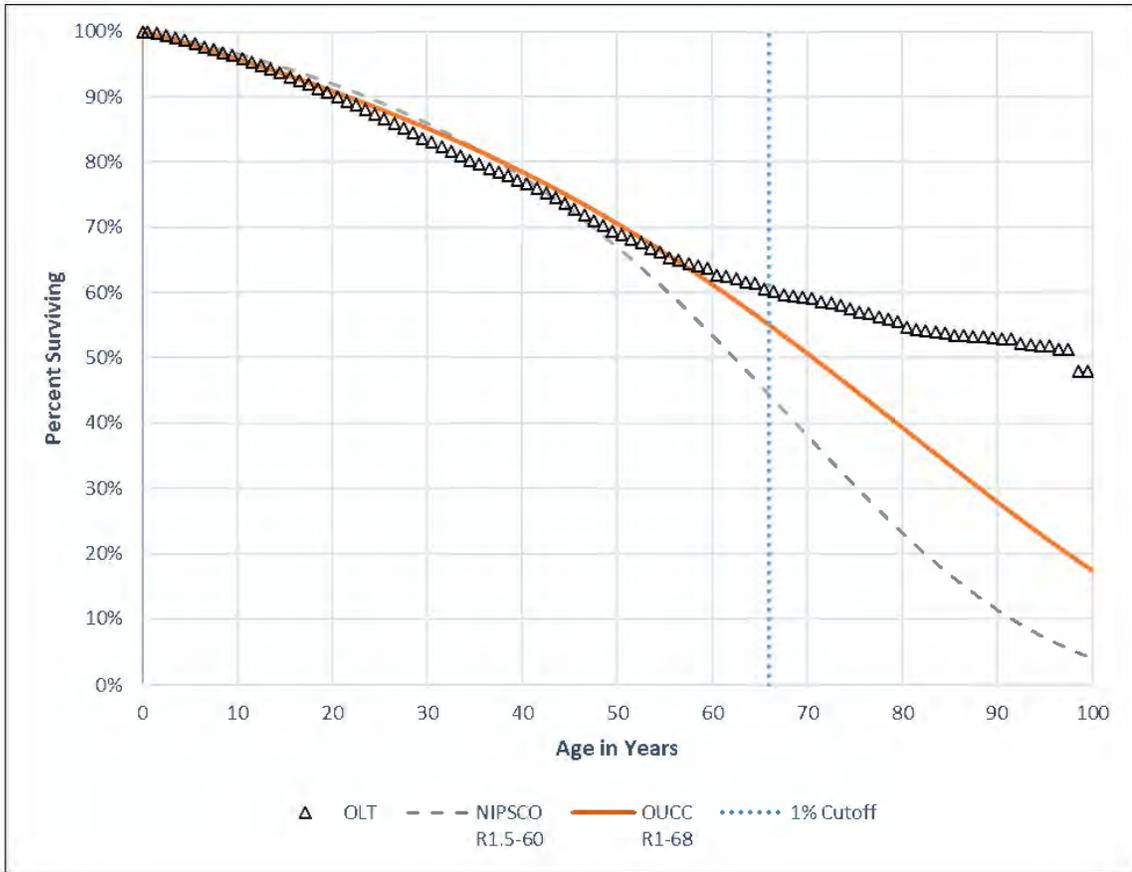
4. Account 365 – Distribution Overhead Conductors and Devices

6 **Q. Describe your service life estimate for this account and compare it with the**
7 **Company's estimate.**

8 A. Mr. Spanos selected the R1.5-60 curve for this account, and I selected the R1-68 curve.
9 The two Iowa curves and the OLT curve are shown in the graph below.

³⁵ Attachment DJG-2-12.

Figure 6:
Account 365 – Distribution Overhead Conductors and Devices



1 As with Account 356 discussed above, both Iowa curves correctly ignore irrelevant data
2 points occurring after the truncation line. However, the R1.5-60 curve selected by Mr.
3 Spanos ignores relevant data occurring between age intervals 50-65.

1 **Q. Does the Iowa curve you selected provide a better mathematical fit to the observed**
2 **data than the Company's curve?**

3 A. Yes. The SSD between the Company's curve and the truncated OLT curve is 0.1483, and
4 the SSD between the R1-68 curve I selected and the truncated OLT curve is 0.0170, which
5 means it results in the closer fit to the observed data.³⁶

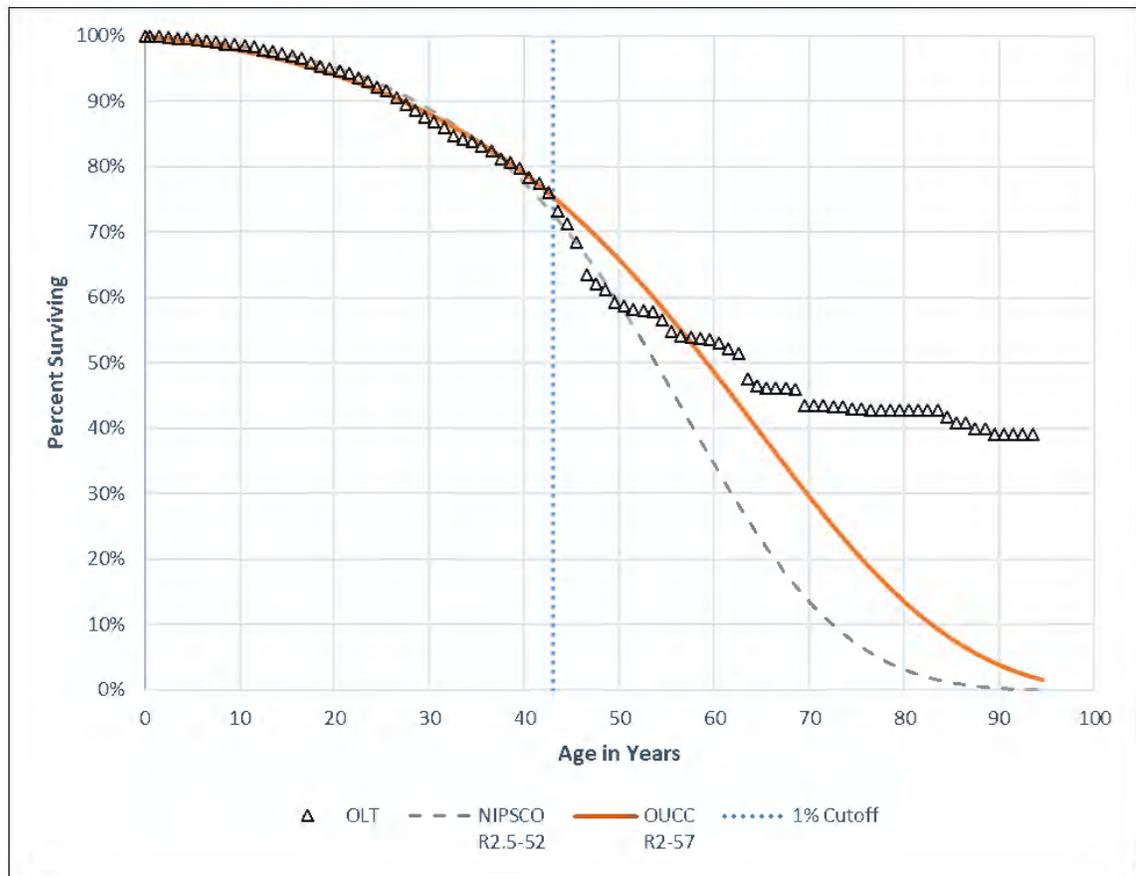
5. Account 367 – Underground Conductors and Devices

6 **Q. Describe your service life estimate for this account and compare it with the**
7 **Company's estimate.**

8 A. Mr. Spanos selected the R2.5-52 curve for this account, and I selected the R2-57 curve.
9 These Iowa curves are displayed in the graph below along with the OLT curve.

³⁶ Attachment DJG-2-13.

**Figure 7:
Account 367 – Underground Conductors and Devices**



1 From a visual standpoint, both Iowa curves provide relatively good fits to the relevant
 2 portion of the observed data. We can use mathematical curve fitting to determine which
 3 Iowa curve results in the closer fit.

4 **Q. Does the Iowa curve you selected provide a better mathematical fit to the observed**
 5 **data than the Company's curve?**

6 **A.** Yes. Whether the entire or truncated OLT curve is measure, the Iowa curve I selected
 7 results in the closer mathematical fit. The SSD between the Company's curve and the
 8 truncated OLT curve is 0.0036, and the SSD between the R2-57 curve I selected and the

1 truncated OLT curve is 0.0020, which means it results in the closer fit to the observed
2 data.³⁷

6. Account 373 – Street Lighting and Signal Systems

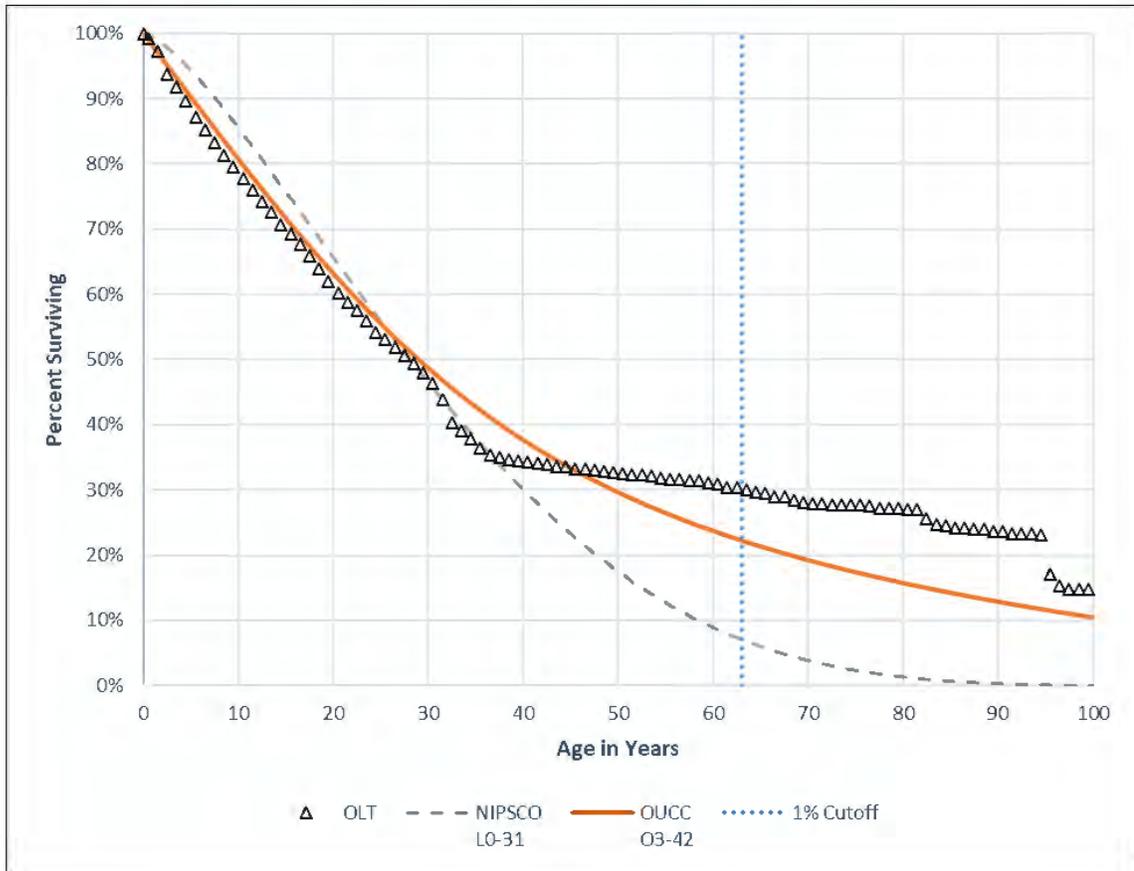
3 **Q. Describe your service life estimate for this account and compare it with the**
4 **Company's estimate.**

5 A. For this account, Mr. Spanos selected the L0-31 curve, and I selected the O3-42 curve.

6 Both Iowa curves are displayed in the graph below along with the OLT curve.

³⁷ Attachment DJG-2-14.

**Figure 8:
Account 373 – Street Lighting and Signal Systems**



1 As shown in this graph, the L0-31 curve selected by Mr. Spanos ignores too much of the
2 relevant data occurring between the 35-65-year age intervals, which is a significant amount
3 of data. As a result, the depreciation rate he proposes for this account is unreasonably high.

1 **Q. Does the Iowa curve you selected for this account provide a better mathematical fit**
2 **to the OLT curve?**

3 A. Yes. Specifically, the SSD between the Company's curve and the truncated OLT curve is
4 0.6935, and the SSD between the O3-42 Iowa curve I selected and the truncated OLT curve
5 is 0.0816, which means it results in the closer fit to the observed data.³⁸

B. Net Salvage

6 **Q. Describe the concept of net salvage.**

7 A. If an asset has any value left when it is retired from service, a utility might decide to sell
8 the asset. The proceeds from this transaction are called "gross salvage." The
9 corresponding expense associated with the removal of the asset from service is called the
10 "cost of removal." The term "net salvage" equates to gross salvage less the cost of removal.
11 Often, the net salvage for utility assets is a negative number (or percentage) because the
12 cost of removing the assets from service exceeds any proceeds received from selling the
13 assets. When a negative net salvage rate is applied to an account to calculate the
14 depreciation rate, it results in increasing the total depreciable base to be recovered over a
15 particular period of time and increases the depreciation rate. Therefore, a greater negative
16 net salvage rate equates to a higher depreciation rate and expense, all else held constant.

³⁸ Attachment DJG-2-15.

1 **Q. Does the Company's historical net salvage data generally indicate an increase in**
2 **negative net salvage rates?**

3 A. Yes. While I would agree with Mr. Spanos that an increase in negative net salvage rates
4 for several accounts is appropriate, I recommend taking a gradual approach with the
5 proposed increase in this case, as discussed further below.

6 **Q. Has there been a trend in increasing negative net salvage in the utility industry?**

7 A. Yes. Negative net salvage rates occur when the cost of removal exceeds the gross salvage
8 of an asset when it is removed from service. Net salvage rates are calculated by considering
9 gross salvage and removal costs as a percent of the original cost of the assets retired. In
10 other words, salvage and removal costs are based on current dollars, while retirements are
11 based on historical dollars. Increasing labor costs associated with asset removal combined
12 with the fact that original costs remain the same have contributed to increasing negative
13 net salvage over time.

14 **Q. Have other utility commissions expressed concern over increasing negative net**
15 **salvage rates?**

16 A. Yes. The Pacific Gas and Electric Company's ("PG&E") 2014 rate case, the California
17 commission stated: "We remain concerned with the growing cost burden associated with
18 increasing cost trends for negative net salvage."³⁹ The California commission also
19 expressed an interest in the ratemaking concept of gradualism:

³⁹ Decision Authorizing Pacific Gas and Electric Company's General Rate Case Revenue Requirement for 2014-2016, D.14-08-032, p. 597

1 In evaluating whether a proposed increase reflects gradualism, however, we
2 believe the more appropriate measure is how the change affects customers'
3 retail rates. The fact that PG&E previously proposed higher removal costs
4 than adopted has no bearing on how a proposed change would impact
5 current ratepayers. Accordingly, we apply the principle of gradualism based
6 on how a proposed change in estimate compares to adopted costs reflected
7 in current rates, irrespective of what PG&E may have forecasted in an
8 earlier depreciation study.⁴⁰

9 In PG&E's 2014 rate case, the Office of Ratepayer Advocates (known today as the Public
10 Advocates Office) proposed a 25% cap on increased net salvage rates to mitigate sudden
11 increases in net salvage and instead provide for more gradual levels of increases.⁴¹ The
12 Commission ultimately found: "As a general approach, we adopt no more than 25% of
13 PG&E's estimated increases in the accrual provision for removal costs. This limitation
14 tempers the impacts on current ratepayers. . . ." ⁴²

15 **Q. Will taking a gradual approach to net salvage rate increases in this case help mitigate**
16 **an otherwise substantial rate increase for customers in this case?**

17 A. Yes. In this case, NIPSCO is proposing a substantial overall increase to customer rates.
18 Taking a gradual approach to net salvage, along with the other adjustments proposed in my
19 testimony, can help mitigate the financial impact to customers.

20 **Q. Please summarize your proposed net salvage adjustments.**

21 A. Based on the 25% benchmark discussed above, I propose net salvage adjustments to 14 of
22 the Company's mass property accounts. The following table shows the current and
23 proposed net salvage rates for these accounts.

⁴⁰ *Id.* at 598.

⁴¹ *Id.* at 592-93.

⁴² *Id.* at 602.

**Figure 2:
Net Salvage Adjustment Summary**

		<u>Current Salvage</u>	<u>NIPSCO Proposed</u>	<u>OUCC Proposed</u>
	Transmission			
352.00	STRUCTURES AND IMPROVEMENTS	-10%	-15%	-11%
353.00	STATION EQUIPMENT	-10%	-15%	-11%
354.00	TOWERS AND FIXTURES	-25%	-30%	-26%
356.00	OVERHEAD CONDUCTORS AND DEVICES	-30%	-40%	-33%
	Distribution			
362.00	STATION EQUIPMENT	-10%	-15%	-11%
364.10	CUSTOMER TRANSFORMER STATION	-50%	-55%	-51%
364.20	POLES, TOWERS AND FIXTURES	-50%	-55%	-51%
367.00	UNDERGROUND CONDUCTORS AND DEVICES	-30%	-35%	-31%
368.00	LINE TRANSFORMERS	-5%	-10%	-6%
369.10	OVERHEAD SERVICES	-25%	-40%	-29%
369.20	UNDERGROUND SERVICES	-25%	-40%	-29%
370.10	CUSTOMER METERING STATIONS	-2%	-5%	-3%
370.20	METERS	-2%	-5%	-3%
371.00	INSTALLATIONS ON CUSTOMERS' PREMISES	-25%	-30%	-26%

1 As shown in this table, adopting my proposed net salvage rates would have an increasing
2 effect to the depreciation rates and expenses to each of these accounts compared to current
3 levels.

4 **Q. Does this conclude your testimony?**

5 A. Yes.

APPENDIX A:
THE DEPRECIATION SYSTEM

A depreciation accounting system may be thought of as a dynamic system in which estimates of life and salvage are inputs to the system, and the accumulated depreciation account is a measure of the state of the system at any given time.⁴³ The primary objective of the depreciation system is the timely recovery of capital. The process for calculating the annual accruals is determined by the factors required to define the system. A depreciation system should be defined by four primary factors: 1) a method of allocation; 2) a procedure for applying the method of allocation to a group of property; 3) a technique for applying the depreciation rate; and 4) a model for analyzing the characteristics of vintage groups comprising a continuous property group.⁴⁴ The figure below illustrates the basic concept of a depreciation system and includes some of the available parameters.⁴⁵

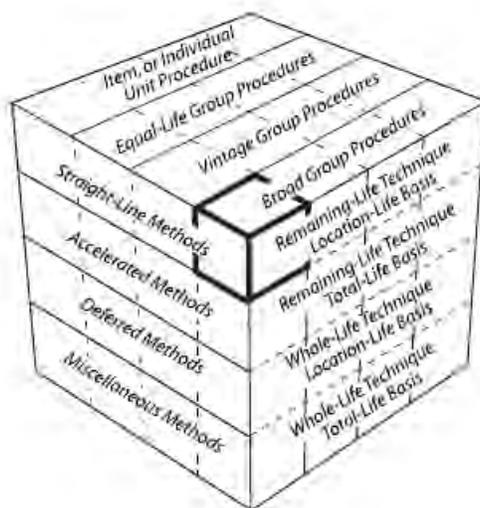
There are hundreds of potential combinations of methods, procedures, techniques, and models, but in practice, analysts use only a few combinations. Ultimately, the system selected must result in the systematic and rational allocation of capital recovery for the utility. Each of the four primary factors defining the parameters of a depreciation system is discussed further below.

⁴³ Wolf *supra* n. 7, at 69-70.

⁴⁴ *Id.* at 70, 139-40.

⁴⁵ Edison Electric Institute, *Introduction to Depreciation* (inside cover) (EEI April 2013). Some definitions of the terms shown in this diagram are not consistent among depreciation practitioners and literature due to the fact that depreciation analysis is a relatively small and fragmented field. This diagram simply illustrates some of the available parameters of a depreciation system.

**Figure 9:
The Depreciation System Cube**



1. Allocation Methods

The “method” refers to the pattern of depreciation in relation to the accounting periods. The method most commonly used in the regulatory context is the “straight-line method” – a type of age-life method in which the depreciable cost of plant is charged in equal amounts to each accounting period over the service life of plant.⁴⁶ Because group depreciation rates and plant balances often change, the amount of the annual accrual rarely remains the same, even when the straight-line method is employed.⁴⁷ The basic formula for the straight-line method is as follows:⁴⁸

⁴⁶ NARUC *supra* n. 10, at 56.

⁴⁷ *Id.*

⁴⁸ *Id.*

**Equation 1:
Straight-Line Accrual**

$$\text{Annual Accrual} = \frac{\text{Gross Plant} - \text{Net Salvage}}{\text{Service Life}}$$

Gross plant is a known amount from the utility's records, while both net salvage and service life must be estimated to calculate the annual accrual. The straight-line method differs from accelerated methods of recovery, such as the "sum-of-the-years-digits" method and the "declining balance" method. Accelerated methods are primarily used for tax purposes and are rarely used in the regulatory context for determining annual accruals.⁴⁹ In practice, the annual accrual is expressed as a rate which is applied to the original cost of plant to determine the annual accrual in dollars. The formula for determining the straight-line rate is as follows:⁵⁰

**Equation 2:
Straight-Line Rate**

$$\text{Depreciation Rate \%} = \frac{100 - \text{Net Salvage \%}}{\text{Service Life}}$$

2. Grouping Procedures

The "procedure" refers to the way the allocation method is applied through subdividing the total property into groups.⁵¹ While single units may be analyzed for depreciation, a group plan of depreciation is particularly adaptable to utility property. Employing a grouping procedure allows for a composite application of depreciation rates to groups of similar property, rather than conducting calculations for each unit. Whereas an individual unit of property has a single life, a

⁴⁹ *Id.* at 57.

⁵⁰ *Id.* at 56.

⁵¹ Wolf *supra* n. 7, at 74-75.

group of property displays a dispersion of lives, and the life characteristics of the group must be described statistically.⁵² When analyzing mass property categories, it is important that each group contains homogenous units of plant that are used in the same general manner throughout the plant and operated under the same general conditions.⁵³

The “average life” and “equal life” grouping procedures are the two most common. In the average life procedure, a constant annual accrual rate based on the average life of all property in the group is applied to the surviving property. While property having shorter lives than the group average will not be fully depreciated, and likewise, property having longer lives than the group average will be over-depreciated, the ultimate result is that the group will be fully depreciated by the time of the final retirement.⁵⁴ Thus, the average life procedure treats each unit as though its life is equal to the average life of the group. In contrast, the equal life procedure treats each unit in the group as though its life was known.⁵⁵ Under the equal life procedure the property is divided into subgroups that each has a common life.⁵⁶

3. Application Techniques

The third factor of a depreciation system is the “technique” for applying the depreciation rate. There are two commonly used techniques: “whole life” and “remaining life.” The whole life technique applies the depreciation rate on the estimated average service life of a group, while the remaining life technique seeks to recover undepreciated costs over the remaining life of the plant.⁵⁷

⁵² *Id.* at 74.

⁵³ NARUC *supra* n. 10, at 61-62.

⁵⁴ *See* Wolf *supra* n. 7, at 74-75.

⁵⁵ *Id.* at 75.

⁵⁶ *Id.*

⁵⁷ NARUC *supra* n. 10, at 63-64.

In choosing the application technique, consideration should be given to the proper level of the accumulated depreciation account. Depreciation accrual rates are calculated using estimates of service life and salvage. Periodically these estimates must be revised due to changing conditions, which cause the accumulated depreciation account to be higher or lower than necessary. Unless some corrective action is taken, the annual accruals will not equal the original cost of the plant at the time of final retirement.⁵⁸ Analysts can calculate the level of imbalance in the accumulated depreciation account by determining the “calculated accumulated depreciation,” (a.k.a. “theoretical reserve” and referred to in these appendices as “CAD”). The CAD is the calculated balance that would be in the accumulated depreciation account at a point in time using current depreciation parameters.⁵⁹ An imbalance exists when the actual accumulated depreciation account does not equal the CAD. The choice of application technique will affect how the imbalance is dealt with.

Use of the whole life technique requires that an adjustment be made to accumulated depreciation after calculation of the CAD. The adjustment can be made in a lump sum or over a period of time. With use of the remaining life technique, however, adjustments to accumulated depreciation are amortized over the remaining life of the property and are automatically included in the annual accrual.⁶⁰ This is one reason that the remaining life technique is popular among practitioners and regulators. The basic formula for the remaining life technique is as follows:⁶¹

⁵⁸ Wolf *supra* n. 7, at 83.

⁵⁹ NARUC *supra* n. 10, at 325.

⁶⁰ NARUC *supra* n. 10, at 65 (“The desirability of using the remaining life technique is that any necessary adjustments of [accumulated depreciation] . . . are accrued automatically over the remaining life of the property. Once commenced, adjustments to the depreciation reserve, outside of those inherent in the remaining life rate would require regulatory approval.”).

⁶¹ *Id.* at 64.

**Equation 3:
Remaining Life Accrual**

$$\text{Annual Accrual} = \frac{\text{Gross Plant} - \text{Accumulated Depreciation} - \text{Net Salvage}}{\text{Average Remaining Life}}$$

The remaining life accrual formula is similar to the basic straight-line accrual formula above with two notable exceptions. First, the numerator has an additional factor in the remaining life formula: the accumulated depreciation. Second, the denominator is “average remaining life” instead of “average life.” Essentially, the future accrual of plant (gross plant less accumulated depreciation) is allocated over the remaining life of plant. Thus, the adjustment to accumulated depreciation is “automatic” in the sense that it is built into the remaining life calculation.⁶²

4. Analysis Model

The fourth parameter of a depreciation system, the “model,” relates to the way of viewing the life and salvage characteristics of the vintage groups that have been combined to form a continuous property group for depreciation purposes.⁶³ A continuous property group is created when vintage groups are combined to form a common group. Over time, the characteristics of the property may change, but the continuous property group will continue. The two analysis models used among practitioners, the “broad group” and the “vintage group,” are two ways of viewing the life and salvage characteristics of the vintage groups that have been combined to form a continuous property group.

The broad group model views the continuous property group as a collection of vintage groups that each have the same life and salvage characteristics. Thus, a single survivor curve and

⁶² Wolf *supra* n. 7, at 178.

⁶³ See Wolf *supra* n. 7, at 139 (I added the term “model” to distinguish this fourth depreciation system parameter from the other three parameters).

a single salvage schedule are chosen to describe all the vintages in the continuous property group. In contrast, the vintage group model views the continuous property group as a collection of vintage groups that may have different life and salvage characteristics. Typically, there is not a significant difference between vintage group and broad group results unless vintages within the applicable property group experienced dramatically different retirement levels than anticipated in the overall estimated life for the group. For this reason, many analysts utilize the broad group procedure because it is more efficient.

APPENDIX B:**IOWA CURVES**

Early work in the analysis of the service life of industrial property was based on models that described the life characteristics of human populations.⁶⁴ This explains why the word “mortality” is often used in the context of depreciation analysis. In fact, a group of property installed during the same accounting period is analogous to a group of humans born during the same calendar year. Each period the group will incur a certain fraction of deaths / retirements until there are no survivors. Describing this pattern of mortality is part of actuarial analysis and is regularly used by insurance companies to determine life insurance premiums. The pattern of mortality may be described by several mathematical functions, particularly the survivor curve and frequency curve. Each curve may be derived from the other so that if one curve is known, the other may be obtained. A survivor curve is a graph of the percent of units remaining in service expressed as a function of age.⁶⁵ A frequency curve is a graph of the frequency of retirements as a function of age. Several types of survivor and frequency curves are illustrated in the figures below.

1. Development

The survivor curves used by analysts today were developed over several decades from extensive analysis of utility and industrial property. In 1931, Edwin Kurtz and Robley Winfrey used extensive data from a range of 65 industrial property groups to create survivor curves representing the life characteristics of each group of property.⁶⁶ They generalized the 65 curves

⁶⁴ Wolf *supra* n. 7, at 276.

⁶⁵ *Id.* at 23.

⁶⁶ *Id.* at 34.

into 13 survivor curve types and published their results in *Bulletin 103: Life Characteristics of Physical Property*. The 13 type curves were designed to be used as valuable aids in forecasting probable future service lives of industrial property. Over the next few years, Winfrey continued gathering additional data, particularly from public utility property, and expanded the examined property groups from 65 to 176.⁶⁷ This resulted in 5 additional survivor curve types for a total of 18 curves. In 1935, Winfrey published *Bulletin 125: Statistical Analysis of Industrial Property Retirements*. According to Winfrey, “[t]he 18 type curves are expected to represent quite well all survivor curves commonly encountered in utility and industrial practices.”⁶⁸ These curves are known as the “Iowa curves” and are used extensively in depreciation analysis in order to obtain the average service lives of property groups. (Use of Iowa curves in actuarial analysis is further discussed in Appendix C.)

In 1942, Winfrey published *Bulletin 155: Depreciation of Group Properties*. In Bulletin 155, Winfrey made some slight revisions to a few of the 18 curve types, and published the equations, tables of the percent surviving, and probable life of each curve at five-percent intervals.⁶⁹ Rather than using the original formulas, analysts typically rely on the published tables containing the percentages surviving. This is because absent knowledge of the integration technique applied to each age interval, it is not possible to recreate the exact original published table values. In the 1970s, John Russo collected data from over 2,000 property accounts reflecting observations during the period 1965 – 1975 as part of his Ph.D. dissertation at Iowa State. Russo

⁶⁷ *Id.*

⁶⁸ Robley Winfrey, *Bulletin 125: Statistical Analyses of Industrial Property Retirements* 85, Vol. XXXIV, No. 23 (Iowa State College of Agriculture and Mechanic Arts 1935).

⁶⁹ Robley Winfrey, *Bulletin 155: Depreciation of Group Properties* 121-28, Vol. XLI, No. 1 (The Iowa State College Bulletin 1942); see also Wolf *supra* n. 7, at 305-38 (publishing the percent surviving for each Iowa curve, including “O” type curve, at one percent intervals).

essentially repeated Winfrey's data collection, testing, and analysis methods used to develop the original Iowa curves, except that Russo studied industrial property in service several decades after Winfrey published the original Iowa curves. Russo drew three major conclusions from his research:⁷⁰

1. No evidence was found to conclude that the Iowa curve set, as it stands, is not a valid system of standard curves;
2. No evidence was found to conclude that new curve shapes could be produced at this time that would add to the validity of the Iowa curve set; and
3. No evidence was found to suggest that the number of curves within the Iowa curve set should be reduced.

Prior to Russo's study, some had criticized the Iowa curves as being potentially obsolete because their development was rooted in the study of industrial property in existence during the early 1900s. Russo's research, however, negated this criticism by confirming that the Iowa curves represent a sufficiently wide range of life patterns, and that though technology will change over time, the underlying patterns of retirements remain constant and can be adequately described by the Iowa curves.⁷¹

Over the years, several more curve types have been added to Winfrey's 18 Iowa curves. In 1967, Harold Cowles added four origin-modal curves. In addition, a square curve is sometimes used to depict retirements which are all planned to occur at a given age. Finally, analysts commonly rely on several "half curves" derived from the original Iowa curves. Thus, the term "Iowa curves" could be said to describe up to 31 standardized survivor curves.

⁷⁰ See Wolf *supra* n. 7, at 37.

⁷¹ *Id.*

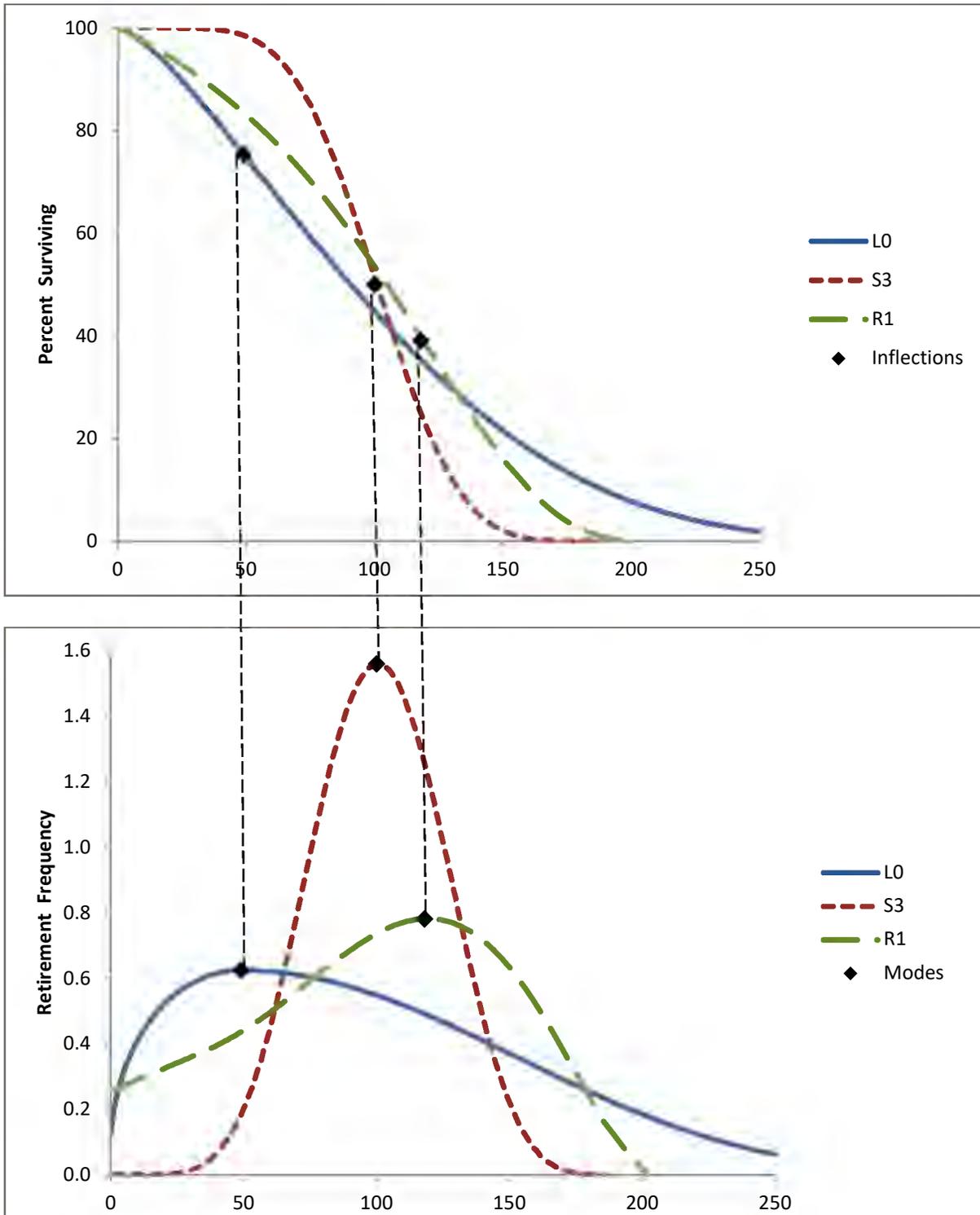
2. Classification

The Iowa curves are classified by three variables: modal location, average life, and variation of life. First, the mode is the percent life that results in the highest point of the frequency curve and the “inflection point” on the survivor curve. The modal age is the age at which the greatest rate of retirement occurs. As illustrated in the figure below, the modes appear at the steepest point of each survivor curve in the top graph, as well as the highest point of each corresponding frequency curve in the bottom graph.

The classification of the survivor curves was made according to whether the mode of the retirement frequency curves was to the left, to the right, or coincident with average service life. There are three modal “families” of curves: six left modal curves (L0, L1, L2, L3, L4, L5); five right modal curves (R1, R2, R3, R4, R5); and seven symmetrical curves (S0, S1, S2, S3, S4, S5, S6).⁷² In the figure below, one curve from each family is shown: L0, S3 and R1, with average life at 100 on the x-axis. It is clear from the graphs that the modes for the L0 and R1 curves appear to the left and right of average life respectively, while the S3 mode is coincident with average life.

⁷² In 1967, Harold A. Cowles added four origin-modal curves known as “O type” curves. There are also several “half” curves and a square curve, so the total amount of survivor curves commonly called “Iowa” curves is about 31 (see NARUC supra n. 10, at 68).

**Figure 10:
Modal Age Illustration**



The second Iowa curve classification variable is average life. The Iowa curves were designed using a single parameter of age expressed as a percent of average life instead of actual age. This was necessary for the curves to be of practical value. As Winfrey notes:

Since the location of a particular survivor on a graph is affected by both its span in years and the shape of the curve, it is difficult to classify a group of curves unless one of these variables can be controlled. This is easily done by expressing the age in percent of average life.⁷³

Because age is expressed in terms of percent of average life, any particular Iowa curve type can be modified to forecast property groups with various average lives.

The third variable, variation of life, is represented by the numbers next to each letter. A lower number (e.g., L1) indicates a relatively low mode, large variation, and large maximum life; a higher number (e.g., L5) indicates a relatively high mode, small variation, and small maximum life. All three classification variables – modal location, average life, and variation of life – are used to describe each Iowa curve. For example, a 13-L1 Iowa curve describes a group of property with a 13-year average life, with the greatest number of retirements occurring before (or to the left of) the average life, and a relatively low mode. The graphs below show these 18 survivor curves, organized by modal family.

⁷³ Winfrey *supra* n. 75, at 60.

Figure 11:
Type L Survivor and Frequency Curves

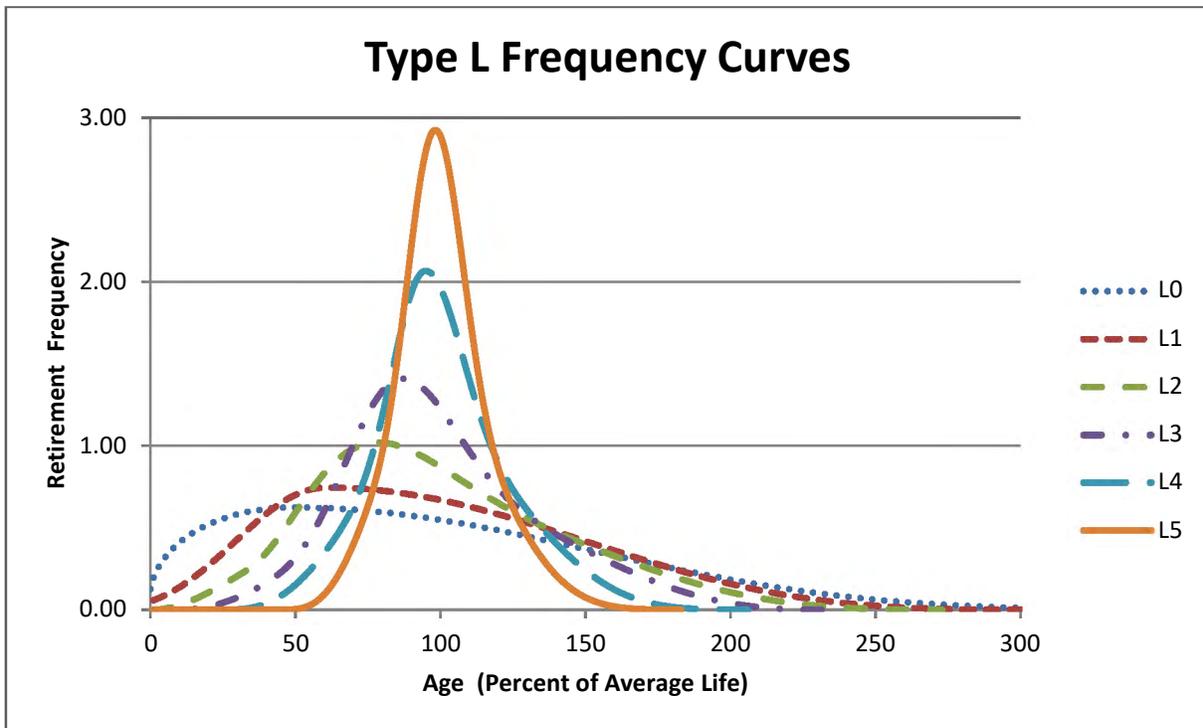
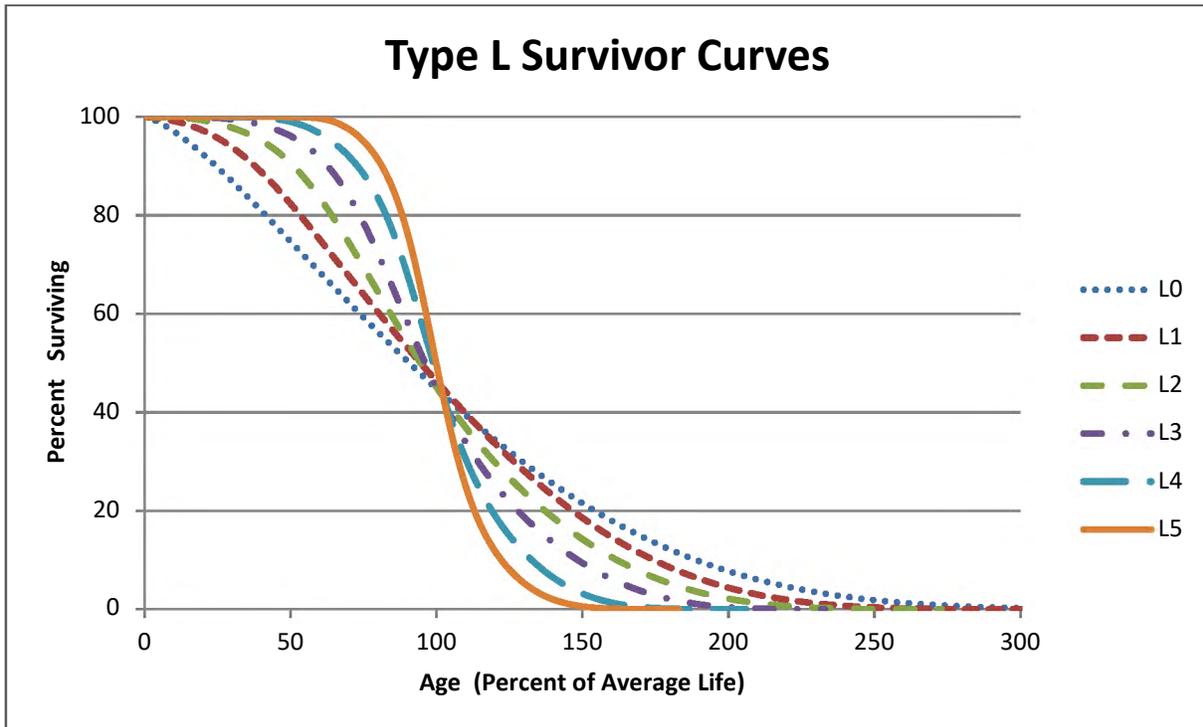


Figure 12:
Type S Survivor and Frequency Curves

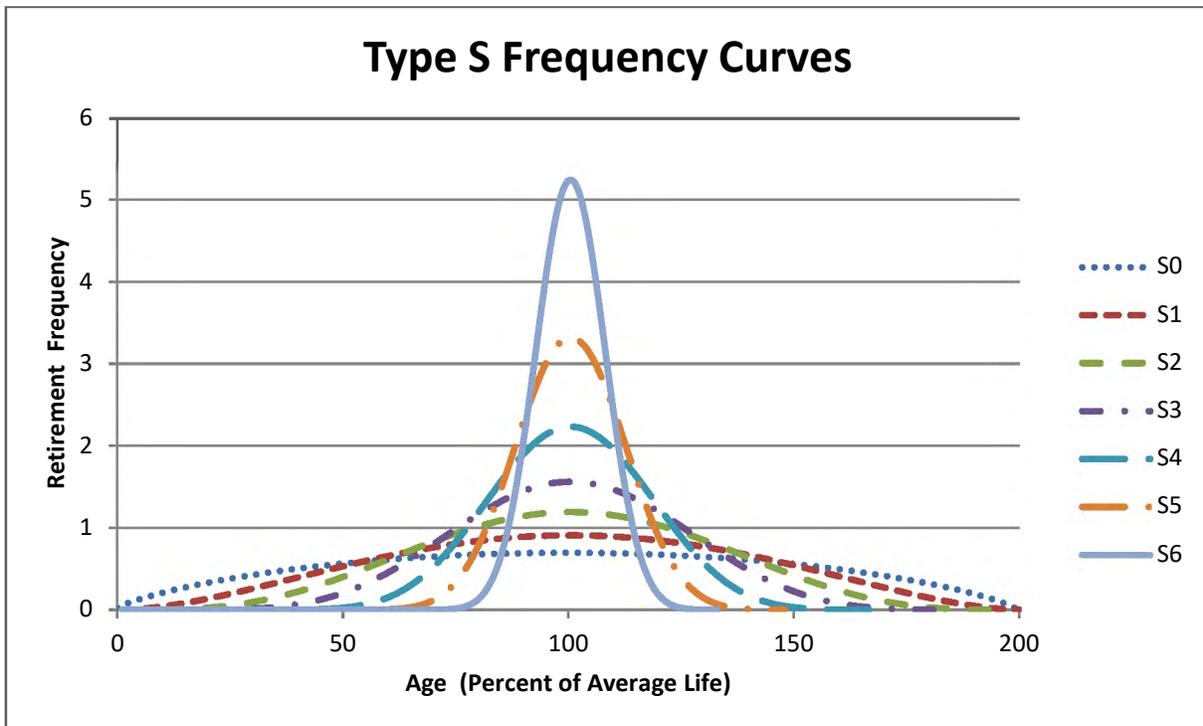
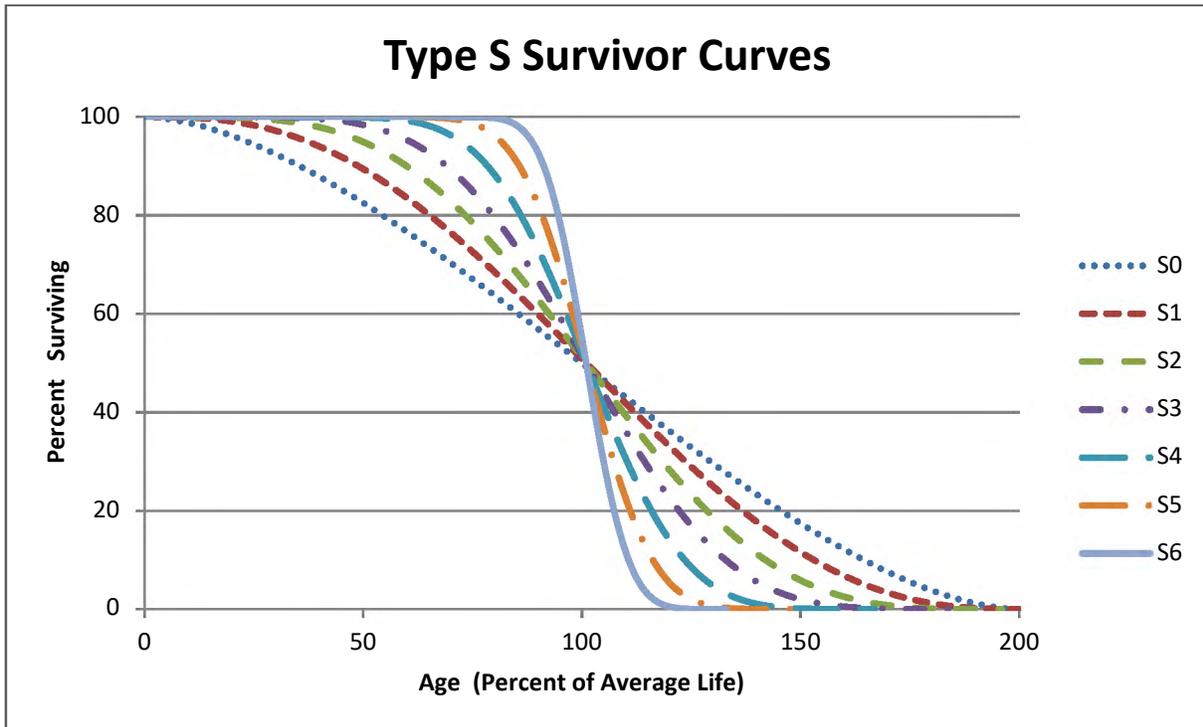
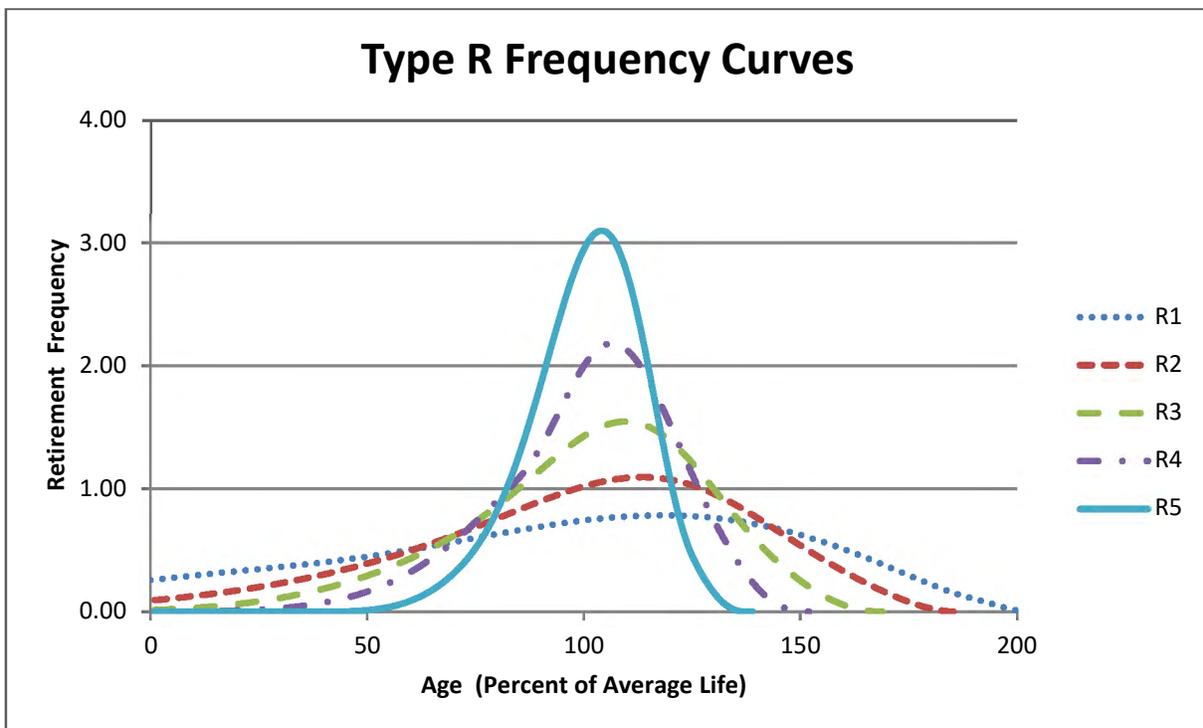
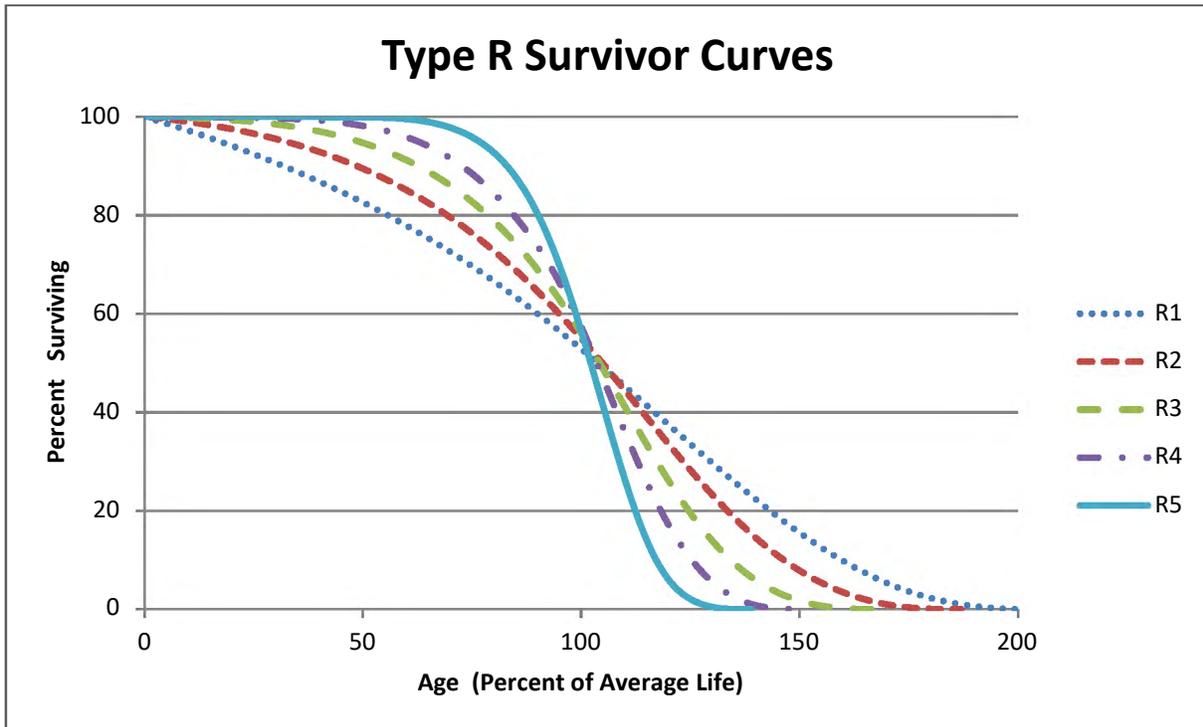


Figure 13:
Type R Survivor and Frequency Curves



As shown in the graphs above, the modes for the L family frequency curves occur to the left of average life (100% on the x-axis), while the S family modes occur at the average, and the R family modes occur after the average.

3. Types of Lives

Several other important statistical analyses and types of lives may be derived from an Iowa curve. These include: 1) average life; 2) realized life; 3) remaining life; and 4) probable life. The figure below illustrates these concepts. It shows the frequency curve, survivor curve, and probable life curve. Age M_x on the x-axis represents the modal age, while age AL_x represents the average age. Thus, this figure illustrates an “L type” Iowa curve since the mode occurs before the average.⁷⁴

First, average life is the area under the survivor curve from age zero to maximum life. Because the survivor curve is measured in percent, the area under the curve must be divided by 100% to convert it from percent-years to years. The formula for average life is as follows:⁷⁵

**Equation 4:
Average Life**

$$\text{Average Life} = \frac{\text{Area Under Survivor Curve from Age 0 to Max Life}}{100\%}$$

Thus, average life may not be determined without a complete survivor curve. Many property groups being analyzed will not have experienced full retirement. This results in a “stub” survivor curve. Iowa curves are used to extend stub curves to maximum life in order for the average life calculation to be made (see Appendix C).

⁷⁴ From age zero to age M_x on the survivor curve, it could be said that the percent surviving from this property group is decreasing at an increasing rate. Conversely, from point M_x to maximum on the survivor curve, the percent surviving is decreasing at a decreasing rate.

⁷⁵ See NARUC *supra* n. 10, at 71.

Realized life is similar to average life, except that realized life is the average years of service experienced to date from the vintage's original installations.⁷⁶ As shown in the figure below, realized life is the area under the survivor curve from zero to age RL_x . Likewise, unrealized life is the area under the survivor curve from age RL_x to maximum life. Thus, it could be said that average life equals realized life plus unrealized life.

Average remaining life represents the future years of service expected from the surviving property.⁷⁷ Remaining life is sometimes referred to as "average remaining life" and "life expectancy." To calculate average remaining life at age x , the area under the estimated future portion of the survivor curve is divided by the percent surviving at age x (denoted S_x). Thus, the average remaining life formula is:

**Equation 5:
Average Remaining Life**

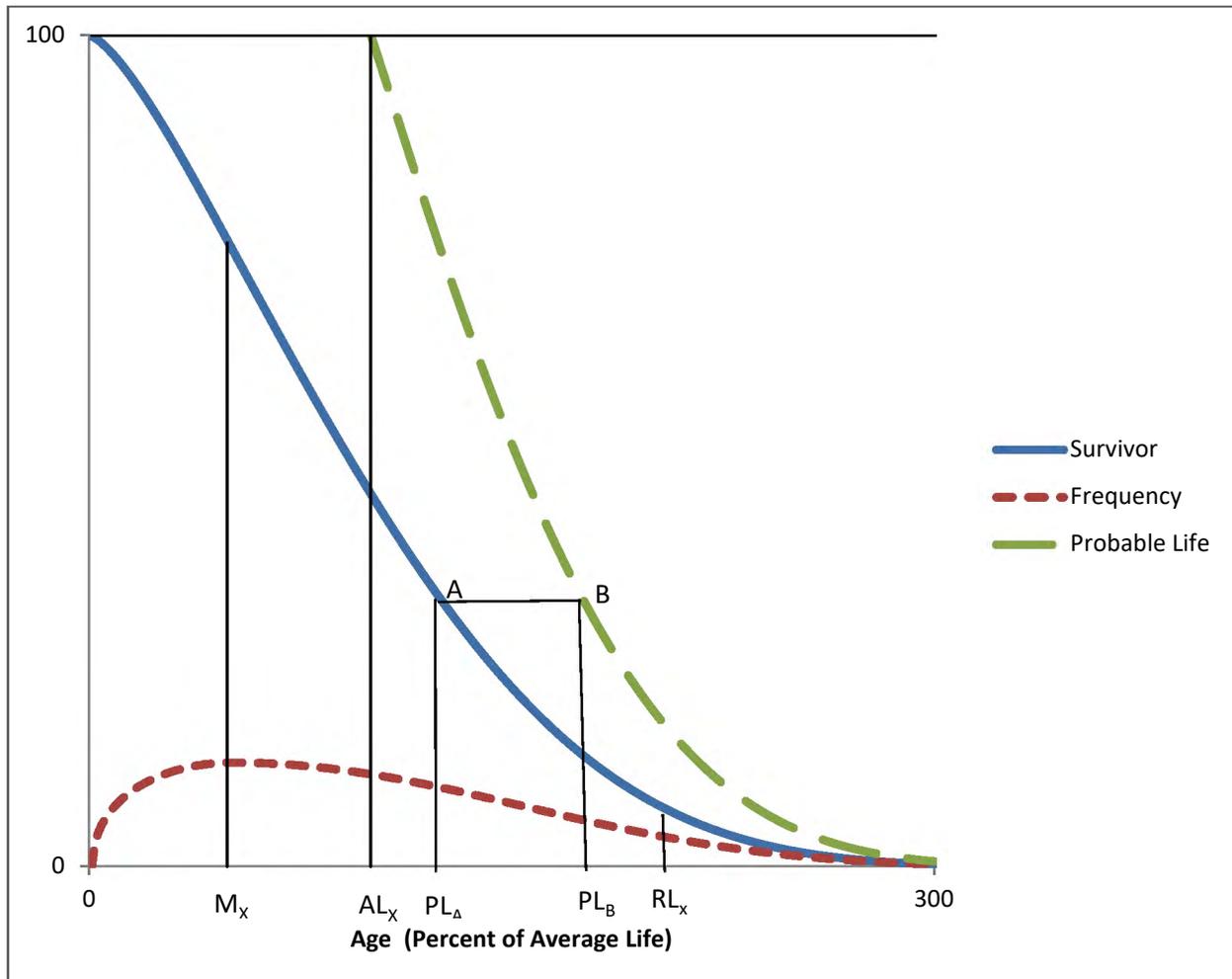
$$\text{Average Remaining Life} = \frac{\text{Area Under Survivor Curve from Age } x \text{ to Max Life}}{S_x}$$

It is necessary to determine average remaining life to calculate the annual accrual under the remaining life technique.

⁷⁶ *Id.* at 73.

⁷⁷ *Id.* at 74.

**Figure 14:
Iowa Curve Derivations**



Finally, the probable life may also be determined from the Iowa curve. The probable life of a property group is the total life expectancy of the property surviving at any age and is equal to the remaining life plus the current age.⁷⁸ The probable life is also illustrated in this figure. The probable life at age PL_A is the age at point PL_B . Thus, to read the probable life at age PL_A , see the corresponding point on the survivor curve above at point “A,” then horizontally to point “B” on

⁷⁸ Wolf *supra* n. 7, at 28.

the probable life curve, and back down to the age corresponding to point “B.” It is no coincidence that the vertical line from AL_X connects at the top of the probable life curve. This is because at age zero, probable life equals average life.

**APPENDIX C:
ACTUARIAL ANALYSIS**

Actuarial science is a discipline that applies various statistical methods to assess risk probabilities and other related functions. Actuaries often study human mortality. The results from historical mortality data are used to predict how long similar groups of people who are alive today will live. Insurance companies rely on actuarial analysis in determining premiums for life insurance policies.

The study of human mortality is analogous to estimating service lives of industrial property groups. While some humans die solely from chance, most deaths are related to age; that is, death rates generally increase as age increases. Similarly, physical plant is also subject to forces of retirement. These forces include physical, functional, and contingent factors, as shown in the table below.⁷⁹

**Figure 15:
Forces of Retirement**

<u>Physical Factors</u>	<u>Functional Factors</u>	<u>Contingent Factors</u>
Wear and tear Decay or deterioration Action of the elements	Inadequacy Obsolescence Changes in technology Regulations Managerial discretion	Casualties or disasters Extraordinary obsolescence

While actuaries study historical mortality data in order to predict how long a group of people will live, depreciation analysts must look at a utility's historical data in order to estimate the average lives of property groups. A utility's historical data is often contained in the Continuing Property Records ("CPR"). Generally, a CPR should contain 1) an inventory of property record

⁷⁹ NARUC *supra* n. 10, at 14-15.

units; 2) the association of costs with such units; and 3) the dates of installation and removal of plant. Since actuarial analysis includes the examination of historical data to forecast future retirements, the historical data used in the analysis should not contain events that are anomalous or unlikely to recur.⁸⁰ Historical data is used in the retirement rate actuarial method, which is discussed further below.

The Retirement Rate Method

There are several systematic actuarial methods that use historical data to calculate observed survivor curves for property groups. Of these methods, the retirement rate method is superior, and is widely employed by depreciation analysts.⁸¹ The retirement rate method is ultimately used to develop an observed survivor curve, which can be fitted with an Iowa curve discussed in Appendix B to forecast average life. The observed survivor curve is calculated by using an observed life table (“OLT”). The figures below illustrate how the OLT is developed. First, historical property data are organized in a matrix format, with placement years on the left forming rows, and experience years on the top forming columns. The placement year (a.k.a. “vintage year” or “installation year”) is the year of placement into service of a group of property. The experience year (a.k.a. “activity year”) refers to the accounting data for a particular calendar year. The two matrices below use aged data – that is, data for which the dates of placements, retirements, transfers, and other transactions are known. Without aged data, the retirement rate actuarial method may not be employed. The first matrix is the exposure matrix, which shows the exposures

⁸⁰ *Id.* at 112-13.

⁸¹ Anson Marston, Robley Winfrey & Jean C. Hempstead, *Engineering Valuation and Depreciation* 154 (2nd ed., McGraw-Hill Book Company, Inc. 1953).

at the beginning of each year.⁸² An exposure is simply the depreciable property subject to retirement during a period. The second matrix is the retirement matrix, which shows the annual retirements during each year. Each matrix covers placement years 2003–2015, and experience years 2008-2015. In the exposure matrix, the number in the 2012 experience column and the 2003 placement row is \$192,000. This means at the beginning of 2012, there was \$192,000 still exposed to retirement from the vintage group placed in 2003. Likewise, in the retirement matrix, \$19,000 of the dollars invested in 2003 were retired during 2012.

**Figure 16:
Exposure Matrix**

Placement Years	Experience Years								Total at Start of Age Interval	Age Interval
	Exposures at January 1 of Each Year (Dollars in 000's)									
	2008	2009	2010	2011	2012	2013	2014	2015		
2003	261	245	228	211	192	173	152	131	131	11.5 - 12.5
2004	267	252	236	220	202	184	165	145	297	10.5 - 11.5
2005	304	291	277	263	248	232	216	198	536	9.5 - 10.5
2006	345	334	322	310	298	284	270	255	847	8.5 - 9.5
2007	367	357	347	335	324	312	299	286	1,201	7.5 - 8.5
2008	375	366	357	347	336	325	314	302	1,581	6.5 - 7.5
2009		377	366	356	346	336	327	319	1,986	5.5 - 6.5
2010			381	369	358	347	336	327	2,404	4.5 - 5.5
2011				386	372	359	346	334	2,559	3.5 - 4.5
2012					395	380	366	352	2,722	2.5 - 3.5
2013						401	385	370	2,866	1.5 - 2.5
2014							410	393	2,998	0.5 - 1.5
2015								416	3,141	0.0 - 0.5
Total	1919	2222	2514	2796	3070	3333	3586	3827	23,268	

⁸² Technically, the last numbers in each column are “gross additions” rather than exposures. Gross additions do not include adjustments and transfers applicable to plant placed in a previous year. Once retirements, adjustments, and transfers are factored in, the balance at the beginning of the next accounting period is called an “exposure” rather than an addition.

**Figure 17:
Retirement Matrix**

Placement Years	Experience Years								Total During Age Interval	Age Interval
	Retirements During the Year (Dollars in 000's)									
	2008	2009	2010	2011	2012	2013	2014	2015		
2003	16	17	18	19	19	20	21	23	23	11.5 - 12.5
2004	15	16	17	17	18	19	20	21	43	10.5 - 11.5
2005	13	14	14	15	16	17	17	18	59	9.5 - 10.5
2006	11	12	12	13	13	14	15	15	71	8.5 - 9.5
2007	10	11	11	12	12	13	13	14	82	7.5 - 8.5
2008	9	9	10	10	11	11	12	13	91	6.5 - 7.5
2009		11	10	10	9	9	9	8	95	5.5 - 6.5
2010			12	11	11	10	10	9	100	4.5 - 5.5
2011				14	13	13	12	11	93	3.5 - 4.5
2012					15	14	14	13	91	2.5 - 3.5
2013						16	15	14	93	1.5 - 2.5
2014							17	16	100	0.5 - 1.5
2015								18	112	0.0 - 0.5
Total	74	89	104	121	139	157	175	194	1,052	

These matrices help visualize how exposure and retirement data are calculated for each age interval. An age interval is typically one year. A common convention is to assume that any unit installed during the year is installed in the middle of the calendar year (i.e., July 1st). This convention is called the “half-year convention” and effectively assumes that all units are installed uniformly during the year.⁸³ Adoption of the half-year convention leads to age intervals of 0-0.5 years, 0.5-1.5 years, etc., as shown in the matrices.

The purpose of the matrices is to calculate the totals for each age interval, which are shown in the second column from the right in each matrix. This column is calculated by adding each number from the corresponding age interval in the matrix. For example, in the exposure matrix, the total amount of exposures at the beginning of the 8.5-9.5 age interval is \$847,000. This number was calculated by adding the numbers shown on the “stairs” to the left ($192+184+216+255=847$). The same calculation is applied to each number in the column. The amounts retired during the year

⁸³ Wolf *supra* n. 7, at 22.

in the retirements matrix affect the exposures at the beginning of each year in the exposures matrix. For example, the amount exposed to retirement in 2008 from the 2003 vintage is \$261,000. The amount retired during 2008 from the 2003 vintage is \$16,000. Thus, the amount exposed to retirement at the beginning of 2009 from the 2003 vintage is \$245,000 (\$261,000 - \$16,000). The company's property records may contain other transactions which affect the property, including sales, transfers, and adjusting entries. Although these transactions are not shown in the matrices above, they would nonetheless affect the amount exposed to retirement at the beginning of each year.

The totaled amounts for each age interval in both matrices are used to form the exposure and retirement columns in the OLT, as shown in the chart below. This chart also shows the retirement ratio and the survivor ratio for each age interval. The retirement ratio for an age interval is the ratio of retirements during the interval to the property exposed to retirement at the beginning of the interval. The retirement ratio represents the probability that the property surviving at the beginning of an age interval will be retired during the interval. The survivor ratio is simply the complement to the retirement ratio ($1 - \text{retirement ratio}$). The survivor ratio represents the probability that the property surviving at the beginning of an age interval will survive to the next age interval.

**Figure 18:
Observed Life Table**

Age at Start of Interval	Exposures at Start of Age Interval	Retirements During Age Interval	Retirement Ratio	Survivor Ratio	Percent Surviving at Start of Age Interval
A	B	C	D = C / B	E = 1 - D	F
0.0	3,141	112	0.036	0.964	100.00
0.5	2,998	100	0.033	0.967	96.43
1.5	2,866	93	0.032	0.968	93.21
2.5	2,722	91	0.033	0.967	90.19
3.5	2,559	93	0.037	0.963	87.19
4.5	2,404	100	0.042	0.958	84.01
5.5	1,986	95	0.048	0.952	80.50
6.5	1,581	91	0.058	0.942	76.67
7.5	1,201	82	0.068	0.932	72.26
8.5	847	71	0.084	0.916	67.31
9.5	536	59	0.110	0.890	61.63
10.5	297	43	0.143	0.857	54.87
11.5	131	23	0.172	0.828	47.01
Total	23,268	1,052			38.91

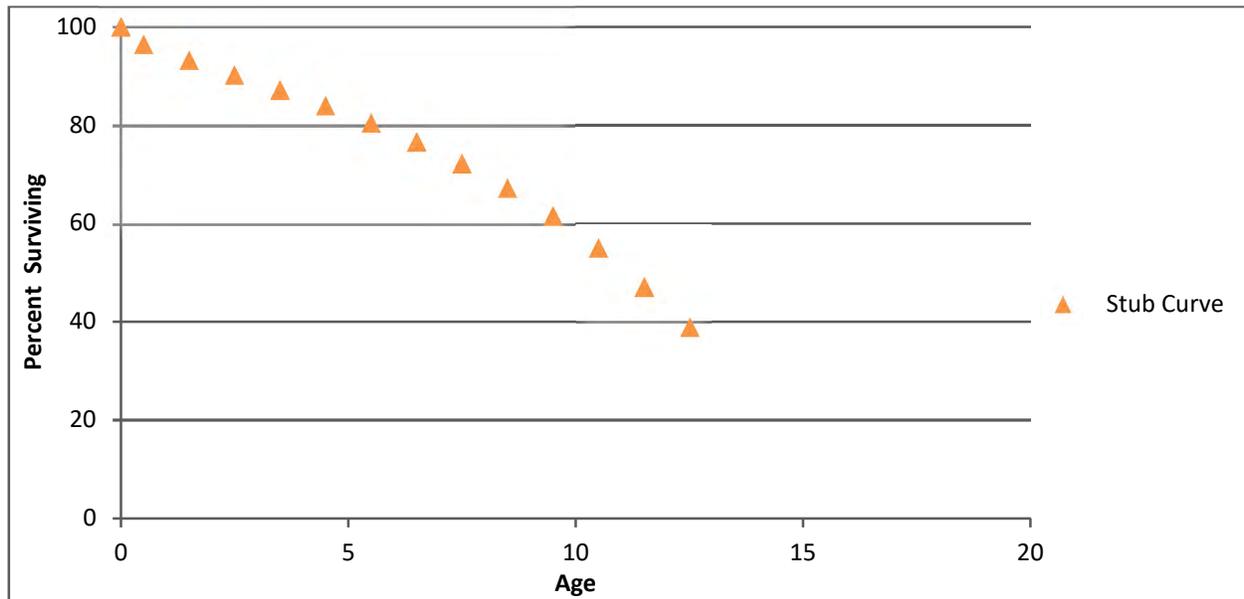
Column F on the right shows the percentages surviving at the beginning of each age interval. This column starts at 100% surviving. Each consecutive number below is calculated by multiplying the percent surviving from the previous age interval by the corresponding survivor ratio for that age interval. For example, the percent surviving at the start of age interval 1.5 is 93.21%, which was calculated by multiplying the percent surviving for age interval 0.5 (96.43%) by the survivor ratio for age interval 0.5 (0.967)⁸⁴.

The percentages surviving in Column F are the numbers that are used to form the original survivor curve. This particular curve starts at 100% surviving and ends at 38.91% surviving. An

⁸⁴ Multiplying 96.43 by 0.967 does not equal 93.21 exactly due to rounding.

observed survivor curve such as this that does not reach zero percent surviving is called a “stub” curve. The figure below illustrates the stub survivor curve derived from the OLT above.

**Figure 19:
Original “Stub” Survivor Curve**



The matrices used to develop the basic OLT and stub survivor curve provide a basic illustration of the retirement rate method in that only a few placement and experience years were used. In reality, analysts may have several decades of aged property data to analyze. In that case, it may be useful to use a technique called “banding” in order to identify trends in the data.

Banding

The forces of retirement and characteristics of industrial property are constantly changing. A depreciation analyst may examine the magnitude of these changes. Analysts often use a technique called “banding” to assist with this process. Banding refers to the merging of several years of data into a single data set for further analysis, and it is a common technique associated

with the retirement rate method.⁸⁵ There are three primary benefits of using bands in depreciation analysis:

- 1 1. Increasing the sample size. In statistical analyses, the larger the sample size
2 in relation to the body of total data, the greater the reliability of the result;
- 3 2. Smooth the observed data. Generally, the data obtained from a single
4 activity or vintage year will not produce an observed life table that can be
5 easily fit; and
- 6 3. Identify trends. By looking at successive bands, the analyst may identify
7 broad trends in the data that may be useful in projecting the future life
8 characteristics of the property.⁸⁶

Two common types of banding methods are the “placement band” method and the “experience band” method.” A placement band, as the name implies, isolates selected placement years for analysis. The figure below illustrates the same exposure matrix shown above, except that only the placement years 2005-2008 are considered in calculating the total exposures at the beginning of each age interval.

⁸⁵ NARUC *supra* n. 10, at 113.

⁸⁶ *Id.*

**Figure 20:
Placement Bands**

Placement Years	Experience Years								Total at Start of Age Interval	Age Interval
	Exposures at January 1 of Each Year (Dollars in 000's)									
	2008	2009	2010	2011	2012	2013	2014	2015		
2003	261	245	228	211	192	173	152	131		11.5 - 12.5
2004	267	252	236	220	202	184	165	145		10.5 - 11.5
2005	304	291	277	263	248	232	216	198	198	9.5 - 10.5
2006	345	334	322	310	298	284	270	255	471	8.5 - 9.5
2007	367	357	347	335	324	312	299	286	788	7.5 - 8.5
2008	375	366	357	347	336	325	314	302	1,133	6.5 - 7.5
2009		377	366	356	346	336	327	319	1,186	5.5 - 6.5
2010			381	369	358	347	336	327	1,237	4.5 - 5.5
2011				386	372	359	346	334	1,285	3.5 - 4.5
2012					395	380	366	352	1,331	2.5 - 3.5
2013						401	385	370	1,059	1.5 - 2.5
2014							410	393	733	0.5 - 1.5
2015								416	375	0.0 - 0.5
Total	1919	2222	2514	2796	3070	3333	3586	3827	9,796	

The shaded cells within the placement band equal the total exposures at the beginning of age interval 4.5–5.5 (\$1,237). The same placement band would be used for the retirement matrix covering the same placement years of 2005 – 2008. This of course would result in a different OLT and original stub survivor curve than those that were calculated above without the restriction of a placement band.

Analysts often use placement bands for comparing the survivor characteristics of properties with different physical characteristics.⁸⁷ Placement bands allow analysts to isolate the effects of changes in technology and materials that occur in successive generations of plant. For example, if in 2005 an electric utility began placing transmission poles into service with a special chemical treatment that extended the service lives of those poles, an analyst could use placement bands to isolate and analyze the effect of that change in the property group's physical characteristics. While placement bands are very useful in depreciation analysis, they also possess an intrinsic dilemma.

⁸⁷ Wolf *supra* n. 7, at 182.

A fundamental characteristic of placement bands is that they yield fairly complete survivor curves for older vintages. However, with newer vintages, which are arguably more valuable for forecasting, placement bands yield shorter survivor curves. Longer “stub” curves are considered more valuable for forecasting average life. Thus, an analyst must select a band width broad enough to provide confidence in the reliability of the resulting curve fit, yet narrow enough so that an emerging trend may be observed.⁸⁸

Analysts also use “experience bands.” Experience bands show the composite retirement history for all vintages during a select set of activity years. The figure below shows the same data presented in the previous exposure matrices, except that the experience band from 2011 – 2013 is isolated, resulting in different interval totals.

**Figure 21:
Experience Bands**

Placement Years	Experience Years								Total at Start of Age Interval	Age Interval
	2008	2009	2010	2011	2012	2013	2014	2015		
	Exposures at January 1 of Each Year (Dollars in 000's)									
2003	261	245	228	211	192	173	152	131		11.5 - 12.5
2004	267	252	236	220	202	184	165	145		10.5 - 11.5
2005	304	291	277	263	248	232	216	198	173	9.5 - 10.5
2006	345	334	322	310	298	284	270	255	376	8.5 - 9.5
2007	367	357	347	335	324	312	299	286	645	7.5 - 8.5
2008	375	366	357	347	336	325	314	302	752	6.5 - 7.5
2009		377	366	356	346	336	327	319	872	5.5 - 6.5
2010			381	369	358	347	336	327	959	4.5 - 5.5
2011				386	372	359	346	334	1,008	3.5 - 4.5
2012					395	380	366	352	1,039	2.5 - 3.5
2013						401	385	370	1,072	1.5 - 2.5
2014							410	393	1,121	0.5 - 1.5
2015								416	1,182	0.0 - 0.5
Total	1919	2222	2514	2796	3070	3333	3586	3827	9,199	

The shaded cells within the experience band equal the total exposures at the beginning of age interval 4.5–5.5 (\$1,237). The same experience band would be used for the retirement matrix

⁸⁸ NARUC *supra* n. 10, at 114.

covering the same experience years of 2011 – 2013. This of course would result in a different OLT and original stub survivor than if the band had not been used. Analysts often use experience bands to isolate and analyze the effects of an operating environment over time.⁸⁹ Likewise, the use of experience bands allows analysis of the effects of an unusual environmental event. For example, if an unusually severe ice storm occurred in 2013, destruction from that storm would affect an electric utility's line transformers of all ages. That is, each of the line transformers from each placement year would be affected, including those recently installed in 2012, as well as those installed in 2003. Using experience bands, an analyst could isolate or even eliminate the 2013 experience year from the analysis. In contrast, a placement band would not effectively isolate the ice storm's effect on life characteristics. Rather, the placement band would show an unusually large rate of retirement during 2013, making it more difficult to accurately fit the data with a smooth Iowa curve. Experience bands tend to yield the most complete stub curves for recent bands because they have the greatest number of vintages included. Longer stub curves are better for forecasting. The experience bands, however, may also result in more erratic retirement dispersion making the curve fitting process more difficult.

Depreciation analysts must use professional judgment in determining the types of bands to use and the band widths. In practice, analysts may use various combinations of placement and experience bands in order to increase the data sample size, identify trends and changes in life characteristics, and isolate unusual events. Regardless of which bands are used, observed survivor curves in depreciation analysis rarely reach zero percent. This is because, as seen in the OLT above, relatively newer vintage groups have not yet been fully retired at the time the property is

⁸⁹ *Id.*

studied. An analyst could confine the analysis to older, fully retired vintage groups to get complete survivor curves, but such analysis would ignore some of the property currently in service and would arguably not provide an accurate description of life characteristics for current plant in service. Because a complete curve is necessary to calculate the average life of the property group, however, curve fitting techniques using Iowa curves or other standardized curves may be employed in order to complete the stub curve.

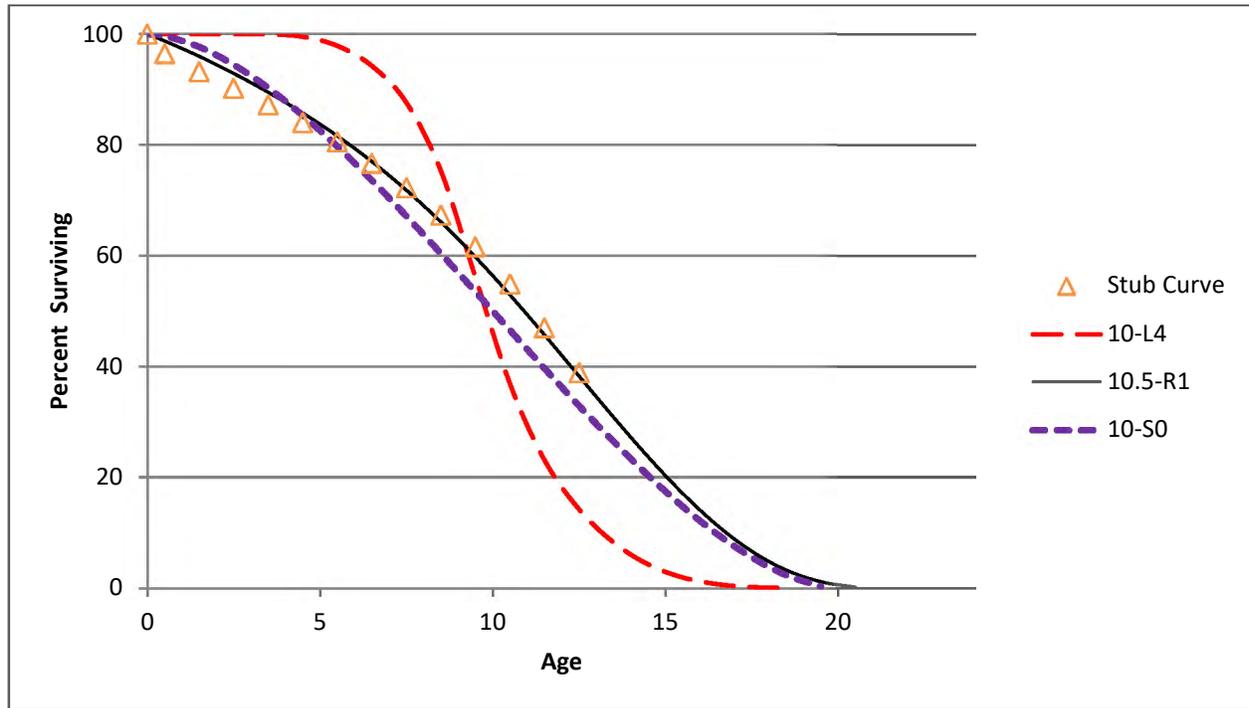
Curve Fitting

Depreciation analysts typically use the survivor curve rather than the frequency curve to fit the observed stub curves. The most commonly used generalized survivor curves in the curve fitting process are the Iowa curves discussed above. As Wolf notes, if “the Iowa curves are adopted as a model, an underlying assumption is that the process describing the retirement pattern is one of the 22 [or more] processes described by the Iowa curves.”⁹⁰

Curve fitting may be done through visual matching or mathematical matching. In visual curve fitting, the analyst visually examines the plotted data to make an initial judgment about the Iowa curves that may be a good fit. The figure below illustrates the stub survivor curve shown above. It also shows three different Iowa curves: the 10-L4, the 10.5-R1, and the 10-S0. Visually, it is clear that the 10.5-R1 curve is a better fit than the other two curves.

⁹⁰ Wolf *supra* n. 7, at 46 (22 curves includes Winfrey’s 18 original curves plus Cowles’s four “O” type curves).

**Figure 22:
Visual Curve Fitting**



In mathematical fitting, the least squares method is used to calculate the best fit. This mathematical method would be excessively time consuming if done by hand. With the use of modern computer software however, mathematical fitting is an efficient and useful process. The typical logic for a computer program, as well as the software employed for the analysis in this testimony is as follows:

First (an Iowa curve) curve is arbitrarily selected. . . . If the observed curve is a stub curve, . . . calculate the area under the curve and up to the age at final data point. Call this area the realized life. Then systematically vary the average life of the theoretical survivor curve and calculate its realized life at the age corresponding to the study date. This trial and error procedure ends when you find an average life such that the realized life of the theoretical curve equals the realized life of the observed curve. Call this the average life.

Once the average life is found, calculate the difference between each percent surviving point on the observed survivor curve and the corresponding point on the Iowa curve. Square each difference and sum them. The sum of squares is used as a measure of goodness of fit for that particular Iowa type curve. This procedure is

repeated for the remaining 21 Iowa type curves. The “best fit” is declared to be the type of curve that minimizes the sum of differences squared.⁹¹

Mathematical fitting requires less judgment from the analyst and is thus less subjective. Blind reliance on mathematical fitting, however, may lead to poor estimates. Thus, analysts should employ both mathematical and visual curve fitting in reaching their final estimates. This way, analysts may utilize the objective nature of mathematical fitting while still employing professional judgment. As Wolf notes: “The results of mathematical curve fitting serve as a guide for the analyst and speed the visual fitting process. But the results of the mathematical fitting should be checked visually, and the final determination of the best fit be made by the analyst.”⁹²

In the graph above, visual fitting was sufficient to determine that the 10.5-R1 Iowa curve was a better fit than the 10-L4 and the 10-S0 curves. Using the sum of least squares method, mathematical fitting confirms the same result. In the chart below, the percentages surviving from the OLT that formed the original stub curve are shown in the left column, while the corresponding percentages surviving for each age interval are shown for the three Iowa curves. The right portion of the chart shows the differences between the points on each Iowa curve and the stub curve. These differences are summed at the bottom. Curve 10.5-R1 is the best fit because the sum of the squared differences for this curve is less than the same sum for the other two curves. Curve 10-L4 is the worst fit, which was also confirmed visually.

⁹¹ Wolf *supra* n. 7, at 47.

⁹² *Id.* at 48.

**Figure 23:
Mathematical Fitting**

Age Interval	Stub Curve	Iowa Curves			Squared Differences		
		10-L4	10-S0	10.5-R1	10-L4	10-S0	10.5-R1
0.0	100.0	100.0	100.0	100.0	0.0	0.0	0.0
0.5	96.4	100.0	99.7	98.7	12.7	10.3	5.3
1.5	93.2	100.0	97.7	96.0	46.1	19.8	7.6
2.5	90.2	100.0	94.4	92.9	96.2	18.0	7.2
3.5	87.2	100.0	90.2	89.5	162.9	9.3	5.2
4.5	84.0	99.5	85.3	85.7	239.9	1.6	2.9
5.5	80.5	97.9	79.7	81.6	301.1	0.7	1.2
6.5	76.7	94.2	73.6	77.0	308.5	9.5	0.1
7.5	72.3	87.6	67.1	71.8	235.2	26.5	0.2
8.5	67.3	75.2	60.4	66.1	62.7	48.2	1.6
9.5	61.6	56.0	53.5	59.7	31.4	66.6	3.6
10.5	54.9	36.8	46.5	52.9	325.4	69.6	3.9
11.5	47.0	23.1	39.6	45.7	572.6	54.4	1.8
12.5	38.9	14.2	32.9	38.2	609.6	36.2	0.4
SUM					3004.2	371.0	41.0

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EDUCATION

University of Oklahoma Master of Business Administration Areas of Concentration: Finance, Energy	Norman, OK 2014
University of Oklahoma College of Law Juris Doctor Member, American Indian Law Review	Norman, OK 2007
University of Oklahoma Bachelor of Business Administration Major: Finance	Norman, OK 2003

PROFESSIONAL DESIGNATIONS

Society of Depreciation Professionals
Certified Depreciation Professional (CDP)

Society of Utility and Regulatory Financial Analysts
Certified Rate of Return Analyst (CRRA)

The Mediation Institute
Certified Civil / Commercial & Employment Mediator

WORK EXPERIENCE

Resolve Utility Consulting PLLC <u>Managing Member</u> Provide expert analysis and testimony specializing in depreciation and cost of capital issues for clients in utility regulatory proceedings.	Oklahoma City, OK 2016 – Present
Oklahoma Corporation Commission <u>Public Utility Regulatory Analyst</u> <u>Assistant General Counsel</u> Represented commission staff in utility regulatory proceedings and provided legal opinions to commissioners. Provided expert analysis and testimony in depreciation, cost of capital, incentive compensation, payroll and other issues.	Oklahoma City, OK 2012 – 2016 2011 – 2012

Perebus Counsel, PLLC

Managing Member

Represented clients in the areas of family law, estate planning, debt negotiations, business organization, and utility regulation.

Oklahoma City, OK
2009 – 2011

Moricoli & Schovanec, P.C.

Associate Attorney

Represented clients in the areas of contracts, oil and gas, business structures and estate administration.

Oklahoma City, OK
2007 – 2009

TEACHING EXPERIENCE

University of Oklahoma

Adjunct Instructor – “Conflict Resolution”

Adjunct Instructor – “Ethics in Leadership”

Norman, OK
2014 – 2021

Rose State College

Adjunct Instructor – “Legal Research”

Adjunct Instructor – “Oil & Gas Law”

Midwest City, OK
2013 – 2015

PUBLICATIONS

American Indian Law Review

“Vine of the Dead: Reviving Equal Protection Rites for Religious Drug Use”
(31 Am. Indian L. Rev. 143)

Norman, OK
2006

PROFESSIONAL ASSOCIATIONS

Oklahoma Bar Association

2007 – Present

Society of Depreciation Professionals

Board Member – President

Participate in management of operations, attend meetings, review performance, organize presentation agenda.

2014 – Present
2017

Society of Utility Regulatory Financial Analysts

2014 – Present

Utility Regulatory Proceedings

Regulatory Agency	Utility Applicant	Docket Number	Issues Addressed	Parties Represented
Railroad Commission of Texas	Texas Gas Services Company	OS-22-00009896	Depreciation rates, service lives, net salvage	The City of El Paso
Public Utilities Commission of Nevada	Sierra Pacific Power Company	22-06014	Depreciation rates, service lives, net salvage	Bureau of Consumer Protection
Washington Utilities & Transportation Commission	Puget Sound Energy	UE-220066 UG-220067 UG-210918	Depreciation rates, service lives, net salvage	Washington Office of Attorney General
Public Utility Commission of Texas	Oncor Electric Delivery Company LLC	PUC 53601	Depreciation rates, service lives, net salvage	Alliance of Oncor Cities
Florida Public Service Commission	Florida Public Utilities Company	20220067-GU	Cost of capital, depreciation rates	Florida Office of Public Counsel
Public Utility Commission of Texas	Entergy Texas, Inc.	PUC 53719	Depreciation rates, decommissioning costs	Texas Municipal Group
Florida Public Service Commission	Florida City Gas	2020069-GU	Cost of capital, depreciation rates	Florida Office of Public Counsel
Connecticut Public Utilities Regulatory Authority	Aquarion Water Company of Connecticut	22-07-01	Depreciation rates, service lives, net salvage	PURA Staff
Washington Utilities & Transportation Commission	Avista Corporation	UE-220053 UG-220054 UE-210854	Cost of capital, awarded rate of return, capital structure	Washington Office of Attorney General
Federal Energy Regulatory Commission	ANR Pipeline Company	RP22-501-000	Depreciation rates, service lives, net salvage	Ascent Resources - Utica, LLC
Pennsylvania Public Utility Commission	Columbia Gas of Pennsylvania, Inc.	R-2022-3031211	Cost of capital, awarded rate of return, capital structure	Pennsylvania Office of Consumer Advocate
Public Service Commission of South Carolina	Piedmont Natural Gas Company	2022-89-G	Depreciation rates, service lives, net salvage	South Carolina Office of Regulatory Staff
Pennsylvania Public Utility Commission	UGI Utilities, Inc. - Gas Division	R-2021-3030218	Cost of capital, awarded rate of return, capital structure	Pennsylvania Office of Consumer Advocate
Public Utilities Commission of the State of California	Pacific Gas & Electric Company	A.21-06-021	Depreciation rates, service lives, net salvage	The Utility Reform Network

Utility Regulatory Proceedings

Regulatory Agency	Utility Applicant	Docket Number	Issues Addressed	Parties Represented
Pennsylvania Public Utility Commission	PECO Energy Company - Gas Division	R-2022-3031113	Cost of capital, awarded rate of return, capital structure	Pennsylvania Office of Consumer Advocate
Oklahoma Corporation Commission	Oklahoma Gas & Electric Company	PUD 202100164	Cost of capital, depreciation rates, net salvage	Oklahoma Industrial Energy Consumers
Massachusetts Department of Public Utilities	NSTAR Electric Company D/B/A Eversource Energy	D.P.U. 22-22	Depreciation rates, service lives, net salvage	Massachusetts Office of the Attorney General, Office of Ratepayer Advocacy
Michigan Public Service Company	DTE Electric Company	U-20836	Cost of capital, awarded rate of return, capital structure	Michigan Environmental Council and Citizens Utility Board of Michigan
New York State Public Service Commission	Consolidated Edison Company of New York, Inc.	22-E-0064 22-G-0065	Depreciation rates, service lives, net salvage, depreciation reserve	The City of New York
Pennsylvania Public Utility Commission	Aqua Pennsylvania Wastewater / East Whiteland Township	A-2021-3026132	Fair market value estimates for wastewater assets	Pennsylvania Office of Consumer Advocate
Public Service Commission of South Carolina	Kiawah Island Utility, Inc.	2021-324-WS	Cost of capital, awarded rate of return, capital structure	South Carolina Office of Regulatory Staff
Pennsylvania Public Utility Commission	Aqua Pennsylvania Wastewater / Willistown Township	A-2021-3027268	Fair market value estimates for wastewater assets	Pennsylvania Office of Consumer Advocate
Indiana Utility Regulatory Commission	Northern Indiana Public Service Company	45621	Depreciation rates, service lives, net salvage	Indiana Office of Utility Consumer Counselor
Arkansas Public Service Commission	Southwestern Electric Power Company	21-070-U	Cost of capital, depreciation rates, net salvage	Western Arkansas Large Energy Consumers
Federal Energy Regulatory Commission	Southern Star Central Gas Pipeline	RP21-778-002	Depreciation rates, service lives, net salvage	Consumer-Owned Shippers
Railroad Commission of Texas	Participating Texas gas utilities in consolidated proceeding	OS-21-00007061	Securitization of extraordinary gas costs arising from winter storms	The City of El Paso
Public Service Commission of South Carolina	Palmetto Wastewater Reclamation, Inc.	2021-153-S	Cost of capital, awarded rate of return, capital structure, ring-fencing	South Carolina Office of Regulatory Staff
Public Utilities Commission of the State of Colorado	Public Service Company of Colorado	21AL-0317E	Cost of capital, depreciation rates, net salvage	Colorado Energy Consumers

Utility Regulatory Proceedings

Regulatory Agency	Utility Applicant	Docket Number	Issues Addressed	Parties Represented
Pennsylvania Public Utility Commission	City of Lancaster - Water Department	R-2021-3026682	Cost of capital, awarded rate of return, capital structure	Pennsylvania Office of Consumer Advocate
Public Utility Commission of Texas	Southwestern Public Service Company	PUC 51802	Depreciation rates, service lives, net salvage	The Alliance of Xcel Municipalities
Pennsylvania Public Utility Commission	The Borough of Hanover - Hanover Municipal Waterworks	R-2021-3026116	Cost of capital, awarded rate of return, capital structure	Pennsylvania Office of Consumer Advocate
Maryland Public Service Commission	Delmarva Power & Light Company	9670	Cost of capital and authorized rate of return	Maryland Office of People's Counsel
Oklahoma Corporation Commission	Oklahoma Natural Gas Company	PUD 202100063	Cost of capital, awarded rate of return, capital structure	Oklahoma Industrial Energy Consumers
Indiana Utility Regulatory Commission	Indiana Michigan Power Company	45576	Depreciation rates, service lives, net salvage	Indiana Office of Utility Consumer Counselor
Public Utility Commission of Texas	El Paso Electric Company	PUC 52195	Depreciation rates, service lives, net salvage	The City of El Paso
Pennsylvania Public Utility Commission	Aqua Pennsylvania	R-2021-3027385	Cost of capital, awarded rate of return, capital structure	Pennsylvania Office of Consumer Advocate
Public Service Commission of the State of Montana	NorthWestern Energy	D2021.02.022	Cost of capital, awarded rate of return, capital structure	Montana Consumer Counsel
Pennsylvania Public Utility Commission	PECO Energy Company	R-2021-3024601	Cost of capital, awarded rate of return, capital structure	Pennsylvania Office of Consumer Advocate
New Mexico Public Regulation Commission	Southwestern Public Service Company	20-00238-UT	Cost of capital and authorized rate of return	The New Mexico Large Customer Group; Occidental Permian
Oklahoma Corporation Commission	Public Service Company of Oklahoma	PUD 202100055	Cost of capital, depreciation rates, net salvage	Oklahoma Industrial Energy Consumers
Pennsylvania Public Utility Commission	Duquesne Light Company	R-2021-3024750	Cost of capital, awarded rate of return, capital structure	Pennsylvania Office of Consumer Advocate
Maryland Public Service Commission	Columbia Gas of Maryland	9664	Cost of capital and authorized rate of return	Maryland Office of People's Counsel

Utility Regulatory Proceedings

Regulatory Agency	Utility Applicant	Docket Number	Issues Addressed	Parties Represented
Indiana Utility Regulatory Commission	Southern Indiana Gas Company, d/b/a Vectren Energy Delivery of Indiana, Inc.	45447	Depreciation rates, service lives, net salvage	Indiana Office of Utility Consumer Counselor
Public Utility Commission of Texas	Southwestern Electric Power Company	PUC 51415	Depreciation rates, service lives, net salvage	Cities Advocating Reasonable Deregulation
New Mexico Public Regulatory Commission	Avangrid, Inc., Avangrid Networks, Inc., NM Green Holdings, Inc., PNM, and PNM Resources	20-00222-UT	Ring fencing and capital structure	The Albuquerque Bernalillo County Water Utility Authority
Indiana Utility Regulatory Commission	Indiana Gas Company, d/b/a Vectren Energy Delivery of Indiana, Inc.	45468	Depreciation rates, service lives, net salvage	Indiana Office of Utility Consumer Counselor
Public Utilities Commission of Nevada	Nevada Power Company and Sierra Pacific Power Company, d/b/a NV Energy	20-07023	Construction work in progress	MGM Resorts International, Caesars Enterprise Services, LLC, and the Southern Nevada Water Authority
Massachusetts Department of Public Utilities	Boston Gas Company, d/b/a National Grid	D.P.U. 20-120	Depreciation rates, service lives, net salvage	Massachusetts Office of the Attorney General, Office of Ratepayer Advocacy
Public Service Commission of the State of Montana	ABACO Energy Services, LLC	D2020.07.082	Cost of capital and authorized rate of return	Montana Consumer Counsel
Maryland Public Service Commission	Washington Gas Light Company	9651	Cost of capital and authorized rate of return	Maryland Office of People's Counsel
Florida Public Service Commission	Utilities, Inc. of Florida	20200139-WS	Cost of capital and authorized rate of return	Florida Office of Public Counsel
New Mexico Public Regulatory Commission	El Paso Electric Company	20-00104-UT	Cost of capital, depreciation rates, net salvage	City of Las Cruces and Doña Ana County
Public Utilities Commission of Nevada	Nevada Power Company	20-06003	Cost of capital, awarded rate of return, capital structure, earnings sharing	MGM Resorts International, Caesars Enterprise Services, LLC, Wynn Las Vegas, LLC, Smart Energy Alliance, and Circus Circus Las Vegas, LLC
Wyoming Public Service Commission	Rocky Mountain Power	20000-578-ER-20	Cost of capital and authorized rate of return	Wyoming Industrial Energy Consumers
Florida Public Service Commission	Peoples Gas System	20200051-GU 20200166-GU	Cost of capital, depreciation rates, net salvage	Florida Office of Public Counsel
Wyoming Public Service Commission	Rocky Mountain Power	20000-539-EA-18	Depreciation rates, service lives, net salvage	Wyoming Industrial Energy Consumers

Utility Regulatory Proceedings

Regulatory Agency	Utility Applicant	Docket Number	Issues Addressed	Parties Represented
Public Service Commission of South Carolina	Dominion Energy South Carolina	2020-125-E	Depreciation rates, service lives, net salvage	South Carolina Office of Regulatory Staff
Pennsylvania Public Utility Commission	The City of Bethlehem	2020-3020256	Cost of capital, awarded rate of return, capital structure	Pennsylvania Office of Consumer Advocate
Railroad Commission of Texas	Texas Gas Services Company	GUD 10928	Depreciation rates, service lives, net salvage	Gulf Coast Service Area Steering Committee
Public Utilities Commission of the State of California	Southern California Edison	A.19-08-013	Depreciation rates, service lives, net salvage	The Utility Reform Network
Massachusetts Department of Public Utilities	NSTAR Gas Company	D.P.U. 19-120	Depreciation rates, service lives, net salvage	Massachusetts Office of the Attorney General, Office of Ratepayer Advocacy
Georgia Public Service Commission	Liberty Utilities (Peach State Natural Gas)	42959	Depreciation rates, service lives, net salvage	Public Interest Advocacy Staff
Florida Public Service Commission	Florida Public Utilities Company	20190155-EI 20190156-EI 20190174-EI	Depreciation rates, service lives, net salvage	Florida Office of Public Counsel
Illinois Commerce Commission	Commonwealth Edison Company	20-0393	Depreciation rates, service lives, net salvage	The Office of the Illinois Attorney General
Public Utility Commission of Texas	Southwestern Public Service Company	PUC 49831	Depreciation rates, service lives, net salvage	Alliance of Xcel Municipalities
Public Service Commission of South Carolina	Blue Granite Water Company	2019-290-WS	Depreciation rates, service lives, net salvage	South Carolina Office of Regulatory Staff
Railroad Commission of Texas	CenterPoint Energy Resources	GUD 10920	Depreciation rates and grouping procedure	Alliance of CenterPoint Municipalities
Pennsylvania Public Utility Commission	Aqua Pennsylvania Wastewater / East Norriton Township	A-2019-3009052	Fair market value estimates for wastewater assets	Pennsylvania Office of Consumer Advocate
New Mexico Public Regulation Commission	Southwestern Public Service Company	19-00170-UT	Cost of capital and authorized rate of return	The New Mexico Large Customer Group; Occidental Permian
Indiana Utility Regulatory Commission	Duke Energy Indiana	45253	Cost of capital, depreciation rates, net salvage	Indiana Office of Utility Consumer Counselor

Utility Regulatory Proceedings

Regulatory Agency	Utility Applicant	Docket Number	Issues Addressed	Parties Represented
Maryland Public Service Commission	Columbia Gas of Maryland	9609	Depreciation rates, service lives, net salvage	Maryland Office of People's Counsel
Washington Utilities & Transportation Commission	Avista Corporation	UE-190334	Cost of capital, awarded rate of return, capital structure	Washington Office of Attorney General
Indiana Utility Regulatory Commission	Indiana Michigan Power Company	45235	Cost of capital, depreciation rates, net salvage	Indiana Office of Utility Consumer Counselor
Public Utilities Commission of the State of California	Pacific Gas & Electric Company	18-12-009	Depreciation rates, service lives, net salvage	The Utility Reform Network
Oklahoma Corporation Commission	The Empire District Electric Company	PUD 201800133	Cost of capital, authorized ROE, depreciation rates	Oklahoma Industrial Energy Consumers and Oklahoma Energy Results
Arkansas Public Service Commission	Southwestern Electric Power Company	19-008-U	Cost of capital, depreciation rates, net salvage	Western Arkansas Large Energy Consumers
Public Utility Commission of Texas	CenterPoint Energy Houston Electric	PUC 49421	Depreciation rates, service lives, net salvage	Texas Coast Utilities Coalition
Massachusetts Department of Public Utilities	Massachusetts Electric Company and Nantucket Electric Company	D.P.U. 18-150	Depreciation rates, service lives, net salvage	Massachusetts Office of the Attorney General, Office of Ratepayer Advocacy
Oklahoma Corporation Commission	Oklahoma Gas & Electric Company	PUD 201800140	Cost of capital, authorized ROE, depreciation rates	Oklahoma Industrial Energy Consumers and Oklahoma Energy Results
Public Service Commission of the State of Montana	Montana-Dakota Utilities Company	D2018.9.60	Depreciation rates, service lives, net salvage	Montana Consumer Counsel and Denbury Onshore
Indiana Utility Regulatory Commission	Northern Indiana Public Service Company	45159	Depreciation rates, grouping procedure, demolition costs	Indiana Office of Utility Consumer Counselor
Public Service Commission of the State of Montana	NorthWestern Energy	D2018.2.12	Depreciation rates, service lives, net salvage	Montana Consumer Counsel
Oklahoma Corporation Commission	Public Service Company of Oklahoma	PUD 201800097	Depreciation rates, service lives, net salvage	Oklahoma Industrial Energy Consumers and Wal-Mart
Nevada Public Utilities Commission	Southwest Gas Corporation	18-05031	Depreciation rates, service lives, net salvage	Nevada Bureau of Consumer Protection

Utility Regulatory Proceedings

Regulatory Agency	Utility Applicant	Docket Number	Issues Addressed	Parties Represented
Public Utility Commission of Texas	Texas-New Mexico Power Company	PUC 48401	Depreciation rates, service lives, net salvage	Alliance of Texas-New Mexico Power Municipalities
Oklahoma Corporation Commission	Oklahoma Gas & Electric Company	PUD 201700496	Depreciation rates, service lives, net salvage	Oklahoma Industrial Energy Consumers and Oklahoma Energy Results
Maryland Public Service Commission	Washington Gas Light Company	9481	Depreciation rates, service lives, net salvage	Maryland Office of People's Counsel
Indiana Utility Regulatory Commission	Citizens Energy Group	45039	Depreciation rates, service lives, net salvage	Indiana Office of Utility Consumer Counselor
Public Utility Commission of Texas	Entergy Texas, Inc.	PUC 48371	Depreciation rates, decommissioning costs	Texas Municipal Group
Washington Utilities & Transportation Commission	Avista Corporation	UE-180167	Depreciation rates, service lives, net salvage	Washington Office of Attorney General
New Mexico Public Regulation Commission	Southwestern Public Service Company	17-00255-UT	Cost of capital and authorized rate of return	HollyFrontier Navajo Refining; Occidental Permian
Public Utility Commission of Texas	Southwestern Public Service Company	PUC 47527	Depreciation rates, plant service lives	Alliance of Xcel Municipalities
Public Service Commission of the State of Montana	Montana-Dakota Utilities Company	D2017.9.79	Depreciation rates, service lives, net salvage	Montana Consumer Counsel
Florida Public Service Commission	Florida City Gas	20170179-GU	Cost of capital, depreciation rates	Florida Office of Public Counsel
Washington Utilities & Transportation Commission	Avista Corporation	UE-170485	Cost of capital and authorized rate of return	Washington Office of Attorney General
Wyoming Public Service Commission	Powder River Energy Corporation	10014-182-CA-17	Credit analysis, cost of capital	Private customer
Oklahoma Corporation Commission	Public Service Co. of Oklahoma	PUD 201700151	Depreciation, terminal salvage, risk analysis	Oklahoma Industrial Energy Consumers
Public Utility Commission of Texas	Oncor Electric Delivery Company	PUC 46957	Depreciation rates, simulated analysis	Alliance of Oncor Cities

Utility Regulatory Proceedings

Regulatory Agency	Utility Applicant	Docket Number	Issues Addressed	Parties Represented
Nevada Public Utilities Commission	Nevada Power Company	17-06004	Depreciation rates, service lives, net salvage	Nevada Bureau of Consumer Protection
Public Utility Commission of Texas	El Paso Electric Company	PUC 46831	Depreciation rates, interim retirements	City of El Paso
Idaho Public Utilities Commission	Idaho Power Company	IPC-E-16-24	Accelerated depreciation of North Valmy plant	Micron Technology, Inc.
Idaho Public Utilities Commission	Idaho Power Company	IPC-E-16-23	Depreciation rates, service lives, net salvage	Micron Technology, Inc.
Public Utility Commission of Texas	Southwestern Electric Power Company	PUC 46449	Depreciation rates, decommissioning costs	Cities Advocating Reasonable Deregulation
Massachusetts Department of Public Utilities	Eversource Energy	D.P.U. 17-05	Cost of capital, capital structure, and rate of return	Sunrun Inc.; Energy Freedom Coalition of America
Railroad Commission of Texas	Atmos Pipeline - Texas	GUD 10580	Depreciation rates, grouping procedure	City of Dallas
Public Utility Commission of Texas	Sharyland Utility Company	PUC 45414	Depreciation rates, simulated analysis	City of Mission
Oklahoma Corporation Commission	Empire District Electric Company	PUD 201600468	Cost of capital, depreciation rates	Oklahoma Industrial Energy Consumers
Railroad Commission of Texas	CenterPoint Energy Texas Gas	GUD 10567	Depreciation rates, simulated plant analysis	Texas Coast Utilities Coalition
Arkansas Public Service Commission	Oklahoma Gas & Electric Company	160-159-GU	Cost of capital, depreciation rates, terminal salvage	Arkansas River Valley Energy Consumers; Wal-Mart
Florida Public Service Commission	Peoples Gas	160-159-GU	Depreciation rates, service lives, net salvage	Florida Office of Public Counsel
Arizona Corporation Commission	Arizona Public Service Company	E-01345A-16-0036	Cost of capital, depreciation rates, terminal salvage	Energy Freedom Coalition of America
Nevada Public Utilities Commission	Sierra Pacific Power Company	16-06008	Depreciation rates, net salvage, theoretical reserve	Northern Nevada Utility Customers

Utility Regulatory Proceedings

Regulatory Agency	Utility Applicant	Docket Number	Issues Addressed	Parties Represented
Oklahoma Corporation Commission	Oklahoma Gas & Electric Co.	PUD 201500273	Cost of capital, depreciation rates, terminal salvage	Public Utility Division
Oklahoma Corporation Commission	Public Service Co. of Oklahoma	PUD 201500208	Cost of capital, depreciation rates, terminal salvage	Public Utility Division
Oklahoma Corporation Commission	Oklahoma Natural Gas Company	PUD 201500213	Cost of capital, depreciation rates, net salvage	Public Utility Division

Summary Depreciation Accrual Adjustment

2021 Depreciation Study				
Plant Function	Plant Balance 12/31/2021	NIPSCO Proposal	OUCC Proposal	OUCC Adjustment
Steam Production	\$ 2,430,305,511	\$ 150,788,813	\$ 153,847,973	\$ 3,059,160
Hydro Production	72,652,153	4,189,194	4,039,386	(149,808)
Other Production	238,227,658	8,329,665	8,151,577	(178,088)
Transmission	1,965,103,759	36,554,215	31,982,645	(4,571,570)
Distribution	2,636,720,069	59,620,185	54,742,857	(4,877,328)
General	109,608,318	3,286,420	3,287,012	592
Common	168,663,392	2,192,783	2,168,024	(24,759)
Total	\$ 7,621,280,859	\$ 264,961,275	\$ 258,219,472	\$ (6,741,803)

2023 Depreciation Study				
Plant Function	Plant Balance 12/31/2023	NIPSCO Proposal	OUCC Proposal	OUCC Adjustment
Steam Production	\$ 2,606,488,068	\$ 178,927,039	\$ 182,022,675	\$ 3,095,636
Hydro Production	77,928,624	4,807,463	4,634,566	(172,897)
Other Production	255,486,367	7,641,719	7,459,380	(182,339)
Transmission	2,294,700,214	44,703,116	38,854,641	(5,848,475)
Distribution	3,111,535,218	71,954,537	66,124,037	(5,830,500)
General	129,779,494	8,089,642	8,183,550	93,908
Common	174,292,164	5,795,810	5,720,369	(75,441)
Total	\$ 8,650,210,147	\$ 321,919,326	\$ 312,999,216	\$ (8,920,110)

Mass Property Parameter Comparison

Account No.	Description	NIPSCO Proposal				OUCC Proposal					
		Iowa Curve		Salvage Rate	Depr Rate	Annual Accrual	Iowa Curve		Salvage Rate	Depr Rate	Annual Accrual
		Type	AL				Type	AL			
Transmission											
352.00	STRUCTURES AND IMPROVEMENTS	R1.5	- 65	-15%	1.23%	930,110	R1.5	- 65	-11%	1.16%	875,829
353.00	STATION EQUIPMENT	S0	- 50	-15%	1.99%	17,853,298	L0.5	- 55	-11%	1.70%	15,289,516
354.00	TOWERS AND FIXTURES	R4	- 70	-30%	1.34%	1,929,382	R4	- 70	-26%	1.26%	1,814,605
355.00	POLES AND FIXTURES	R1	- 60	-35%	2.01%	9,721,473	R0.5	- 69	-35%	1.75%	8,434,528
356.00	OVERHEAD CONDUCTORS AND DEVICES	R2	- 65	-40%	1.81%	5,243,568	R2	- 71	-33%	1.62%	4,691,771
Distribution											
362.00	STATION EQUIPMENT	R1.5	- 50	-15%	2.11%	9,875,275	R1.5	- 50	-11%	2.01%	9,418,552
364.10	CUSTOMER TRANSFORMER STATION	S0	- 50	-55%	2.20%	1,059,116	S0	- 50	-51%	2.10%	1,011,327
364.20	POLES, TOWERS AND FIXTURES	R1	- 47	-55%	2.91%	15,186,592	R1	- 47	-51%	2.81%	14,640,440
365.00	OVERHEAD CONDUCTORS AND DEVICES	R1.5	- 60	-60%	1.93%	6,322,209	R1	- 68	-60%	1.79%	5,882,765
367.00	UNDERGROUND CONDUCTORS AND DEVICES	R2.5	- 52	-35%	2.42%	12,040,241	R2	- 57	-31%	2.09%	10,405,770
368.00	LINE TRANSFORMERS	S0	- 47	-10%	1.85%	5,905,062	S0	- 47	-6%	1.73%	5,542,689
369.10	OVERHEAD SERVICES	R1	- 47	-40%	1.26%	586,888	R1	- 47	-29%	0.98%	458,196
369.20	UNDERGROUND SERVICES	R3	- 70	-40%	1.31%	3,118,302	R3	- 70	-29%	1.13%	2,678,625
370.10	CUSTOMER METERING STATIONS	R2	- 50	-5%	1.44%	290,859	R2	- 50	-3%	1.39%	280,781
370.20	METERS	L0	- 24	-5%	4.40%	2,833,259	L0	- 24	-3%	4.28%	2,755,706
371.00	INSTALLATIONS ON CUSTOMERS' PREMISES	O1	- 20	-30%	3.66%	324,352	O1	- 20	-26%	3.40%	301,714
373.00	STREET LIGHTING AND SIGNAL SYSTEMS	L0	- 31	-30%	3.38%	1,837,248	O3	- 42	-30%	2.07%	1,125,384

2021 Detailed Rate Comparison

Account No.	Description	[1]	[2]		[3]		[4]	
		Plant 12/31/2021	NIPSCO Proposal		OUCC Proposal		OUCC Adjustment	
			Rate	Annual Accrual	Rate	Annual Accrual	Rate	Annual Accrual
Steam Production Plant								
311.00	STRUCTURES AND IMPROVEMENTS							
	MICHIGAN CITY GENERATING STATION	49,860,655	4.00%	1,992,819	4.27%	2,129,725	0.27%	136,906
	MICHIGAN CITY - UNIT 12	101,006,387	4.63%	4,673,580	4.90%	4,950,920	0.27%	277,340
	R M SCHAHFER GENERATING STATION	109,665,813	7.99%	8,767,537	8.05%	8,829,374	0.06%	61,837
	R M SCHAHFER - UNIT 14	7,254,941	0.09%	6,595	0.15%	10,686	0.06%	4,091
	R M SCHAHFER - UNIT 15	8,973,688	0.09%	8,158	0.15%	13,218	0.06%	5,060
	R M SCHAHFER - UNIT 17	136,293,713	7.71%	10,503,125	7.76%	10,579,976	0.05%	76,851
	R M SCHAHFER - UNIT 18	62,460,413	7.73%	4,828,658	7.79%	4,863,877	0.06%	35,219
	SUGAR CREEK	7,980,101	1.94%	154,496	1.89%	151,116	-0.05%	-3,380
	TOTAL ACCOUNT 311.00	483,495,712	6.40%	30,934,968	6.52%	31,528,891	0.12%	593,923
312.10	BOILER PLANT EQUIPMENT							
	MICHIGAN CITY GENERATING STATION	110,113,431	6.11%	6,731,655	6.39%	7,034,001	0.28%	302,346
	MICHIGAN CITY - UNIT 12	218,680,126	6.65%	14,535,016	6.92%	15,135,460	0.27%	600,444
	R M SCHAHFER GENERATING STATION	54,729,627	8.14%	4,457,505	8.20%	4,488,365	0.06%	30,860
	R M SCHAHFER - UNIT 14	49,723,376	0.09%	45,203	0.15%	73,240	0.06%	28,037
	R M SCHAHFER - UNIT 15	33,603,926	0.09%	30,549	0.15%	49,497	0.06%	18,948
	R M SCHAHFER - UNIT 17	189,794,022	8.04%	15,253,332	8.09%	15,360,350	0.05%	107,018
	R M SCHAHFER - UNIT 18	192,698,651	8.08%	15,579,156	8.14%	15,687,812	0.06%	108,656
	SUGAR CREEK	90,321,674	2.02%	1,824,422	1.97%	1,776,306	-0.05%	-48,116
	TOTAL ACCOUNT 312.10	939,664,833	6.22%	58,456,838	6.34%	59,605,031	0.12%	1,148,193
312.20	BOILER PLANT - MOBILE FUEL HANDLING AND STORAGE							
	MICHIGAN CITY GENERATING STATION	7,955,844	3.71%	294,860	3.98%	316,705	0.27%	21,845
	R M SCHAHFER - UNITS 14, 15, 17 AND 18	766,549	3.34%	25,593	3.67%	28,116	0.33%	2,523
	R M SCHAHFER GENERATING STATION	15,943,264	7.52%	1,198,389	7.57%	1,207,378	0.05%	8,989
	TOTAL ACCOUNT 312.20	24,665,657	6.16%	1,518,842	6.29%	1,552,199	0.14%	33,357
312.30	BOILER PLANT - UNIT TRAIN COAL CARS							
	R M SCHAHFER GENERATING STATION	1,164,024	7.64%	88,979	7.64%	88,979	0.00%	0
	TOTAL ACCOUNT 312.30	1,164,024	7.64%	88,979	7.64%	88,979	0.00%	0

2021 Detailed Rate Comparison

Account No.	Description	[1]	[2]		[3]		[4]	
		Plant 12/31/2021	NIPSCO Proposal		OUCC Proposal		OUCC Adjustment	
			Rate	Annual Accrual	Rate	Annual Accrual	Rate	Annual Accrual
312.40	BOILER PLANT - SO2 PLANT EQUIPMENT							
	MICHIGAN CITY - UNIT 12	207,071,320	7.03%	14,566,402	7.31%	15,134,971	0.28%	568,569
	R M SCHAHFER GENERATING STATION	4,933,147	8.26%	407,320	8.31%	410,102	0.05%	2,782
	R M SCHAHFER - UNIT 14	6,435,510	0.09%	5,850	0.15%	9,479	0.06%	3,629
	R M SCHAHFER - UNIT 15	23,150,635	0.09%	21,046	0.15%	34,100	0.06%	13,054
	R M SCHAHFER - UNIT 17	73,540,886	7.99%	5,872,578	8.04%	5,914,045	0.05%	41,467
	R M SCHAHFER - UNIT 18	65,161,880	8.00%	5,209,812	8.05%	5,246,554	0.05%	36,742
	TOTAL ACCOUNT 312.40	380,293,377	6.86%	26,083,008	7.03%	26,749,252	0.18%	666,244
312.50	BOILER PLANT - COAL PILE BASE							
	MICHIGAN CITY GENERATING STATION	664,033	3.33%	22,128	3.61%	23,952	0.28%	1,824
	R M SCHAHFER - UNIT 17	1,200,088	7.77%	93,218	7.82%	93,895	0.05%	677
	R M SCHAHFER - UNIT 18	1,200,088	7.77%	93,218	7.82%	93,895	0.05%	677
	TOTAL ACCOUNT 312.50	3,064,210	6.81%	208,564	6.91%	211,742	0.10%	3,178
314.00	TURBOGENERATOR UNITS							
	MICHIGAN CITY GENERATING STATION	1,459,627	4.74%	69,240	5.02%	73,247	0.28%	4,007
	MICHIGAN CITY - UNIT 12	93,680,757	5.76%	5,396,944	6.04%	5,654,169	0.28%	257,225
	R M SCHAHFER GENERATING STATION	2,669,941	7.37%	196,721	7.42%	198,226	0.05%	1,505
	R M SCHAHFER - UNIT 14	8,274,048	0.09%	7,522	0.15%	12,187	0.06%	4,665
	R M SCHAHFER - UNIT 15	14,130,189	0.09%	12,846	0.15%	20,813	0.06%	7,967
	R M SCHAHFER - UNIT 17	85,501,635	7.23%	6,181,259	7.29%	6,229,470	0.06%	48,211
	R M SCHAHFER - UNIT 18	93,471,189	7.28%	6,809,349	7.34%	6,862,054	0.06%	52,705
	SUGAR CREEK	55,352,855	2.22%	1,228,447	2.17%	1,202,451	-0.05%	-25,996
	TOTAL ACCOUNT 314.00	354,540,241	5.61%	19,902,328	5.71%	20,252,617	0.10%	350,289
315.00	ACCESSORY ELECTRIC EQUIPMENT							
	MICHIGAN CITY GENERATING STATION	20,833,837	3.57%	743,066	3.84%	800,271	0.27%	57,205
	MICHIGAN CITY - UNIT 12	33,042,559	3.57%	1,181,199	3.85%	1,271,926	0.28%	90,727
	R M SCHAHFER GENERATING STATION	30,080,118	7.29%	2,192,216	7.34%	2,209,177	0.05%	16,961
	R M SCHAHFER - UNIT 14	9,152,750	0.09%	8,321	0.15%	13,482	0.06%	5,161
	R M SCHAHFER - UNIT 15	6,314,515	0.09%	5,740	0.15%	9,301	0.06%	3,561
	R M SCHAHFER - UNIT 17	58,228,056	7.18%	4,182,966	7.24%	4,215,799	0.06%	32,833

2021 Detailed Rate Comparison

Account No.	Description	[1]	[2]		[3]		[4]	
		Plant 12/31/2021	NIPSCO Proposal		OUCC Proposal		OUCC Adjustment	
			Rate	Annual Accrual	Rate	Annual Accrual	Rate	Annual Accrual
	R M SCHAHFER - UNIT 18	42,552,975	7.25%	3,083,028	7.30%	3,107,022	0.05%	23,994
	SUGAR CREEK	4,712,045	1.90%	89,507	1.85%	87,296	-0.05%	-2,211
	TOTAL ACCOUNT 315.00	204,916,855	5.61%	11,486,043	5.72%	11,714,273	0.11%	228,230
316.00	MISCELLANEOUS POWER PLANT EQUIPMENT							
	MICHIGAN CITY GENERATING STATION	3,770,199	4.13%	155,684	4.40%	166,036	0.27%	10,352
	MICHIGAN CITY - UNIT 12	4,479,761	3.57%	160,049	3.85%	172,349	0.28%	12,300
	R M SCHAHFER GENERATING STATION	11,062,948	7.19%	795,064	7.24%	801,302	0.05%	6,238
	R M SCHAHFER - UNIT 14	981,905	0.09%	893	0.15%	1,446	0.06%	553
	R M SCHAHFER - UNIT 15	1,811,815	0.09%	1,647	0.15%	2,669	0.06%	1,022
	R M SCHAHFER - UNIT 17	6,188,369	7.25%	448,920	7.31%	452,409	0.06%	3,489
	R M SCHAHFER - UNIT 18	6,327,483	7.25%	458,858	7.31%	462,426	0.06%	3,568
	SUGAR CREEK	3,878,122	2.27%	88,128	2.23%	86,351	-0.04%	-1,777
	TOTAL ACCOUNT 316.00	38,500,602	5.48%	2,109,243	5.57%	2,144,990	0.09%	35,747
	Total Steam Production Plant	2,430,305,511	6.20%	150,788,813	6.33%	153,847,973	0.13%	3,059,160
	Hydro Plant							
331.00	STRUCTURES AND IMPROVEMENTS							
	NORWAY GENERATING STATION	3,420,762	4.04%	138,117	3.87%	132,495	-0.17%	-5,622
	OAKDALE GENERATING STATION	6,803,370	4.11%	279,814	3.87%	263,582	-0.24%	-16,232
	TOTAL ACCOUNT 331.00	10,224,133	4.09%	417,931	3.87%	396,077	-0.21%	-21,854
332.00	RESERVOIRS, DAMS AND WATERWAYS							
	NORWAY GENERATING STATION	27,767,538	6.45%	1,790,921	6.27%	1,742,302	-0.18%	-48,619
	OAKDALE GENERATING STATION	18,138,018	6.36%	1,153,491	6.11%	1,107,894	-0.25%	-45,597
	TOTAL ACCOUNT 332.00	45,905,555	6.41%	2,944,412	6.21%	2,850,195	-0.21%	-94,217
333.00	WATER WHEELS, TURBINES AND GENERATORS							
	NORWAY GENERATING STATION	7,170,120	5.39%	386,538	5.23%	374,728	-0.16%	-11,810
	OAKDALE GENERATING STATION	6,162,934	4.86%	299,732	4.61%	284,355	-0.25%	-15,377

2021 Detailed Rate Comparison

Account No.	Description	[1]	[2]		[3]		[4]	
		Plant 12/31/2021	NIPSCO Proposal		OUCC Proposal		OUCC Adjustment	
			Rate	Annual Accrual	Rate	Annual Accrual	Rate	Annual Accrual
	TOTAL ACCOUNT 333.00	13,333,053	5.15%	686,270	4.94%	659,083	-0.20%	-27,187
334.00	ACCESSORY ELECTRIC EQUIPMENT							
	NORWAY GENERATING STATION	1,615,096	3.79%	61,247	3.61%	58,240	-0.18%	-3,007
	OAKDALE GENERATING STATION	801,808	5.19%	41,626	4.94%	39,570	-0.25%	-2,056
	TOTAL ACCOUNT 334.00	2,416,904	4.26%	102,873	4.05%	97,810	-0.21%	-5,063
335.00	MISCELLANEOUS POWER PLANT EQUIPMENT							
	NORWAY GENERATING STATION	657,292	4.96%	32,613	4.78%	31,407	-0.18%	-1,206
	OAKDALE GENERATING STATION	115,216	4.42%	5,095	4.18%	4,814	-0.24%	-281
	TOTAL ACCOUNT 335.00	772,508	4.88%	37,708	4.69%	36,221	-0.19%	-1,487
	<u>Total Hydro Plant</u>	72,652,153	5.77%	4,189,194	5.56%	4,039,386	-0.21%	-149,808
	<u>Other Production Plant</u>							
341.00	STRUCTURES AND IMPROVEMENTS							
	R M SCHAFFER - UNITS 16A AND 16B	2,235,015	4.27%	95,480	4.07%	91,053	-0.20%	-4,427
	SUGAR CREEK	11,735,457	2.37%	278,457	2.36%	277,421	-0.01%	-1,036
	TOTAL ACCOUNT 341.00	13,970,472	2.68%	373,937	2.64%	368,474	-0.04%	-5,463
342.00	FUEL HOLDERS, PRODUCERS AND ACCESSORIES							
	R M SCHAFFER - UNITS 16A AND 16B	5,229,879	4.11%	214,692	3.85%	201,348	-0.26%	-13,344
	R M SCHAFFER - UNIT 16A	2,214,318	4.17%	92,432	3.91%	86,596	-0.26%	-5,836
	R M SCHAFFER - UNIT 16B	1,297,415	4.27%	55,426	4.07%	52,750	-0.20%	-2,676
	SUGAR CREEK	3,078,423	1.92%	59,188	1.91%	58,839	-0.01%	-349
	TOTAL ACCOUNT 342.00	11,820,034	3.57%	421,738	3.38%	399,534	-0.19%	-22,204
343.00	PRIME MOVERS							
	R M SCHAFFER - UNITS 16A AND 16B	2,408,332	2.03%	48,967	1.81%	43,608	-0.22%	-5,359
	R M SCHAFFER - UNIT 16A	9,216,092	1.93%	177,929	1.70%	156,851	-0.23%	-21,078

2021 Detailed Rate Comparison

Account No.	Description	[1]	[2]		[3]		[4]		
		Plant 12/31/2021	NIPSCO Proposal		OUCC Proposal		OUCC Adjustment		
			Rate	Annual Accrual	Rate	Annual Accrual	Rate	Annual Accrual	
	R M SCHAHFER - UNIT 16B	22,144,488	7.06%	1,564,285	6.85%	1,517,871	-0.21%	-46,414	
	SUGAR CREEK	73,680,825	2.88%	2,120,359	2.86%	2,110,678	-0.02%	-9,681	
	TOTAL ACCOUNT 343.00	107,449,737	3.64%	3,911,540	3.56%	3,829,008	-0.08%	-82,532	
344.00	GENERATORS								
	R M SCHAHFER - UNIT 16A	4,997,754	4.58%	228,780	4.37%	218,321	-0.21%	-10,459	
	R M SCHAHFER - UNIT 16B	2,436,314	2.98%	72,706	2.74%	66,736	-0.24%	-5,970	
	SUGAR CREEK	38,919,849	2.13%	830,374	2.12%	825,005	-0.01%	-5,369	
	TOTAL ACCOUNT 344.00	46,353,918	2.44%	1,131,860	2.39%	1,110,062	-0.05%	-21,798	
344.10	GENERATORS - SOLAR	945,974	5.35%	50,648	5.35%	50,648	0.00%	0	
345.00	ACCESSORY ELECTRIC EQUIPMENT								
	R M SCHAHFER - UNITS 16A AND 16B	16,460,198	8.96%	1,474,638	8.73%	1,436,971	-0.23%	-37,667	
	R M SCHAHFER - UNIT 16A	736,827	0.21%	1,529	-0.01%	-84	-0.22%	-1,613	
	R M SCHAHFER - UNIT 16B	1,269,902	0.20%	2,550	-0.01%	-139	-0.21%	-2,689	
	SUGAR CREEK	33,222,856	2.39%	795,207	2.38%	792,298	-0.01%	-2,909	
	TOTAL ACCOUNT 345.00	51,689,783	4.40%	2,273,924	4.31%	2,229,046	-0.09%	-44,878	
345.10	ACCESSORY ELECTRIC EQUIPMENT - SOLAR	236,494	5.35%	12,662	5.35%	12,662	0.00%	0	
346.00	MISCELLANEOUS POWER PLANT EQUIPMENT								
	R M SCHAHFER - UNITS 16A AND 16B	337,119	6.08%	20,489	5.84%	19,696	-0.24%	-793	
	SUGAR CREEK	5,424,128	2.45%	132,867	2.44%	132,445	-0.01%	-422	
	TOTAL ACCOUNT 346.00	5,761,246	2.66%	153,356	2.64%	152,141	-0.02%	-1,215	
	Total Other Production Plant	238,227,658	3.50%	8,329,665	3.42%	8,151,577	-0.07%	-178,088	
	Transmission Plant								
350.20	LAND RIGHTS	69,313,829	1.18%	818,854	1.18%	818,840	0.00%	-14	
352.00	STRUCTURES AND IMPROVEMENTS	75,707,161	1.23%	930,110	1.16%	875,829	-0.07%	-54,281	

2021 Detailed Rate Comparison

Account No.	Description	[1]	[2]		[3]		[4]	
		Plant 12/31/2021	NIPSCO Proposal		OUCC Proposal		OUCC Adjustment	
			Rate	Annual Accrual	Rate	Annual Accrual	Rate	Annual Accrual
353.00	STATION EQUIPMENT	899,272,083	1.99%	17,853,298	1.70%	15,289,516	-0.29%	-2,563,782
354.00	TOWERS AND FIXTURES	143,767,014	1.34%	1,929,382	1.26%	1,814,605	-0.08%	-114,777
355.00	POLES AND FIXTURES	483,280,228	2.01%	9,721,473	1.75%	8,434,528	-0.26%	-1,286,945
356.00	OVERHEAD CONDUCTORS AND DEVICES	289,774,134	1.81%	5,243,568	1.62%	4,691,771	-0.19%	-551,797
357.00	UNDERGROUND CONDUIT	740,689	0.32%	2,387	0.32%	2,389	0.00%	2
358.00	UNDERGROUND CONDUCTORS AND DEVICES	3,172,674	1.73%	54,890	1.73%	54,914	0.00%	24
359.00	ROADS AND TRAILS	75,948	0.33%	253	0.33%	253	0.00%	0
Total Transmission Plant		1,965,103,759	1.86%	36,554,215	1.63%	31,982,645	-0.23%	-4,571,570
Distribution Plant								
360.20	LAND RIGHTS	1,166,004	1.22%	14,201	1.22%	14,197	0.00%	-4
361.00	STRUCTURES AND IMPROVEMENTS	14,259,786	1.12%	159,695	1.12%	159,795	0.00%	100
362.00	STATION EQUIPMENT	468,391,384	2.11%	9,875,275	2.01%	9,418,552	-0.10%	-456,723
364.10	CUSTOMER TRANSFORMER STATION	48,188,472	2.20%	1,059,116	2.10%	1,011,327	-0.10%	-47,789
364.20	POLES, TOWERS AND FIXTURES	521,434,383	2.91%	15,186,592	2.81%	14,640,440	-0.10%	-546,152
365.00	OVERHEAD CONDUCTORS AND DEVICES	328,284,426	1.93%	6,322,209	1.79%	5,882,765	-0.14%	-439,444
366.00	UNDERGROUND CONDUIT	5,056,449	1.32%	66,886	1.32%	66,917	0.00%	31
367.00	UNDERGROUND CONDUCTORS AND DEVICES	498,298,377	2.42%	12,040,241	2.09%	10,405,770	-0.33%	-1,634,471
368.00	LINE TRANSFORMERS	320,043,987	1.85%	5,905,062	1.73%	5,542,689	-0.12%	-362,373
369.10	OVERHEAD SERVICES	46,652,003	1.26%	586,888	0.98%	458,196	-0.28%	-128,692
369.20	UNDERGROUND SERVICES	237,201,062	1.31%	3,118,302	1.13%	2,678,625	-0.18%	-439,677
370.10	CUSTOMER METERING STATIONS	20,207,959	1.44%	290,859	1.39%	280,781	-0.05%	-10,078
370.20	METERS	64,343,298	4.40%	2,833,259	4.28%	2,755,706	-0.12%	-77,553
371.00	INSTALLATIONS ON CUSTOMERS' PREMISES	8,867,144	3.66%	324,352	3.40%	301,714	-0.26%	-22,638
373.00	STREET LIGHTING AND SIGNAL SYSTEMS	54,325,336	3.38%	1,837,248	2.07%	1,125,384	-1.31%	-711,864
Total Distribution Plant		2,636,720,069	2.26%	59,620,185	2.08%	54,742,857	-0.18%	-4,877,328
General Plant								
390.00	STRUCTURES AND IMPROVEMENTS	20,500,123	1.30%	266,595	1.30%	266,906	0.00%	311
391.10	OFFICE FURNITURE AND EQUIPMENT							

2021 Detailed Rate Comparison

Account No.	Description	[1]	[2]		[3]		[4]	
		Plant	NIPSCO Proposal		OUCC Proposal		OUCC Adjustment	
		12/31/2021	Rate	Annual Accrual	Rate	Annual Accrual	Rate	Annual Accrual
	FULLY ACCRUED	33,853	0.00%	0	0.00%	0	0.00%	0
	AMORTIZED	4,016,012	3.65%	146,441	3.66%	147,175	0.01%	734
	TOTAL ACCOUNT 391.10	4,049,864	3.62%	146,441	3.63%	147,175	0.02%	734
391.20	COMPUTERS AND PERIPHERAL EQUIPMENT	18,932,883	14.29%	2,704,897	14.30%	2,708,095	0.01%	3,198
393.00	STORES EQUIPMENT	835,159	1.11%	9,268	1.11%	9,292	0.00%	24
394.00	TOOLS, SHOP AND GARAGE EQUIPMENT	23,869,800	3.57%	852,496	3.57%	853,101	0.00%	605
395.00	LABORATORY EQUIPMENT							
	FULLY ACCRUED	93,530	0.00%	0	0.00%	0	0.00%	0
	AMORTIZED	5,777,991	1.29%	74,738	1.29%	74,786	0.00%	48
	TOTAL ACCOUNT 395.00	5,871,522	1.27%	74,738	1.27%	74,786	0.00%	48
397.00	COMMUNICATION EQUIPMENT							
	FULLY ACCRUED	58,340	0.00%	0	0.00%	0	0.00%	0
	AMORTIZED	32,288,117	7.03%	2,268,984	7.01%	2,264,320	-0.02%	-4,664
	TOTAL ACCOUNT 397.00	32,346,457	7.01%	2,268,984	7.00%	2,264,320	-0.01%	-4,664
398.00	MISCELLANEOUS EQUIPMENT	3,202,511	5.09%	163,001	5.10%	163,337	0.01%	336
	ACCOUNT 391.2 RESERVE AMORTIZATION			-3,200,000		-3,200,000		
	Total General Plant	109,608,318	3.00%	3,286,420	3.00%	3,287,012	0.00%	592
	TOTAL ELECTRIC PLANT	7,452,617,467	3.53%	262,768,492	3.44%	256,051,448	-0.09%	-6,717,044
	Common Plant							
390.00	STRUCTURES AND IMPROVEMENTS	110,350,105	2.04%	2,256,222	2.04%	2,254,658	0.00%	-1,564
391.10	OFFICE FURNITURE AND EQUIPMENT							
	FULLY ACCRUED	142	0.00%	0	0.00%	0	0.00%	0
	AMORTIZED	5,392,216	4.69%	252,975	4.70%	253,581	0.01%	606
	TOTAL ACCOUNT 391.10	5,392,357	4.69%	252,975	4.70%	253,581	0.01%	606

2021 Detailed Rate Comparison

Account No.	Description	[1]	[2]		[3]		[4]	
		Plant 12/31/2021	NIPSCO Proposal		OUCC Proposal		OUCC Adjustment	
			Rate	Annual Accrual	Rate	Annual Accrual	Rate	Annual Accrual
391.20	COMPUTERS AND PERIPHERAL EQUIPMENT	14,931,367	10.82%	1,616,075	10.66%	1,591,647	-0.16%	-24,428
393.00	STORES EQUIPMENT	2,530,710	4.12%	104,299	4.12%	104,353	0.00%	54
394.00	TOOLS, SHOP AND GARAGE EQUIPMENT							
	FULLY ACCRUED	5,156	0.00%	0	0.00%	0	0.00%	0
	AMORTIZED	7,765,126	0.87%	67,424	0.87%	67,343	0.00%	-81
	TOTAL ACCOUNT 394.00	<u>7,770,282</u>	<u>0.87%</u>	<u>67,424</u>	<u>0.87%</u>	<u>67,343</u>	<u>0.00%</u>	<u>-81</u>
395.00	LABORATORY EQUIPMENT	1,608,110	4.81%	77,395	4.80%	77,213	-0.01%	-182
397.00	COMMUNICATION EQUIPMENT							
	FULLY ACCRUED	1,015,147	0.00%	0	0.00%	0	0.00%	0
	AMORTIZED	22,140,986	6.73%	1,489,224	6.73%	1,490,069	0.00%	845
	TOTAL ACCOUNT 397.00	<u>23,156,133</u>	<u>6.43%</u>	<u>1,489,224</u>	<u>6.43%</u>	<u>1,490,069</u>	<u>0.00%</u>	<u>845</u>
398.00	MISCELLANEOUS EQUIPMENT	2,924,326	2.37%	69,169	2.37%	69,161	0.00%	-8
	RESERVE ADJUSTMENT FOR AMORTIZATION							
391.10	OFFICE FURNITURE AND EQUIPMENT			-2,200,000		-2,200,000		0
397.00	COMMUNICATION EQUIPMENT			-1,540,000		-1,540,000		0
	Total Common Plant	<u><u>168,663,392</u></u>	<u><u>1.30%</u></u>	<u><u>2,192,783</u></u>	<u><u>1.29%</u></u>	<u><u>2,168,024</u></u>	<u><u>-0.01%</u></u>	<u><u>-24,759</u></u>
	TOTAL PLANT STUDIED	<u><u>7,621,280,859</u></u>	<u><u>3.48%</u></u>	<u><u>264,961,275</u></u>	<u><u>3.39%</u></u>	<u><u>258,219,472</u></u>	<u><u>-0.09%</u></u>	<u><u>-6,741,803</u></u>

[1], [2] From Company depreciation study

[3] From Attachment DJG-2-5

[4] = [3] - [2]

2021 Depreciation Rate Development

Account No.	Description	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8] [9]	
		Original Cost	Iowa Curve Type AL	Net Salvage	Depreciable Base	Book Reserve	Future Accruals	Remaining Life	Accrual	Rate
Steam Production Plant										
311.00	STRUCTURES AND IMPROVEMENTS									
	MICHIGAN CITY GENERATING STATION	49,860,655	R2.5 - 110	-8%	53,859,650	30,432,676	23,426,974	11.00	2,129,725	4.27%
	MICHIGAN CITY - UNIT 12	101,006,387	R2.5 - 110	-8%	109,107,445	54,647,324	54,460,121	11.00	4,950,920	4.90%
	R M SCHAHFER GENERATING STATION	109,665,813	R2.5 - 110	-9%	119,119,279	21,996,169	97,123,110	11.00	8,829,374	8.05%
	R M SCHAHFER - UNIT 14	7,254,941	R2.5 - 110	-9%	7,880,335	7,762,787	117,548	11.00	10,686	0.15%
	R M SCHAHFER - UNIT 15	8,973,688	R2.5 - 110	-9%	9,747,242	9,601,846	145,396	11.00	13,218	0.15%
	R M SCHAHFER - UNIT 17	136,293,713	R2.5 - 110	-9%	148,042,570	31,662,830	116,379,740	11.00	10,579,976	7.76%
	R M SCHAHFER - UNIT 18	62,460,413	R2.5 - 110	-9%	67,844,656	14,342,013	53,502,643	11.00	4,863,877	7.79%
	SUGAR CREEK	7,980,101	R2.5 - 110	-18%	9,430,072	2,629,867	6,800,205	45.00	151,116	1.89%
	TOTAL ACCOUNT 311.00	483,495,712		-9%	525,031,250	173,075,512	351,955,738	11.16	31,528,891	6.52%
312.10	BOILER PLANT EQUIPMENT									
	MICHIGAN CITY GENERATING STATION	110,113,431	S0 - 55	-8%	118,944,905	41,570,898	77,374,007	11.00	7,034,001	6.39%
	MICHIGAN CITY - UNIT 12	218,680,126	S0 - 55	-8%	236,219,021	69,728,959	166,490,062	11.00	15,135,460	6.92%
	R M SCHAHFER GENERATING STATION	54,729,627	S0 - 55	-9%	59,447,457	10,075,439	49,372,018	11.00	4,488,365	8.20%
	R M SCHAHFER - UNIT 14	49,723,376	S0 - 55	-9%	54,009,655	53,204,013	805,642	11.00	73,240	0.15%
	R M SCHAHFER - UNIT 15	33,603,926	S0 - 55	-9%	36,500,668	35,956,201	544,467	11.00	49,497	0.15%
	R M SCHAHFER - UNIT 17	189,794,022	S0 - 55	-9%	206,154,739	37,190,891	168,963,848	11.00	15,360,350	8.09%
	R M SCHAHFER - UNIT 18	192,698,651	S0 - 55	-9%	209,309,755	36,743,827	172,565,928	11.00	15,687,812	8.14%
	SUGAR CREEK	90,321,674	S0 - 55	-18%	106,732,967	42,963,577	63,769,390	35.90	1,776,306	1.97%
	TOTAL ACCOUNT 312.10	939,664,833		-9%	1,027,319,165	327,433,805	699,885,360	11.74	59,605,031	6.34%
312.20	BOILER PLANT - MOBILE FUEL HANDLING AND STORAGE									
	MICHIGAN CITY GENERATING STATION	7,955,844	S0 - 55	-8%	8,593,930	5,110,180	3,483,750	11.00	316,705	3.98%
	R M SCHAHFER - UNITS 14, 15, 17 AND 18	766,549	S0 - 55	-9%	832,628	523,355	309,273	11.00	28,116	3.67%
	R M SCHAHFER GENERATING STATION	15,943,264	S0 - 55	-9%	17,317,613	4,036,451	13,281,162	11.00	1,207,378	7.57%
	TOTAL ACCOUNT 312.20	24,665,657		-8%	26,744,171	9,669,986	17,074,185	11.00	1,552,199	6.29%
312.30	BOILER PLANT - UNIT TRAIN COAL CARS									
	R M SCHAHFER GENERATING STATION	1,164,024	R2.5 - 25	0%	1,164,024	185,256	978,768	11.00	88,979	7.64%
	TOTAL ACCOUNT 312.30	1,164,024		0%	1,164,024	185,256	978,768	11.00	88,979	7.64%
312.40	BOILER PLANT - SO2 PLANT EQUIPMENT									
	MICHIGAN CITY - UNIT 12	207,071,320	S0 - 55	-8%	223,679,149	57,194,464	166,484,685	11.00	15,134,971	7.31%
	R M SCHAHFER GENERATING STATION	4,933,147	S0 - 55	-9%	5,358,396	847,278	4,511,118	11.00	410,102	8.31%
	R M SCHAHFER - UNIT 14	6,435,510	S0 - 55	-9%	6,990,267	6,885,995	104,272	11.00	9,479	0.15%
	R M SCHAHFER - UNIT 15	23,150,635	S0 - 55	-9%	25,146,277	24,771,179	375,098	11.00	34,100	0.15%
	R M SCHAHFER - UNIT 17	73,540,886	S0 - 55	-9%	79,880,293	14,825,795	65,054,498	11.00	5,914,045	8.04%
	R M SCHAHFER - UNIT 18	65,161,880	S0 - 55	-9%	70,778,996	13,066,897	57,712,099	11.00	5,246,554	8.05%

2021 Depreciation Rate Development

Account No.	Description	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]		[9]	
		Original Cost	Iowa Curve		Net Salvage	Depreciable Base	Book Reserve	Future Accruals	Remaining Life	Total		Rate
			Type	AL						Accrual	Rate	
	TOTAL ACCOUNT 312.40	380,293,377		-8%	411,833,377	117,591,608	294,241,769	11.00	26,749,252		7.03%	
312.50	BOILER PLANT - COAL PILE BASE											
	MICHIGAN CITY GENERATING STATION	664,033	S0 - 55	-8%	717,291	453,824	263,467	11.00	23,952		3.61%	
	R M SCHAHFER - UNIT 17	1,200,088	S0 - 55	-9%	1,303,539	270,694	1,032,845	11.00	93,895		7.82%	
	R M SCHAHFER - UNIT 18	1,200,088	S0 - 55	-9%	1,303,539	270,693	1,032,846	11.00	93,895		7.82%	
	TOTAL ACCOUNT 312.50	3,064,210		-8%	3,324,368	995,211	2,329,157	0.00	211,742		6.91%	
314.00	TURBOGENERATOR UNITS											
	MICHIGAN CITY GENERATING STATION	1,459,627	R2 - 60	-8%	1,576,694	770,973	805,721	11.00	73,247		5.02%	
	MICHIGAN CITY - UNIT 12	93,680,757	R2 - 60	-8%	101,194,274	38,998,414	62,195,860	11.00	5,654,169		6.04%	
	R M SCHAHFER GENERATING STATION	2,669,941	R2 - 60	-9%	2,900,097	719,611	2,180,486	11.00	198,226		7.42%	
	R M SCHAHFER - UNIT 14	8,274,048	R2 - 60	-9%	8,987,292	8,853,231	134,061	11.00	12,187		0.15%	
	R M SCHAHFER - UNIT 15	14,130,189	R2 - 60	-9%	15,348,246	15,119,302	228,944	11.00	20,813		0.15%	
	R M SCHAHFER - UNIT 17	85,501,635	R2 - 60	-9%	92,872,089	24,347,922	68,524,167	11.00	6,229,470		7.29%	
	R M SCHAHFER - UNIT 18	93,471,189	R2 - 60	-9%	101,528,638	26,046,045	75,482,593	11.00	6,862,054		7.34%	
	SUGAR CREEK	55,352,855	R2 - 60	-18%	65,410,373	18,394,545	47,015,828	39.10	1,202,451		2.17%	
	TOTAL ACCOUNT 314.00	354,540,241		-10%	389,817,703	133,250,043	256,567,660	12.67	20,252,617		5.71%	
315.00	ACCESSORY ELECTRIC EQUIPMENT											
	MICHIGAN CITY GENERATING STATION	20,833,837	R2 - 65	-8%	22,504,782	13,701,804	8,802,978	11.00	800,271		3.84%	
	MICHIGAN CITY - UNIT 12	33,042,559	R2 - 65	-8%	35,692,685	21,701,502	13,991,183	11.00	1,271,926		3.85%	
	R M SCHAHFER GENERATING STATION	30,080,118	R2 - 65	-9%	32,673,099	8,372,151	24,300,948	11.00	2,209,177		7.34%	
	R M SCHAHFER - UNIT 14	9,152,750	R2 - 65	-9%	9,941,740	9,793,442	148,298	11.00	13,482		0.15%	
	R M SCHAHFER - UNIT 15	6,314,515	R2 - 65	-9%	6,858,841	6,756,531	102,310	11.00	9,301		0.15%	
	R M SCHAHFER - UNIT 17	58,228,056	R2 - 65	-9%	63,247,460	16,873,674	46,373,786	11.00	4,215,799		7.24%	
	R M SCHAHFER - UNIT 18	42,552,975	R2 - 65	-9%	46,221,147	12,043,905	34,177,242	11.00	3,107,022		7.30%	
	SUGAR CREEK	4,712,045	R2 - 65	-18%	5,568,215	2,050,199	3,518,016	40.30	87,296		1.85%	
	TOTAL ACCOUNT 315.00	204,916,855		-9%	222,707,970	91,293,208	131,414,762	11.22	11,714,273		5.72%	
316.00	MISCELLANEOUS POWER PLANT EQUIPMENT											
	MICHIGAN CITY GENERATING STATION	3,770,199	R1.5 - 70	-8%	4,072,581	2,246,186	1,826,395	11.00	166,036		4.40%	
	MICHIGAN CITY - UNIT 12	4,479,761	R1.5 - 70	-8%	4,839,053	2,943,210	1,895,843	11.00	172,349		3.85%	
	R M SCHAHFER GENERATING STATION	11,062,948	R1.5 - 70	-9%	12,016,602	3,202,277	8,814,325	11.00	801,302		7.24%	
	R M SCHAHFER - UNIT 14	981,905	R1.5 - 70	-9%	1,066,547	1,050,638	15,909	11.00	1,446		0.15%	
	R M SCHAHFER - UNIT 15	1,811,815	R1.5 - 70	-9%	1,967,998	1,938,642	29,356	11.00	2,669		0.15%	
	R M SCHAHFER - UNIT 17	6,188,369	R1.5 - 70	-9%	6,721,822	1,745,318	4,976,504	11.00	452,409		7.31%	
	R M SCHAHFER - UNIT 18	6,327,483	R1.5 - 70	-9%	6,872,928	1,786,240	5,086,688	11.00	462,426		7.31%	
	SUGAR CREEK	3,878,122	R1.5 - 70	-18%	4,582,770	1,059,630	3,523,140	40.80	86,351		2.23%	
	TOTAL ACCOUNT 316.00	38,500,602		-9%	42,140,302	15,972,141	26,168,161	12.20	2,144,990		5.57%	
	Total Steam Production Plant	2,430,305,511		-9%	2,650,082,330	869,466,770	1,780,615,560	11.57	153,847,973		6.33%	

2021 Depreciation Rate Development

Account No.	Description	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8] [9]		
		Original Cost	Iowa Curve		Net Salvage	Depreciable Base	Book Reserve	Future Accruals	Remaining Life	Total	
			Type	AL						Accrual	Rate
	R M SCHAHFER - UNITS 16A AND 16B	5,229,879	S2.5 - 50	-2%	5,331,620	4,405,418	926,202	4.60	201,348	3.85%	
	R M SCHAHFER - UNIT 16A	2,214,318	S2.5 - 50	-2%	2,257,395	1,850,392	407,003	4.70	86,596	3.91%	
	R M SCHAHFER - UNIT 16B	1,297,415	S2.5 - 50	-2%	1,322,654	1,074,728	247,926	4.70	52,750	4.07%	
	SUGAR CREEK	3,078,423	S2.5 - 50	-6%	3,254,543	1,807,103	1,447,440	24.60	58,839	1.91%	
	TOTAL ACCOUNT 342.00	11,820,034		-3%	12,166,213	9,137,641	3,028,572	7.58	399,534	3.38%	
343.00	PRIME MOVERS										
	R M SCHAHFER - UNITS 16A AND 16B	2,408,332	R1 - 50	-2%	2,455,183	2,245,867	209,316	4.80	43,608	1.81%	
	R M SCHAHFER - UNIT 16A	9,216,092	R1 - 50	-2%	9,395,380	8,642,494	752,886	4.80	156,851	1.70%	
	R M SCHAHFER - UNIT 16B	22,144,488	R1 - 50	-2%	22,575,283	15,137,714	7,437,569	4.90	1,517,871	6.85%	
	SUGAR CREEK	73,680,825	R1 - 50	-6%	77,896,197	27,873,122	50,023,075	23.70	2,110,678	2.86%	
	TOTAL ACCOUNT 343.00	107,449,737		-5%	112,322,044	53,899,197	58,422,847	15.26	3,829,008	3.56%	
344.00	GENERATORS										
	R M SCHAHFER - UNIT 16A	4,997,754	R3 - 55	-2%	5,094,980	4,025,205	1,069,775	4.90	218,321	4.37%	
	R M SCHAHFER - UNIT 16B	2,436,314	R3 - 55	-2%	2,483,710	2,163,378	320,332	4.80	66,736	2.74%	
	SUGAR CREEK	38,919,849	R3 - 55	-6%	41,146,502	20,356,369	20,790,133	25.20	825,005	2.12%	
	TOTAL ACCOUNT 344.00	46,353,918		-5%	48,725,192	26,544,952	22,180,240	19.98	1,110,062	2.39%	
344.10	GENERATORS - SOLAR	945,974	S2.5 - 20	0%	945,974	59,628	886,346	17.50	50,648	5.35%	
345.00	ACCESSORY ELECTRIC EQUIPMENT										
	R M SCHAHFER - UNITS 16A AND 16B	16,460,198	S1 - 50	-2%	16,780,413	9,595,558	7,184,855	5.00	1,436,971	8.73%	
	R M SCHAHFER - UNIT 16A	736,827	S1 - 50	-2%	751,161	751,564	-403	4.80	-84	-0.01%	
	R M SCHAHFER - UNIT 16B	1,269,902	S1 - 50	-2%	1,294,606	1,295,300	-694	5.00	-139	-0.01%	
	SUGAR CREEK	33,222,856	S1 - 50	-6%	35,123,577	16,742,262	18,381,315	23.20	792,298	2.38%	
	TOTAL ACCOUNT 345.00	51,689,783		-4%	53,949,757	28,384,684	25,565,073	11.47	2,229,046	4.31%	
345.10	ACCESSORY ELECTRIC EQUIPMENT - SOLAR	236,494	S2.5 - 20	0%	236,494	14,907	221,587	17.50	12,662	5.35%	
346.00	MISCELLANEOUS POWER PLANT EQUIPMENT										
	R M SCHAHFER - UNITS 16A AND 16B	337,119	R2.5 - 55	-2%	343,677	245,199	98,478	5.00	19,696	5.84%	
	SUGAR CREEK	5,424,128	R2.5 - 55	-6%	5,734,449	2,423,320	3,311,129	25.00	132,445	2.44%	
	TOTAL ACCOUNT 346.00	5,761,246		-6%	6,078,126	2,668,519	3,409,607	22.41	152,141	2.64%	
	Total Other Production Plant	238,227,658		-5%	249,109,150	128,133,270	120,975,880	14.84	8,151,577	3.42%	
	Transmission Plant										
350.20	LAND RIGHTS	69,313,829	R4 - 75	0%	69,313,829	13,305,201	56,008,628	68.40	818,840	1.18%	

2021 Depreciation Rate Development

Account No.	Description	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8] [9]	
		Original Cost	Iowa Curve Type AL	Net Salvage	Depreciable Base	Book Reserve	Future Accruals	Remaining Life	Accrual	Rate
352.00	STRUCTURES AND IMPROVEMENTS	75,707,161	R1.5 - 65	-11%	84,034,949	34,900,938	49,134,011	56.10	875,829	1.16%
353.00	STATION EQUIPMENT	899,272,083	L0.5 - 55	-11%	998,192,012	296,556,111	701,635,901	45.89	15,289,516	1.70%
354.00	TOWERS AND FIXTURES	143,767,014	R4 - 70	-26%	181,146,437	89,145,964	92,000,473	50.70	1,814,605	1.26%
355.00	POLES AND FIXTURES	483,280,228	R0.5 - 69	-35%	652,428,307	116,245,373	536,182,934	63.57	8,434,528	1.75%
356.00	OVERHEAD CONDUCTORS AND DEVICES	289,774,134	R2 - 71	-33%	385,399,598	118,297,086	267,102,512	56.93	4,691,771	1.62%
357.00	UNDERGROUND CONDUIT	740,689	S4 - 65	-5%	777,723	701,513	76,210	31.90	2,389	0.32%
358.00	UNDERGROUND CONDUCTORS AND DEVICES	3,172,674	R1.5 - 50	-5%	3,331,308	1,052,365	2,278,943	41.50	54,914	1.73%
359.00	ROADS AND TRAILS	75,948	R4 - 70	0%	75,948	68,318	7,630	30.20	253	0.33%
Total Transmission Plant		1,965,103,759		-21%	2,374,700,112	670,272,869	1,704,427,243	53.29	31,982,645	1.63%
Distribution Plant										
360.20	LAND RIGHTS	1,166,004	R4 - 75	0%	1,166,004	332,653	833,351	58.70	14,197	1.22%
361.00	STRUCTURES AND IMPROVEMENTS	14,259,786	R1.5 - 65	-15%	16,398,753	9,160,023	7,238,730	45.30	159,795	1.12%
362.00	STATION EQUIPMENT	468,391,384	R1.5 - 50	-11%	519,914,436	140,346,798	379,567,638	40.30	9,418,552	2.01%
364.10	CUSTOMER TRANSFORMER STATION	48,188,472	S0 - 50	-51%	72,764,592	32,513,766	40,250,826	39.80	1,011,327	2.10%
364.20	POLES, TOWERS AND FIXTURES	521,434,383	R1 - 47	-51%	787,365,918	211,996,612	575,369,306	39.30	14,640,440	2.81%
365.00	OVERHEAD CONDUCTORS AND DEVICES	328,284,426	R1 - 68	-60%	525,255,081	200,055,840	325,199,241	55.28	5,882,765	1.79%
366.00	UNDERGROUND CONDUIT	5,056,449	S2.5 - 70	-5%	5,309,272	2,077,199	3,232,073	48.30	66,917	1.32%
367.00	UNDERGROUND CONDUCTORS AND DEVICES	498,298,377	R2 - 57	-31%	652,770,874	169,526,922	483,243,952	46.44	10,405,770	2.09%
368.00	LINE TRANSFORMERS	320,043,987	S0 - 47	-6%	339,246,626	140,818,355	198,428,271	35.80	5,542,689	1.73%
369.10	OVERHEAD SERVICES	46,652,003	R1 - 47	-29%	60,181,084	41,899,077	18,282,007	39.90	458,196	0.98%
369.20	UNDERGROUND SERVICES	237,201,062	R3 - 70	-29%	305,989,370	147,414,771	158,574,599	59.20	2,678,625	1.13%
370.10	CUSTOMER METERING STATIONS	20,207,959	R2 - 50	-3%	20,814,198	9,807,593	11,006,605	39.20	280,781	1.39%
370.20	METERS	64,343,298	L0 - 24	-3%	66,273,597	19,151,025	47,122,572	17.10	2,755,706	4.28%
371.00	INSTALLATIONS ON CUSTOMERS' PREMISES	8,867,144	O1 - 20	-26%	11,172,601	6,435,693	4,736,908	15.70	301,714	3.40%
373.00	STREET LIGHTING AND SIGNAL SYSTEMS	54,325,336	O3 - 42	-30%	70,622,937	24,921,112	45,701,825	40.61	1,125,384	2.07%
Total Distribution Plant		2,636,720,069		-31%	3,455,245,343	1,156,457,439	2,298,787,904	41.99	54,742,857	2.08%
General Plant										
390.00	STRUCTURES AND IMPROVEMENTS	20,500,123	R1.5 - 55	-10%	22,550,135	11,606,976	10,943,159	41.00	266,906	1.30%
391.10	OFFICE FURNITURE AND EQUIPMENT									
	FULLY ACCRUED	33,853			33,853	33,853	0			
	AMORTIZED	4,016,012	SQ - 20	0%	4,016,012	2,662,005	1,354,007	9.20	147,175	3.66%
	TOTAL ACCOUNT 391.10	4,049,864		0%	4,049,864	2,695,858	1,354,006	9.20	147,175	3.63%
391.20	COMPUTERS AND PERIPHERAL EQUIPMENT	18,932,883	SQ - 7	0%	18,932,883	8,371,314	10,561,569	3.90	2,708,095	14.30%
393.00	STORES EQUIPMENT	835,159	SQ - 30	0%	835,159	695,778	139,381	15.00	9,292	1.11%
394.00	TOOLS, SHOP AND GARAGE EQUIPMENT	23,869,800	SQ - 25	0%	23,869,800	9,537,710	14,332,090	16.80	853,101	3.57%

2021 Depreciation Rate Development

Account No.	Description	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]		[9]
		Original Cost	Iowa Curve Type AL	Net Salvage	Depreciable Base	Book Reserve	Future Accruals	Remaining Life	Accrual	Rate	
395.00	LABORATORY EQUIPMENT										
	FULLY ACCRUED	93,530			93,530	93,530	0				
	AMORTIZED	5,777,991	SQ - 20	0%	5,777,991	4,828,205	949,786	12.70	74,786	1.29%	
	TOTAL ACCOUNT 395.00	5,871,522		0%	5,871,522	4,921,735	949,787	12.70	74,786	1.27%	
397.00	COMMUNICATION EQUIPMENT										
	FULLY ACCRUED	58,340			58,340	58,340	0				
	AMORTIZED	32,288,117	SQ - 15	0%	32,288,117	7,607,027	24,681,090	10.90	2,264,320	7.01%	
	TOTAL ACCOUNT 397.00	32,346,457		0%	32,346,457	7,665,367	24,681,090	10.90	2,264,320	7.00%	
398.00	MISCELLANEOUS EQUIPMENT	3,202,511	SQ - 20	0%	3,202,511	1,144,462	2,058,049	12.60	163,337	5.10%	
	ACCOUNT 391.2 RESERVE AMORTIZATION					16,000,000			-3,200,000		
	Total General Plant	109,608,318		-2%	111,658,330	62,639,200	65,019,130	19.78	3,287,012	3.00%	
	TOTAL ELECTRIC PLANT	7,452,617,467		-20%	8,918,059,949	2,900,829,150	6,033,230,799	23.56	256,051,448	3.44%	
	Common Plant										
390.00	STRUCTURES AND IMPROVEMENTS	110,350,105	S0 - 50	-10%	121,385,116	43,824,882	77,560,234	34.40	2,254,658	2.04%	
391.10	OFFICE FURNITURE AND EQUIPMENT										
	FULLY ACCRUED	142			142	142	0				
	AMORTIZED	5,392,216	SQ - 20	0%	5,392,216	2,374,608	3,017,608	11.90	253,581	4.70%	
	TOTAL ACCOUNT 391.10	5,392,357		0%	5,392,357	2,374,749	3,017,608	11.90	253,581	4.70%	
391.20	COMPUTERS AND PERIPHERAL EQUIPMENT	14,931,367	SQ - 7	0%	14,931,367	11,111,414	3,819,952	2.40	1,591,647	10.66%	
393.00	STORES EQUIPMENT	2,530,710	SQ - 30	0%	2,530,710	1,288,912	1,241,798	11.90	104,353	4.12%	
394.00	TOOLS, SHOP AND GARAGE EQUIPMENT										
	FULLY ACCRUED	5,156			5,156	5,156	0				
	AMORTIZED	7,765,126	SQ - 25	0%	7,765,126	6,196,043	1,569,083	23.30	67,343	0.87%	
	TOTAL ACCOUNT 394.00	7,770,282		0%	7,770,282	6,201,199	1,569,083	23.30	67,343	0.87%	
395.00	LABORATORY EQUIPMENT	1,608,110	SQ - 20	0%	1,608,110	303,210	1,304,900	16.90	77,213	4.80%	
397.00	COMMUNICATION EQUIPMENT										
	FULLY ACCRUED	1,015,147			1,015,147	1,015,147	0				
	AMORTIZED	22,140,986	SQ - 15	0%	22,140,986	15,435,676	6,705,310	4.50	1,490,069	6.73%	
	TOTAL ACCOUNT 397.00	23,156,133		0%	23,156,133	16,450,823	6,705,310	4.50	1,490,069	6.43%	
398.00	MISCELLANEOUS EQUIPMENT	2,924,326	SQ - 20	0%	2,924,326	1,935,318	989,008	14.30	69,161	2.37%	

2021 Depreciation Rate Development

Account No.	Description	[1]	[2]		[3]	[4]	[5]	[6]	[7]	[8]		[9]
		Original Cost	lowa Curve Type	AL	Net Salvage	Depreciable Base	Book Reserve	Future Accruals	Remaining Life	Accrual	Rate	
391.10	RESERVE ADJUSTMENT FOR AMORTIZATION											
	OFFICE FURNITURE AND EQUIPMENT						11,000,000		5.00		-2,200,000	
397.00	COMMUNICATION EQUIPMENT						7,700,000		5.00		-1,540,000	
	Total Common Plant	168,663,392			-7%	179,698,403	102,190,508	96,207,894	44.38		2,168,024	1.29%
	TOTAL PLANT STUDIED	7,621,280,859			-19%	9,097,758,351	3,003,019,658	6,129,438,693	23.74		258,219,472	3.39%

[1] From Company depreciation study

[2] Average life and lowa curve shape developed through actuarial analysis and professional judgment

[3] Weighted net salvage for life span accounts from weighted net salvage exhibit; net salvage for mass accounts developed through statistical analysis and professional judgment

[4] = [1] * (1 - [3])

[5] From depreciation study

[6] = [4] - [5]

[7] Composite remaining life based on lowa curve in [2]; see remaining life exhibit for detailed calculations

[8] = [6] / [7]

[9] = [8] / [1]

2023 Detailed Rate Comparison

Account No.	Description	[1]	[2]		[3]		[4]	
		Plant 12/31/2023	NIPSCO Proposal		OUCC Proposal		OUCC Adjustment	
			Rate	Annual Accrual	Rate	Annual Accrual	Rate	Annual Accrual
Steam Production Plant								
311.00	STRUCTURES AND IMPROVEMENTS							
	MICHIGAN CITY GENERATING STATION	51,562,436	7.79%	4,015,730	8.12%	4,188,771	0.33%	173,041
	MICHIGAN CITY - UNIT 12	105,612,034	8.04%	8,491,897	8.38%	8,846,324	0.34%	354,427
	R M SCHAHFER GENERATING STATION	127,915,345	7.90%	10,106,463	7.97%	10,194,618	0.07%	88,155
	R M SCHAHFER - UNIT 14	7,254,941	0.11%	8,061	0.18%	13,061	0.07%	5,000
	R M SCHAHFER - UNIT 15	8,973,688	0.11%	9,971	0.18%	16,155	0.07%	6,184
	R M SCHAHFER - UNIT 17	142,375,381	7.35%	10,468,565	7.42%	10,566,685	0.07%	98,120
	R M SCHAHFER - UNIT 18	66,503,876	7.45%	4,952,746	7.52%	4,998,578	0.07%	45,832
	SUGAR CREEK	8,313,732	2.52%	209,207	2.48%	205,887	-0.04%	-3,320
	TOTAL ACCOUNT 311.00	518,511,432	7.38%	38,262,640	7.53%	39,030,079	0.15%	767,439
312.10	BOILER PLANT EQUIPMENT							
	MICHIGAN CITY GENERATING STATION	113,680,109	7.64%	8,681,546	7.97%	9,063,049	0.33%	381,503
	MICHIGAN CITY - UNIT 12	228,859,601	8.00%	18,313,876	8.34%	19,081,914	0.34%	768,038
	R M SCHAHFER GENERATING STATION	84,292,339	8.43%	7,109,809	8.50%	7,167,900	0.07%	58,091
	R M SCHAHFER - UNIT 14	49,723,376	0.11%	55,248	0.18%	89,516	0.07%	34,268
	R M SCHAHFER - UNIT 15	33,603,926	0.11%	37,338	0.18%	60,496	0.07%	23,158
	R M SCHAHFER - UNIT 17	202,359,699	7.58%	15,329,821	7.64%	15,469,280	0.06%	139,459
	R M SCHAHFER - UNIT 18	201,099,271	7.56%	15,195,252	7.63%	15,333,843	0.07%	138,591
	SUGAR CREEK	94,097,829	3.16%	2,971,726	3.10%	2,917,899	-0.06%	-53,827
	TOTAL ACCOUNT 312.10	1,007,716,151	6.72%	67,694,616	6.87%	69,183,897	0.15%	1,489,281
312.20	BOILER PLANT - MOBILE FUEL HANDLING AND STORAGE							
	MICHIGAN CITY GENERATING STATION	8,288,461	7.15%	592,876	7.49%	620,692	0.34%	27,816
	R M SCHAHFER - UNITS 14, 15, 17 AND 18	798,597	7.02%	56,032	7.42%	59,245	0.40%	3,213
	R M SCHAHFER GENERATING STATION	17,364,935	7.07%	1,227,192	7.14%	1,239,159	0.07%	11,967
	TOTAL ACCOUNT 312.20	26,451,993	7.09%	1,876,100	7.26%	1,919,096	0.16%	42,996
312.30	BOILER PLANT - UNIT TRAIN COAL CARS							
	R M SCHAHFER GENERATING STATION	1,443,973	9.97%	143,953	9.97%	143,953	0.00%	0
	TOTAL ACCOUNT 312.30	1,443,973	9.97%	143,953	9.97%	143,953	0.00%	0

2023 Detailed Rate Comparison

Account No.	Description	[1]	[2]		[3]		[4]	
		Plant 12/31/2023	NIPSCO Proposal		OUCC Proposal		OUCC Adjustment	
			Rate	Annual Accrual	Rate	Annual Accrual	Rate	Annual Accrual
312.40	BOILER PLANT - SO2 PLANT EQUIPMENT							
	MICHIGAN CITY - UNIT 12	215,728,528	8.03%	17,329,633	8.37%	18,053,604	0.34%	723,971
	R M SCHAHFER GENERATING STATION	17,157,481	9.34%	1,603,349	9.41%	1,615,173	0.07%	11,824
	R M SCHAHFER - UNIT 14	6,435,510	0.11%	7,151	0.18%	11,586	0.07%	4,435
	R M SCHAHFER - UNIT 15	23,150,635	0.11%	25,723	0.18%	41,678	0.07%	15,955
	R M SCHAHFER - UNIT 17	77,536,922	7.36%	5,706,222	7.43%	5,759,658	0.07%	53,436
	R M SCHAHFER - UNIT 18	67,825,904	8.14%	5,519,332	6.87%	4,661,730	-1.27%	-857,602
	TOTAL ACCOUNT 312.40	407,834,979	7.40%	30,191,410	7.39%	30,143,428	-0.01%	-47,982
312.50	BOILER PLANT - COAL PILE BASE							
	MICHIGAN CITY GENERATING STATION	785,603	8.77%	68,886	9.10%	71,522	0.33%	2,636
	R M SCHAHFER - UNIT 17	1,200,088	8.54%	102,474	8.61%	103,301	0.07%	827
	R M SCHAHFER - UNIT 18	1,300,434	8.75%	113,789	8.82%	114,685	0.07%	896
	TOTAL ACCOUNT 312.50	3,286,126	8.68%	285,149	8.81%	289,508	0.13%	4,359
314.00	TURBOGENERATOR UNITS							
	MICHIGAN CITY GENERATING STATION	1,514,710	6.91%	104,687	7.25%	109,770	0.34%	5,083
	MICHIGAN CITY - UNIT 12	97,603,289	7.48%	7,304,032	7.82%	7,631,582	0.34%	327,550
	R M SCHAHFER GENERATING STATION	13,617,783	9.41%	1,281,335	9.48%	1,290,720	0.07%	9,385
	R M SCHAHFER - UNIT 14	8,274,048	0.11%	9,193	0.18%	14,896	0.07%	5,703
	R M SCHAHFER - UNIT 15	14,130,189	0.11%	15,700	0.18%	25,438	0.07%	9,738
	R M SCHAHFER - UNIT 17	90,517,413	7.02%	6,357,140	7.09%	6,419,521	0.07%	62,381
	R M SCHAHFER - UNIT 18	96,892,279	6.99%	6,774,486	7.06%	6,841,261	0.07%	66,775
	SUGAR CREEK	57,667,039	2.83%	1,633,121	2.78%	1,604,206	-0.05%	-28,915
	TOTAL ACCOUNT 314.00	380,216,750	6.18%	23,479,694	6.30%	23,937,395	0.12%	457,701
315.00	ACCESSORY ELECTRIC EQUIPMENT							
	MICHIGAN CITY GENERATING STATION	21,500,009	7.25%	1,558,706	7.59%	1,630,858	0.34%	72,152
	MICHIGAN CITY - UNIT 12	34,628,827	7.31%	2,531,070	7.64%	2,647,282	0.33%	116,212
	R M SCHAHFER GENERATING STATION	37,502,905	7.54%	2,828,808	7.61%	2,854,654	0.07%	25,846
	R M SCHAHFER - UNIT 14	9,152,750	0.11%	10,170	0.18%	16,478	0.07%	6,308
	R M SCHAHFER - UNIT 15	6,314,515	0.11%	7,016	0.18%	11,368	0.07%	4,352
	R M SCHAHFER - UNIT 17	61,137,860	7.00%	4,278,810	7.07%	4,320,944	0.07%	42,134

2023 Detailed Rate Comparison

Account No.	Description	[1]	[2]		[3]		[4]	
		Plant 12/31/2023	NIPSCO Proposal		OUCC Proposal		OUCC Adjustment	
			Rate	Annual Accrual	Rate	Annual Accrual	Rate	Annual Accrual
	R M SCHAHFER - UNIT 18	44,601,764	7.04%	3,142,023	7.11%	3,172,761	0.07%	30,738
	SUGAR CREEK	4,909,045	2.64%	129,444	3.03%	148,578	0.39%	19,134
	TOTAL ACCOUNT 315.00	219,747,675	6.59%	14,486,047	6.74%	14,802,923	0.14%	316,876
316.00	MISCELLANEOUS POWER PLANT EQUIPMENT							
	MICHIGAN CITY GENERATING STATION	3,890,335	7.14%	277,690	7.47%	290,746	0.33%	13,056
	MICHIGAN CITY - UNIT 12	4,704,537	6.97%	328,137	7.31%	343,925	0.34%	15,788
	R M SCHAHFER GENERATING STATION	12,877,234	7.08%	911,886	7.15%	920,761	0.07%	8,875
	R M SCHAHFER - UNIT 14	981,905	0.11%	1,091	0.18%	1,768	0.07%	677
	R M SCHAHFER - UNIT 15	1,811,815	0.11%	2,013	0.18%	3,262	0.07%	1,249
	R M SCHAHFER - UNIT 17	6,188,369	6.63%	410,540	6.70%	414,805	0.07%	4,265
	R M SCHAHFER - UNIT 18	6,784,536	6.91%	468,965	6.98%	473,640	0.07%	4,675
	SUGAR CREEK	4,040,258	2.65%	107,108	3.06%	123,489	0.41%	16,381
	TOTAL ACCOUNT 316.00	41,278,989	6.07%	2,507,430	6.23%	2,572,396	0.16%	64,966
	Total Steam Production Plant	2,606,488,068	6.86%	178,927,039	6.98%	182,022,675	0.12%	3,095,636
	Hydro Plant							
331.00	STRUCTURES AND IMPROVEMENTS							
	NORWAY GENERATING STATION	3,875,760	4.34%	168,307	4.16%	161,115	-0.18%	-7,192
	OAKDALE GENERATING STATION	7,088,825	4.19%	297,070	3.92%	277,915	-0.27%	-19,155
	TOTAL ACCOUNT 331.00	10,964,585	4.24%	465,377	4.00%	439,031	-0.24%	-26,346
332.00	RESERVOIRS, DAMS AND WATERWAYS							
	NORWAY GENERATING STATION	30,333,798	6.90%	2,093,672	6.72%	2,037,593	-0.18%	-56,079
	OAKDALE GENERATING STATION	18,896,329	6.71%	1,268,504	6.44%	1,217,300	-0.27%	-51,204
	TOTAL ACCOUNT 332.00	49,230,127	6.83%	3,362,176	6.61%	3,254,892	-0.22%	-107,284
333.00	WATER WHEELS, TURBINES AND GENERATORS							
	NORWAY GENERATING STATION	7,878,606	5.97%	470,670	5.78%	455,641	-0.19%	-15,029
	OAKDALE GENERATING STATION	6,495,122	5.46%	354,357	5.20%	337,689	-0.26%	-16,668

2023 Detailed Rate Comparison

Account No.	Description	[1]	[2]		[3]		[4]	
		Plant 12/31/2023	NIPSCO Proposal		OUCC Proposal		OUCC Adjustment	
			Rate	Annual Accrual	Rate	Annual Accrual	Rate	Annual Accrual
	TOTAL ACCOUNT 333.00	14,373,728	5.74%	825,027	5.52%	793,329	-0.22%	-31,698
334.00	ACCESSORY ELECTRIC EQUIPMENT							
	NORWAY GENERATING STATION	1,683,326	3.95%	66,518	3.75%	63,072	-0.20%	-3,446
	OAKDALE GENERATING STATION	839,479	5.37%	45,090	5.07%	42,599	-0.30%	-2,491
	TOTAL ACCOUNT 334.00	2,522,805	4.42%	111,608	4.19%	105,671	-0.24%	-5,937
335.00	MISCELLANEOUS POWER PLANT EQUIPMENT							
	NORWAY GENERATING STATION	712,410	5.23%	37,268	5.05%	35,981	-0.18%	-1,287
	OAKDALE GENERATING STATION	124,969	4.81%	6,007	4.53%	5,661	-0.28%	-346
	TOTAL ACCOUNT 335.00	837,379	5.17%	43,275	4.97%	41,642	-0.20%	-1,633
	<u>Total Hydro Plant</u>	<u>77,928,624</u>	<u>6.17%</u>	<u>4,807,463</u>	<u>5.95%</u>	<u>4,634,566</u>	<u>-0.22%</u>	<u>-172,897</u>
	<u>Other Production Plant</u>							
341.00	STRUCTURES AND IMPROVEMENTS							
	R M SCHAHFER - UNITS 16A AND 16B	2,756,355	5.76%	158,757	5.41%	149,068	-0.35%	-9,689
	SUGAR CREEK	12,225,887	2.67%	326,614	2.66%	324,982	-0.01%	-1,632
	TOTAL ACCOUNT 341.00	14,982,241	3.24%	485,371	3.16%	474,050	-0.08%	-11,321
342.00	FUEL HOLDERS, PRODUCERS AND ACCESSORIES							
	R M SCHAHFER - UNITS 16A AND 16B	5,957,207	7.16%	426,632	6.83%	407,043	-0.33%	-19,589
	R M SCHAHFER - UNIT 16A	2,214,318	4.28%	94,810	3.87%	85,620	-0.41%	-9,190
	R M SCHAHFER - UNIT 16B	1,297,415	4.37%	56,636	3.99%	51,722	-0.38%	-4,914
	SUGAR CREEK	3,207,125	2.94%	94,433	2.93%	93,869	-0.01%	-564
	TOTAL ACCOUNT 342.00	12,676,065	5.31%	672,511	5.04%	638,254	-0.27%	-34,257
343.00	PRIME MOVERS							
	R M SCHAHFER - UNITS 16A AND 16B	5,848,701	5.34%	312,421	4.95%	289,778	-0.39%	-22,643
	R M SCHAHFER - UNIT 16A	9,551,196	0.00%	0	0.00%	0	0.00%	0

2023 Detailed Rate Comparison

Account No.	Description	[1]	[2]		[3]		[4]	
		Plant 12/31/2023	NIPSCO Proposal		OUCC Proposal		OUCC Adjustment	
			Rate	Annual Accrual	Rate	Annual Accrual	Rate	Annual Accrual
	R M SCHAHFER - UNIT 16B	23,070,302	0.00%	0	0.00%	0	0.00%	0
	SUGAR CREEK	<u>76,761,262</u>	2.14%	1,644,543	2.13%	1,635,169	-0.01%	-9,374
	TOTAL ACCOUNT 343.00	115,231,460	1.70%	1,956,964	1.67%	1,924,946	-0.03%	-32,018
344.00	GENERATORS							
	R M SCHAHFER - UNIT 16A	6,625,785	0.37%	24,830	0.02%	1,538	-0.35%	-23,292
	R M SCHAHFER - UNIT 16B	2,538,171	0.00%	0	0.00%	0	0.00%	0
	SUGAR CREEK	<u>40,547,005</u>	2.22%	898,706	2.21%	894,641	-0.01%	-4,065
	TOTAL ACCOUNT 344.00	49,710,961	1.86%	923,536	1.80%	896,179	-0.06%	-27,357
344.10	GENERATORS - SOLAR	1,014,484	5.35%	54,318	5.34%	54,187	-0.01%	-131
345.00	ACCESSORY ELECTRIC EQUIPMENT							
	R M SCHAHFER - UNITS 16A AND 16B	18,757,510	12.43%	2,331,607	12.08%	2,265,667	-0.35%	-65,940
	R M SCHAHFER - UNIT 16A	759,938	0.00%	0	0.00%	0	0.00%	0
	R M SCHAHFER - UNIT 16B	1,308,789	5.16%	67,492	4.79%	62,705	-0.37%	-4,787
	SUGAR CREEK	<u>34,611,832</u>	2.73%	945,990	2.72%	942,137	-0.01%	-3,853
	TOTAL ACCOUNT 345.00	55,438,070	6.03%	3,345,089	5.90%	3,270,509	-0.13%	-74,580
345.10	ACCESSORY ELECTRIC EQUIPMENT - SOLAR	253,621	5.73%	14,545	5.75%	14,591	0.02%	46
346.00	MISCELLANEOUS POWER PLANT EQUIPMENT							
	R M SCHAHFER - UNITS 16A AND 16B	533,484	8.38%	44,695	8.00%	42,684	-0.38%	-2,011
	SUGAR CREEK	<u>5,645,982</u>	2.56%	144,690	2.55%	143,980	-0.01%	-710
	TOTAL ACCOUNT 346.00	6,179,466	3.06%	189,385	3.02%	186,664	-0.04%	-2,721
	<u>Total Other Production Plant</u>	<u>255,486,367</u>	<u>2.99%</u>	<u>7,641,719</u>	<u>2.92%</u>	<u>7,459,380</u>	<u>-0.07%</u>	<u>-182,339</u>
	Transmission Plant							
350.20	LAND RIGHTS	76,903,948	1.27%	978,912	1.27%	979,049	0.00%	137
352.00	STRUCTURES AND IMPROVEMENTS	88,052,012	1.36%	1,197,600	1.29%	1,134,372	-0.07%	-63,228

2023 Detailed Rate Comparison

Account No.	Description	[1]	[2]		[3]		[4]	
		Plant 12/31/2023	NIPSCO Proposal		OUCC Proposal		OUCC Adjustment	
			Rate	Annual Accrual	Rate	Annual Accrual	Rate	Annual Accrual
353.00	STATION EQUIPMENT	1,067,060,114	2.06%	21,962,536	1.76%	18,727,669	-0.30%	-3,234,867
354.00	TOWERS AND FIXTURES	168,314,496	1.50%	2,520,884	1.42%	2,391,832	-0.08%	-129,052
355.00	POLES AND FIXTURES	551,560,827	2.08%	11,464,545	1.78%	9,834,885	-0.30%	-1,629,660
356.00	OVERHEAD CONDUCTORS AND DEVICES	337,965,006	1.92%	6,503,485	1.69%	5,711,661	-0.23%	-791,824
357.00	UNDERGROUND CONDUIT	899,342	0.62%	5,535	0.62%	5,532	0.00%	-3
358.00	UNDERGROUND CONDUCTORS AND DEVICES	3,852,252	1.79%	69,101	1.79%	69,122	0.00%	21
359.00	ROADS AND TRAILS	92,216	0.56%	518	0.56%	518	0.00%	0
Total Transmission Plant		2,294,700,214	1.95%	44,703,116	1.69%	38,854,641	-0.25%	-5,848,475
Distribution Plant								
360.20	LAND RIGHTS	1,375,975	1.26%	17,316	1.26%	17,309	0.00%	-7
361.00	STRUCTURES AND IMPROVEMENTS	16,828,466	1.23%	207,264	1.23%	207,219	0.00%	-45
362.00	STATION EQUIPMENT	552,738,200	2.13%	11,752,272	2.03%	11,208,834	-0.10%	-543,438
364.10	CUSTOMER TRANSFORMER STATION	56,866,138	2.27%	1,289,899	2.17%	1,234,006	-0.10%	-55,893
364.20	POLES, TOWERS AND FIXTURES	615,333,058	2.95%	18,183,041	2.85%	17,547,936	-0.10%	-635,105
365.00	OVERHEAD CONDUCTORS AND DEVICES	387,401,112	2.03%	7,867,660	1.87%	7,263,639	-0.16%	-604,021
366.00	UNDERGROUND CONDUIT	5,967,003	1.38%	82,232	1.38%	82,208	0.00%	-24
367.00	UNDERGROUND CONDUCTORS AND DEVICES	588,030,774	2.47%	14,503,056	2.13%	12,497,805	-0.34%	-2,005,251
368.00	LINE TRANSFORMERS	377,676,754	1.93%	7,282,510	1.82%	6,878,790	-0.11%	-403,720
369.10	OVERHEAD SERVICES	55,052,986	1.60%	880,359	1.33%	731,688	-0.27%	-148,671
369.20	UNDERGROUND SERVICES	279,915,670	1.48%	4,146,251	1.30%	3,625,691	-0.18%	-520,560
370.10	CUSTOMER METERING STATIONS	23,846,961	1.56%	372,135	1.51%	360,307	-0.05%	-11,828
370.20	METERS	75,930,088	3.71%	2,813,352	3.60%	2,733,971	-0.11%	-79,381
371.00	INSTALLATIONS ON CUSTOMERS' PREMISES	10,463,918	3.93%	410,954	3.68%	384,826	-0.25%	-26,128
373.00	STREET LIGHTING AND SIGNAL SYSTEMS	64,108,115	3.35%	2,146,236	2.11%	1,349,806	-1.24%	-796,430
Total Distribution Plant		3,111,535,218	2.31%	71,954,537	2.13%	66,124,037	-0.19%	-5,830,500
General Plant								
390.00	STRUCTURES AND IMPROVEMENTS	24,312,639	1.43%	347,085	1.43%	347,237	0.00%	152
391.10	OFFICE FURNITURE AND EQUIPMENT	4,764,627	3.82%	181,862	3.81%	181,705	-0.01%	-157
391.20	COMPUTERS AND PERIPHERAL EQUIPMENT	21,803,109	27.22%	5,935,248	27.73%	6,046,872	0.51%	111,624

2023 Detailed Rate Comparison

Account No.	Description	[1]	[2]		[3]		[4]	
		Plant	NIPSCO Proposal		OUCC Proposal		OUCC Adjustment	
		12/31/2023	Rate	Annual Accrual	Rate	Annual Accrual	Rate	Annual Accrual
393.00	STORES EQUIPMENT	984,845	1.46%	14,420	1.46%	14,423	0.00%	3
394.00	TOOLS, SHOP AND GARAGE EQUIPMENT	28,427,977	3.83%	1,087,549	3.82%	1,086,689	-0.01%	-860
395.00	LABORATORY EQUIPMENT	6,802,020	2.07%	140,524	2.06%	140,306	-0.01%	-218
397.00	COMMUNICATION EQUIPMENT	38,827,785	8.71%	3,382,628	8.67%	3,365,281	-0.04%	-17,347
398.00	MISCELLANEOUS EQUIPMENT	3,856,492	5.19%	200,326	5.21%	201,036	0.02%	710
	ACCOUNT 391.2 RESERVE AMORTIZATION			-3,200,000		-3,200,000		
	Total General Plant	129,779,494	6.23%	8,089,642	6.31%	8,183,550	0.07%	93,908
	TOTAL ELECTRIC PLANT	8,475,917,983	3.73%	316,123,516	3.63%	307,278,847	-0.10%	-8,844,669
	Common Plant							
390.00	STRUCTURES AND IMPROVEMENTS	123,531,669	2.10%	2,599,709	2.10%	2,596,204	0.00%	-3,505
391.10	OFFICE FURNITURE AND EQUIPMENT	6,071,458	6.13%	372,205	6.11%	371,010	-0.02%	-1,195
391.20	COMPUTERS AND PERIPHERAL EQUIPMENT	10,461,666	33.86%	3,542,731	33.01%	3,453,062	-0.85%	-89,669
393.00	STORES EQUIPMENT	2,864,027	4.31%	123,503	4.32%	123,850	0.01%	347
394.00	TOOLS, SHOP AND GARAGE EQUIPMENT	8,558,217	1.32%	112,554	1.31%	112,415	-0.01%	-139
395.00	LABORATORY EQUIPMENT	1,824,928	5.87%	107,191	5.89%	107,517	0.02%	326
397.00	COMMUNICATION EQUIPMENT	17,739,082	14.56%	2,583,209	14.67%	2,601,859	0.11%	18,650
398.00	MISCELLANEOUS EQUIPMENT	3,241,115	2.92%	94,708	2.91%	94,452	-0.01%	-256
	RESERVE ADJUSTMENT FOR AMORTIZATION							
391.10	OFFICE FURNITURE AND EQUIPMENT			-2,200,000	0.00%	-2,200,000		0
397.00	COMMUNICATION EQUIPMENT			-1,540,000	0.00%	-1,540,000		0
	Total Common Plant	174,292,164	3.33%	5,795,810	3.28%	5,720,369	-0.04%	-75,441
	TOTAL PLANT STUDIED	8,650,210,147	3.72%	321,919,326	3.62%	312,999,216	-0.10%	-8,920,110

[1], [2] From Company depreciation study

2023 Detailed Rate Comparison

		[1]	[2]		[3]		[4]	
Account No.	Description	Plant 12/31/2023	NIPSCO Proposal		OUCC Proposal		OUCC Adjustment	
			Rate	Annual Accrual	Rate	Annual Accrual	Rate	Annual Accrual

[3] From Attachment DJG-2-7

[4] = [3] - [2]

2023 Depreciation Rate Development

Account No.	Description	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8] [9]	
		Original Cost	Iowa Curve Type AL	Net Salvage	Depreciable Base	Book Reserve	Future Accruals	Remaining Life	Accrual	Rate
Steam Production Plant										
311.00	STRUCTURES AND IMPROVEMENTS									
	MICHIGAN CITY GENERATING STATION	51,562,436	R2.5 - 110	-8%	55,697,919	17,998,984	37,698,935	9.00	4,188,771	8.12%
	MICHIGAN CITY - UNIT 12	105,612,034	R2.5 - 110	-8%	114,082,480	34,465,564	79,616,916	9.00	8,846,324	8.38%
	R M SCHAHFER GENERATING STATION	127,915,345	R2.5 - 110	-9%	138,941,965	47,190,404	91,751,561	9.00	10,194,618	7.97%
	R M SCHAHFER - UNIT 14	7,254,941	R2.5 - 110	-9%	7,880,335	7,762,787	117,548	9.00	13,061	0.18%
	R M SCHAHFER - UNIT 15	8,973,688	R2.5 - 110	-9%	9,747,242	9,601,846	145,396	9.00	16,155	0.18%
	R M SCHAHFER - UNIT 17	142,375,381	R2.5 - 110	-9%	154,648,494	59,548,329	95,100,165	9.00	10,566,685	7.42%
	R M SCHAHFER - UNIT 18	66,503,876	R2.5 - 110	-9%	72,236,675	27,249,470	44,987,205	9.00	4,998,578	7.52%
	SUGAR CREEK	8,313,732	R2.5 - 110	-18%	9,824,323	971,170	8,853,153	43.00	205,887	2.48%
	TOTAL ACCOUNT 311.00	518,511,432		-9%	563,059,434	204,788,554	358,270,880	9.18	39,030,079	7.53%
312.10	BOILER PLANT EQUIPMENT									
	MICHIGAN CITY GENERATING STATION	113,680,109	S0 - 55	-8%	122,797,643	41,230,199	81,567,444	9.00	9,063,049	7.97%
	MICHIGAN CITY - UNIT 12	228,859,601	S0 - 55	-8%	247,214,923	75,477,700	171,737,223	9.00	19,081,914	8.34%
	R M SCHAHFER GENERATING STATION	84,292,339	S0 - 55	-9%	91,558,549	27,047,445	64,511,104	9.00	7,167,900	8.50%
	R M SCHAHFER - UNIT 14	49,723,376	S0 - 55	-9%	54,009,655	53,204,013	805,642	9.00	89,516	0.18%
	R M SCHAHFER - UNIT 15	33,603,926	S0 - 55	-9%	36,500,668	35,956,201	544,467	9.00	60,496	0.18%
	R M SCHAHFER - UNIT 17	202,359,699	S0 - 55	-9%	219,803,609	80,580,090	139,223,519	9.00	15,469,280	7.64%
	R M SCHAHFER - UNIT 18	201,099,271	S0 - 55	-9%	218,434,529	80,429,946	138,004,583	9.00	15,333,843	7.63%
	SUGAR CREEK	94,097,829	S0 - 55	-18%	111,195,243	11,111,311	100,083,932	34.30	2,917,899	3.10%
	TOTAL ACCOUNT 312.10	1,007,716,151		-9%	1,101,514,819	405,036,905	696,477,914	10.07	69,183,897	6.87%
312.20	BOILER PLANT - MOBILE FUEL HANDLING AND STORAGE									
	MICHIGAN CITY GENERATING STATION	8,288,461	S0 - 55	-8%	8,953,224	3,366,998	5,586,226	9.00	620,692	7.49%
	R M SCHAHFER - UNITS 14, 15, 17 AND 18	798,597	S0 - 55	-9%	867,438	334,235	533,203	9.00	59,245	7.42%
	R M SCHAHFER GENERATING STATION	17,364,935	S0 - 55	-9%	18,861,836	7,709,401	11,152,435	9.00	1,239,159	7.14%
	TOTAL ACCOUNT 312.20	26,451,993		-8%	28,682,498	11,410,634	17,271,864	9.00	1,919,096	7.26%
312.30	BOILER PLANT - UNIT TRAIN COAL CARS									
	R M SCHAHFER GENERATING STATION	1,443,973	R2.5 - 25	0%	1,443,973	148,395	1,295,578	9.00	143,953	9.97%
	TOTAL ACCOUNT 312.30	1,443,973		0%	1,443,973	148,395	1,295,578	9.00	143,953	9.97%
312.40	BOILER PLANT - SO2 PLANT EQUIPMENT									
	MICHIGAN CITY - UNIT 12	215,728,528	S0 - 55	-8%	233,030,694	70,548,260	162,482,434	9.00	18,053,604	8.37%
	R M SCHAHFER GENERATING STATION	17,157,481	S0 - 55	-9%	18,636,498	4,099,939	14,536,559	9.00	1,615,173	9.41%
	R M SCHAHFER - UNIT 14	6,435,510	S0 - 55	-9%	6,990,267	6,885,995	104,272	9.00	11,586	0.18%
	R M SCHAHFER - UNIT 15	23,150,635	S0 - 55	-9%	25,146,277	24,771,179	375,098	9.00	41,678	0.18%
	R M SCHAHFER - UNIT 17	77,536,922	S0 - 55	-9%	84,220,798	32,383,875	51,836,923	9.00	5,759,658	7.43%
	R M SCHAHFER - UNIT 18	67,825,904	S0 - 55	-9%	73,672,666	31,717,098	41,955,568	9.00	4,661,730	6.87%

2023 Depreciation Rate Development

Account No.	Description	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]		[9]
		Original Cost	lowa Curve Type AL	Net Salvage	Depreciable Base	Book Reserve	Future Accruals	Remaining Life	Accrual	Rate	Total
	TOTAL ACCOUNT 312.40	407,834,979		-8%	441,697,199	170,406,346	271,290,853	9.00	30,143,428	7.39%	
312.50	BOILER PLANT - COAL PILE BASE										
	MICHIGAN CITY GENERATING STATION	785,603	S0 - 55	-8%	848,611	204,909	643,702	9.00	71,522	9.10%	
	R M SCHAHFER - UNIT 17	1,200,088	S0 - 55	-9%	1,303,539	373,831	929,708	9.00	103,301	8.61%	
	R M SCHAHFER - UNIT 18	1,300,434	S0 - 55	-9%	1,412,535	380,372	1,032,163	9.00	114,685	8.82%	
	TOTAL ACCOUNT 312.50	3,286,126		-8%	3,564,685	959,112	2,605,573	0.00	289,508	8.81%	
314.00	TURBOGENERATOR UNITS										
	MICHIGAN CITY GENERATING STATION	1,514,710	R2 - 60	-8%	1,636,195	648,262	987,933	9.00	109,770	7.25%	
	MICHIGAN CITY - UNIT 12	97,603,289	R2 - 60	-8%	105,431,407	36,747,168	68,684,239	9.00	7,631,582	7.82%	
	R M SCHAHFER GENERATING STATION	13,617,783	R2 - 60	-9%	14,791,670	3,175,187	11,616,483	9.00	1,290,720	9.48%	
	R M SCHAHFER - UNIT 14	8,274,048	R2 - 60	-9%	8,987,292	8,853,231	134,061	9.00	14,896	0.18%	
	R M SCHAHFER - UNIT 15	14,130,189	R2 - 60	-9%	15,348,246	15,119,302	228,944	9.00	25,438	0.18%	
	R M SCHAHFER - UNIT 17	90,517,413	R2 - 60	-9%	98,320,239	40,544,547	57,775,692	9.00	6,419,521	7.09%	
	R M SCHAHFER - UNIT 18	96,892,279	R2 - 60	-9%	105,244,634	43,673,287	61,571,347	9.00	6,841,261	7.06%	
	SUGAR CREEK	57,667,039	R2 - 60	-18%	68,145,041	7,987,309	60,157,732	37.50	1,604,206	2.78%	
	TOTAL ACCOUNT 314.00	380,216,750		-10%	417,904,724	156,748,293	261,156,431	10.91	23,937,395	6.30%	
315.00	ACCESSORY ELECTRIC EQUIPMENT										
	MICHIGAN CITY GENERATING STATION	21,500,009	R2 - 65	-8%	23,224,384	8,546,659	14,677,725	9.00	1,630,858	7.59%	
	MICHIGAN CITY - UNIT 12	34,628,827	R2 - 65	-8%	37,406,177	13,580,638	23,825,539	9.00	2,647,282	7.64%	
	R M SCHAHFER GENERATING STATION	37,502,905	R2 - 65	-9%	40,735,749	15,043,862	25,691,887	9.00	2,854,654	7.61%	
	R M SCHAHFER - UNIT 14	9,152,750	R2 - 65	-9%	9,941,740	9,793,442	148,298	9.00	16,478	0.18%	
	R M SCHAHFER - UNIT 15	6,314,515	R2 - 65	-9%	6,858,841	6,756,531	102,310	9.00	11,368	0.18%	
	R M SCHAHFER - UNIT 17	61,137,860	R2 - 65	-9%	66,408,095	27,519,597	38,888,498	9.00	4,320,944	7.07%	
	R M SCHAHFER - UNIT 18	44,601,764	R2 - 65	-9%	48,446,547	19,891,699	28,554,848	9.00	3,172,761	7.11%	
	SUGAR CREEK	4,909,045	R2 - 65	-18%	5,801,011	675,072	5,125,939	34.50	148,578	3.03%	
	TOTAL ACCOUNT 315.00	219,747,675		-9%	238,822,544	101,807,500	137,015,044	9.26	14,802,923	6.74%	
316.00	MISCELLANEOUS POWER PLANT EQUIPMENT										
	MICHIGAN CITY GENERATING STATION	3,890,335	R1.5 - 70	-8%	4,202,353	1,585,640	2,616,713	9.00	290,746	7.47%	
	MICHIGAN CITY - UNIT 12	4,704,537	R1.5 - 70	-8%	5,081,857	1,986,528	3,095,329	9.00	343,925	7.31%	
	R M SCHAHFER GENERATING STATION	12,877,234	R1.5 - 70	-9%	13,987,283	5,700,437	8,286,846	9.00	920,761	7.15%	
	R M SCHAHFER - UNIT 14	981,905	R1.5 - 70	-9%	1,066,547	1,050,638	15,909	9.00	1,768	0.18%	
	R M SCHAHFER - UNIT 15	1,811,815	R1.5 - 70	-9%	1,967,998	1,938,642	29,356	9.00	3,262	0.18%	
	R M SCHAHFER - UNIT 17	6,188,369	R1.5 - 70	-9%	6,721,822	2,988,581	3,733,241	9.00	414,805	6.70%	
	R M SCHAHFER - UNIT 18	6,784,536	R1.5 - 70	-9%	7,369,380	3,106,616	4,262,764	9.00	473,640	6.98%	
	SUGAR CREEK	4,040,258	R1.5 - 70	-18%	4,774,366	513,996	4,260,370	34.50	123,489	3.06%	
	TOTAL ACCOUNT 316.00	41,278,989		-9%	45,171,607	18,871,078	26,300,529	10.22	2,572,396	6.23%	
	Total Steam Production Plant	2,606,488,068		-9%	2,841,861,481	1,070,176,817	1,771,684,664	9.73	182,022,675	6.98%	

2023 Depreciation Rate Development

Account No.	Description	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]		[9]	
		Original Cost	Iowa Curve		Net Salvage	Depreciable Base	Book Reserve	Future Accruals	Remaining Life	Total		Rate
			Type	AL						Accrual	Rate	
	R M SCHAHFER - UNITS 16A AND 16B	5,957,207	S2.5	-50	-2%	6,073,098	4,892,674	1,180,424	2.90	407,043	6.83%	
	R M SCHAHFER - UNIT 16A	2,214,318	S2.5	-50	-2%	2,257,395	2,009,097	248,298	2.90	85,620	3.87%	
	R M SCHAHFER - UNIT 16B	1,297,415	S2.5	-50	-2%	1,322,654	1,172,659	149,995	2.90	51,722	3.99%	
	SUGAR CREEK	3,207,125	S2.5	-50	-6%	3,390,608	1,250,406	2,140,202	22.80	93,869	2.93%	
	TOTAL ACCOUNT 342.00	12,676,065			-3%	13,043,756	9,324,836	3,718,920	5.83	638,254	5.04%	
343.00	PRIME MOVERS											
	R M SCHAHFER - UNITS 16A AND 16B	5,848,701	R1	-50	-2%	5,962,481	5,093,148	869,333	3.00	289,778	4.95%	
	R M SCHAHFER - UNIT 16A	9,551,196	R1	-50	-2%	9,737,003	9,837,731	-100,728				
	R M SCHAHFER - UNIT 16B	23,070,302	R1	-50	-2%	23,519,108	23,762,411	-243,303				
	SUGAR CREEK	76,761,262	R1	-50	-6%	81,152,870	45,015,641	36,137,229	22.10	1,635,169	2.13%	
	TOTAL ACCOUNT 343.00	115,231,460			-4%	120,371,461	83,708,931	36,662,530	19.05	1,924,946	1.67%	
344.00	GENERATORS											
	R M SCHAHFER - UNIT 16A	6,625,785	R3	-55	-2%	6,754,682	6,750,067	4,615	3.00	1,538	0.02%	
	R M SCHAHFER - UNIT 16B	2,538,171	R3	-55	-2%	2,587,549	2,614,317	-26,768				
	SUGAR CREEK	40,547,005	R3	-55	-6%	42,866,749	22,021,609	20,845,140	23.30	894,641	2.21%	
	TOTAL ACCOUNT 344.00	49,710,961			-5%	52,208,979	31,385,993	20,822,986	23.24	896,179	1.80%	
344.10	GENERATORS - SOLAR	1,014,484	S2.5	-20	0%	1,014,484	158,330	856,154	15.80	54,187	5.34%	
345.00	ACCESSORY ELECTRIC EQUIPMENT											
	R M SCHAHFER - UNITS 16A AND 16B	18,757,510	S1	-50	-2%	19,122,416	12,325,414	6,797,002	3.00	2,265,667	12.08%	
	R M SCHAHFER - UNIT 16A	759,938	S1	-50	-2%	774,722	782,736	-8,014				
	R M SCHAHFER - UNIT 16B	1,308,789	S1	-50	-2%	1,334,250	1,146,136	188,114	3.00	62,705	4.79%	
	SUGAR CREEK	34,611,832	S1	-50	-6%	36,592,018	16,241,859	20,350,159	21.60	942,137	2.72%	
	TOTAL ACCOUNT 345.00	55,438,070			-4%	57,823,406	30,496,145	27,327,261	8.36	3,270,509	5.90%	
345.10	ACCESSORY ELECTRIC EQUIPMENT - SOLAR	253,621	S2.5	-20	0%	253,621	24,542	229,079	15.70	14,591	5.75%	
346.00	MISCELLANEOUS POWER PLANT EQUIPMENT											
	R M SCHAHFER - UNITS 16A AND 16B	533,484	R2.5	-55	-2%	543,862	415,811	128,051	3.00	42,684	8.00%	
	SUGAR CREEK	5,645,982	R2.5	-55	-6%	5,968,996	2,628,663	3,340,333	23.20	143,980	2.55%	
	TOTAL ACCOUNT 346.00	6,179,466			-5%	6,512,858	3,044,474	3,468,384	18.58	186,664	3.02%	
	Total Other Production Plant	255,486,367			-4%	266,963,886	166,021,775	100,942,111	13.53	7,459,380	2.92%	
	Transmission Plant											
350.20	LAND RIGHTS	76,903,948	R4	-75	0%	76,903,948	12,972,050	63,931,898	65.30	979,049	1.27%	

2023 Depreciation Rate Development

Account No.	Description	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8] [9]	
		Original Cost	Iowa Curve Type AL	Net Salvage	Depreciable Base	Book Reserve	Future Accruals	Remaining Life	Accrual	Rate
352.00	STRUCTURES AND IMPROVEMENTS	88,052,012	R1.5 - 65	-11%	97,737,734	34,893,524	62,844,210	55.40	1,134,372	1.29%
353.00	STATION EQUIPMENT	1,067,060,114	L0.5 - 55	-11%	1,184,436,726	317,158,359	867,278,367	46.31	18,727,669	1.76%
354.00	TOWERS AND FIXTURES	168,314,496	R4 - 70	-26%	212,076,265	88,418,562	123,657,703	51.70	2,391,832	1.42%
355.00	POLES AND FIXTURES	551,560,827	R0.5 - 69	-35%	744,607,116	123,239,073	621,368,043	63.18	9,834,885	1.78%
356.00	OVERHEAD CONDUCTORS AND DEVICES	337,965,006	R2 - 71	-33%	449,493,458	120,216,178	329,277,280	57.65	5,711,661	1.69%
357.00	UNDERGROUND CONDUIT	899,342	S4 - 65	-5%	944,309	683,182	261,127	47.20	5,532	0.62%
358.00	UNDERGROUND CONDUCTORS AND DEVICES	3,852,252	R1.5 - 50	-5%	4,044,865	1,141,758	2,903,107	42.00	69,122	1.79%
359.00	ROADS AND TRAILS	92,216	R4 - 70	0%	92,216	66,932	25,284	48.80	518	0.56%
Total Transmission Plant		2,294,700,214		-21%	2,770,336,638	698,789,618	2,071,547,020	53.32	38,854,641	1.69%
Distribution Plant										
360.20	LAND RIGHTS	1,375,975	R4 - 75	0%	1,375,975	344,386	1,031,589	59.60	17,309	1.26%
361.00	STRUCTURES AND IMPROVEMENTS	16,828,466	R1.5 - 65	-15%	19,352,736	9,240,468	10,112,268	48.80	207,219	1.23%
362.00	STATION EQUIPMENT	552,738,200	R1.5 - 50	-11%	613,539,403	156,218,958	457,320,445	40.80	11,208,834	2.03%
364.10	CUSTOMER TRANSFORMER STATION	56,866,138	S0 - 50	-51%	85,867,868	35,150,210	50,717,658	41.10	1,234,006	2.17%
364.20	POLES, TOWERS AND FIXTURES	615,333,058	R1 - 47	-51%	929,152,917	236,009,428	693,143,489	39.50	17,547,936	2.85%
365.00	OVERHEAD CONDUCTORS AND DEVICES	387,401,112	R1 - 68	-60%	619,841,779	211,552,607	408,289,172	56.21	7,263,639	1.87%
366.00	UNDERGROUND CONDUIT	5,967,003	S2.5 - 70	-5%	6,265,353	2,122,084	4,143,269	50.40	82,208	1.38%
367.00	UNDERGROUND CONDUCTORS AND DEVICES	588,030,774	R2 - 57	-31%	770,320,314	186,422,843	583,897,471	46.72	12,497,805	2.13%
368.00	LINE TRANSFORMERS	377,676,754	S0 - 47	-6%	400,337,360	147,885,750	252,451,610	36.70	6,878,790	1.82%
369.10	OVERHEAD SERVICES	55,052,986	R1 - 47	-29%	71,018,351	41,384,977	29,633,374	40.50	731,688	1.33%
369.20	UNDERGROUND SERVICES	279,915,670	R3 - 70	-29%	361,091,215	145,725,175	215,366,040	59.40	3,625,691	1.30%
370.10	CUSTOMER METERING STATIONS	23,846,961	R2 - 50	-3%	24,562,369	10,150,092	14,412,277	40.00	360,307	1.51%
370.20	METERS	75,930,088	L0 - 24	-3%	78,207,991	27,902,929	50,305,062	18.40	2,733,971	3.60%
371.00	INSTALLATIONS ON CUSTOMERS' PREMISES	10,463,918	O1 - 20	-26%	13,184,537	6,950,349	6,234,188	16.20	384,826	3.68%
373.00	STREET LIGHTING AND SIGNAL SYSTEMS	64,108,115	O3 - 42	-30%	83,340,549	28,551,926	54,788,623	40.59	1,349,806	2.11%
Total Distribution Plant		3,111,535,218		-31%	4,077,458,717	1,245,612,182	2,831,846,535	42.83	66,124,037	2.13%
General Plant										
390.00	STRUCTURES AND IMPROVEMENTS	24,312,639	R1.5 - 55	-10%	26,743,903	11,777,969	14,965,934	43.10	347,237	1.43%
391.10	OFFICE FURNITURE AND EQUIPMENT	4,764,627	SQ - 20	0%	4,764,627	2,893,068	1,871,559	10.30	181,705	3.81%
391.20	COMPUTERS AND PERIPHERAL EQUIPMENT	21,803,109	SQ - 7	0%	21,803,109	7,895,303	13,907,806	2.30	6,046,872	27.73%
393.00	STORES EQUIPMENT	984,845	SQ - 30	0%	984,845	696,376	288,469	20.00	14,423	1.46%
394.00	TOOLS, SHOP AND GARAGE EQUIPMENT	28,427,977	SQ - 25	0%	28,427,977	10,606,283	17,821,694	16.40	1,086,689	3.82%
395.00	LABORATORY EQUIPMENT	6,802,020	SQ - 20	0%	6,802,020	4,781,618	2,020,402	14.40	140,306	2.06%
397.00	COMMUNICATION EQUIPMENT	38,827,785	SQ - 15	0%	38,827,785	7,867,197	30,960,588	9.20	3,365,281	8.67%
398.00	MISCELLANEOUS EQUIPMENT	3,856,492	SQ - 20	0%	3,856,492	1,444,057	2,412,435	12.00	201,036	5.21%
ACCOUNT 391.2 RESERVE AMORTIZATION						9,600,000			-3,200,000	

2023 Depreciation Rate Development

Account No.	Description	[1]	[2]		[3]	[4]	[5]	[6]	[7]	[8]		[9]
		Original Cost	lowa Curve Type	AL	Net Salvage	Depreciable Base	Book Reserve	Future Accruals	Remaining Life	Accrual	Rate	
Total General Plant		129,779,494			-2%	132,210,758	57,561,871	84,248,887	10.29	8,183,550	6.31%	
TOTAL ELECTRIC PLANT		8,475,917,983			-20%	10,171,708,532	3,257,484,814	6,923,823,718	22.53	307,278,847	3.63%	
Common Plant												
390.00	STRUCTURES AND IMPROVEMENTS	123,531,669	S0	50	-10%	135,884,836	45,017,712	90,867,124	35.00	2,596,204	2.10%	
391.10	OFFICE FURNITURE AND EQUIPMENT	6,071,458	SQ	20	0%	6,071,458	2,361,356	3,710,102	10.00	371,010	6.11%	
391.20	COMPUTERS AND PERIPHERAL EQUIPMENT	10,461,666	SQ	7	0%	10,461,666	4,936,767	5,524,899	1.60	3,453,062	33.01%	
393.00	STORES EQUIPMENT	2,864,027	SQ	30	0%	2,864,027	1,464,524	1,399,503	11.30	123,850	4.32%	
394.00	TOOLS, SHOP AND GARAGE EQUIPMENT	8,558,217	SQ	25	0%	8,558,217	6,085,087	2,473,130	22.00	112,415	1.31%	
395.00	LABORATORY EQUIPMENT	1,824,928	SQ	20	0%	1,824,928	330,447	1,494,481	13.90	107,517	5.89%	
397.00	COMMUNICATION EQUIPMENT	17,739,082	SQ	15	0%	17,739,082	8,112,203	9,626,879	3.70	2,601,859	14.67%	
398.00	MISCELLANEOUS EQUIPMENT	3,241,115	SQ	20	0%	3,241,115	1,956,564	1,284,551	13.60	94,452	2.91%	
RESERVE ADJUSTMENT FOR AMORTIZATION												
391.10	OFFICE FURNITURE AND EQUIPMENT						6,600,000		3.00	-2,200,000		
397.00	COMMUNICATION EQUIPMENT						4,620,000		3.00	-1,540,000		
Total Common Plant		174,292,164			-7%	186,645,331	81,484,660	116,380,671	20.34	5,720,369	3.28%	
TOTAL PLANT STUDIED		8,650,210,147			-20%	10,358,353,863	3,338,969,474	7,040,204,389	22.49	312,999,216	3.62%	

[1] From depreciation study
 [2] Average life and lowa curve shape developed through actuarial analysis and professional judgment
 [3] Weighted net salvage for life span accounts from weighted net salvage exhibit; net salvage for mass accounts developed through statistical analysis and professional judgment
 [4] = [1]*(1-[3])
 [5] From depreciation study
 [6] = [4] - [5]
 [7] Composite remaining life based on lowa cuve in [2]; see remaining life exhibit for detailed calculations
 [8] = [6] / [7]
 [9] = [8] / [1]

Weighted Net Salvage Calculation

	[1]	[2]	[3]	[4]	[5]
Unit	Terminal Retirements		Interim Retirements		Weighted
	Retirements	Net Salvage	Retirements	Net Salvage	Net Salvage
Steam Production					
MICHIGAN CITY	97%	-7.2%	3%	-39.0%	-8.0%
R M SCHAHFER	98%	-7.8%	3%	-39.0%	-8.6%
SUGAR CREEK	55%	-1.0%	45%	-39.0%	-18.2%
Hydro Production					
NORWAY	96%	-3.9%	4%	-61.0%	-6.4%
OAKDALE	96%	-4.1%	4%	-61.0%	-6.3%
Other Production					
R M SCHAHFER	95%	-0.7%	5%	-23.0%	-1.9%
SUGAR CREEK	78%	-0.8%	22%	-23.0%	-5.7%

[1], [3] Accepted Company's proposed weighting of interim and terminal retirements (see depreciation study)

[2] From Attachment DJG-2-9

[4] Accepted Company's proposed interim net salvage rates (see depreciation study)

[5] = [1]*[2] + [3]*[4]

Terminal Net Salvage Adjustment

[1]	[2]	[3]	[4]	[5]	[6]	
<u>Plant</u>	<u>NIPSCO Demo Cost Estimate</u>	<u>Less Contingency</u>	<u>Ash Pond Compliance Cost</u>	<u>Adjusted Demo Cost</u>	<u>Terminal Retirements</u>	<u>Terminal Net Salvage</u>
MICHIGAN CITY	42,435,000	8,820,364	25,946,000	59,560,636	(830,635,007)	-7.2%
SCHAHFER	79,587,985	17,976,602	46,458,000	108,069,384	(1,378,210,864)	-7.8%
SUGAR CREEK	1,506,089	639,693	-	866,396	(88,873,912)	-1.0%
NORWAY	1,846,000	339,000	-	1,507,000	(38,842,215)	-3.9%
OAKDALE	1,569,000	306,000	-	1,263,000	(30,789,843)	-4.1%
SCHAHFER - OTHER PRODUCTION	626,015	141,398	-	484,616	(67,089,669)	-0.7%
SUGAR CREEK - OTHER PRODUCTION	1,735,911	737,307	-	998,604	(129,100,774)	-0.8%

[1] Company demolition studies (Exhibit 14-B); Schafer and Sugar Creek costs allocated based on portion of subtotal total cost; Michigan Creek retired units excluded

[2] Removing 20% contingency factor from demolition studies; Schahfer and Sugar Creek allocated based on portion of total project cost

[3] Ash Pond Compliance Costs for Michigan City (Cause 45700) and Schahfer (Cause 45797), less escalation and contingency costs; Michigan City excludes Non-CCR costs to avoid double counting

[4] = [1] - [2] + [3]

[5] Terminal retirements from depreciation study

[6] = [4] / [5]

Account 353 Curve Fitting

[1]	[2]	[3]	[4]	[5]	[6]	[7]
Age (Years)	Exposures (Dollars)	Observed Life Table (OLT)	NIPSCO S0-50	OUCS L0.5-55	NIPSCO SSD	OUCS SSD
0.0	1,092,865,920	100.00%	100.00%	100.00%	0.0000	0.0000
0.5	1,046,899,937	99.95%	99.98%	99.91%	0.0000	0.0000
1.5	1,005,417,292	99.88%	99.86%	99.67%	0.0000	0.0000
2.5	926,575,396	99.60%	99.66%	99.35%	0.0000	0.0000
3.5	785,898,733	99.41%	99.38%	98.97%	0.0000	0.0000
4.5	702,958,792	99.14%	99.04%	98.55%	0.0000	0.0000
5.5	676,108,259	98.71%	98.63%	98.08%	0.0000	0.0000
6.5	662,625,049	98.38%	98.18%	97.56%	0.0000	0.0001
7.5	624,104,014	97.36%	97.67%	97.00%	0.0000	0.0000
8.5	606,192,982	96.92%	97.11%	96.40%	0.0000	0.0000
9.5	593,233,809	96.40%	96.51%	95.76%	0.0000	0.0000
10.5	565,354,927	95.62%	95.86%	95.08%	0.0000	0.0000
11.5	542,431,604	94.96%	95.18%	94.36%	0.0000	0.0000
12.5	514,116,037	94.35%	94.45%	93.60%	0.0000	0.0001
13.5	480,100,528	93.43%	93.68%	92.80%	0.0000	0.0000
14.5	457,740,173	92.57%	92.87%	91.96%	0.0000	0.0000
15.5	440,612,917	91.70%	92.03%	91.09%	0.0000	0.0000
16.5	421,454,775	90.65%	91.16%	90.18%	0.0000	0.0000
17.5	395,550,617	89.12%	90.25%	89.24%	0.0001	0.0000
18.5	380,001,059	88.00%	89.32%	88.26%	0.0002	0.0000
19.5	369,757,534	86.74%	88.35%	87.25%	0.0003	0.0000
20.5	346,151,311	85.62%	87.35%	86.21%	0.0003	0.0000
21.5	337,753,246	84.66%	86.33%	85.15%	0.0003	0.0000
22.5	324,639,430	84.18%	85.28%	84.05%	0.0001	0.0000
23.5	314,870,862	83.48%	84.21%	82.93%	0.0001	0.0000
24.5	297,216,445	82.67%	83.11%	81.78%	0.0000	0.0001
25.5	263,947,359	81.11%	81.99%	80.61%	0.0001	0.0000
26.5	251,547,233	80.26%	80.85%	79.43%	0.0000	0.0001
27.5	238,715,868	79.17%	79.68%	78.23%	0.0000	0.0001
28.5	231,722,945	77.75%	78.50%	77.01%	0.0001	0.0001
29.5	215,049,768	76.05%	77.30%	75.79%	0.0002	0.0000
30.5	201,830,787	74.51%	76.08%	74.56%	0.0002	0.0000
31.5	191,185,722	73.32%	74.84%	73.32%	0.0002	0.0000
32.5	183,134,797	71.76%	73.59%	72.08%	0.0003	0.0000
33.5	175,639,098	70.26%	72.32%	70.83%	0.0004	0.0000
34.5	163,875,297	68.69%	71.03%	69.59%	0.0005	0.0001
35.5	151,337,449	67.90%	69.74%	68.36%	0.0003	0.0000
36.5	134,230,886	66.60%	68.43%	67.12%	0.0003	0.0000
37.5	129,023,295	65.08%	67.11%	65.89%	0.0004	0.0001
38.5	118,272,335	64.26%	65.78%	64.65%	0.0002	0.0000
39.5	102,610,343	63.42%	64.44%	63.43%	0.0001	0.0000
40.5	83,908,001	62.72%	63.09%	62.21%	0.0000	0.0000
41.5	77,631,416	61.81%	61.74%	60.99%	0.0000	0.0001
42.5	65,590,563	60.22%	60.37%	59.78%	0.0000	0.0000
43.5	59,221,825	58.99%	59.00%	58.57%	0.0000	0.0000
44.5	47,774,322	56.66%	57.63%	57.37%	0.0001	0.0001
45.5	42,304,117	56.01%	56.25%	56.17%	0.0000	0.0000
46.5	30,809,208	55.31%	54.86%	54.99%	0.0000	0.0000
47.5	28,247,792	53.85%	53.48%	53.81%	0.0000	0.0000
48.5	26,298,888	51.12%	52.09%	52.63%	0.0001	0.0002
49.5	22,166,553	49.88%	50.70%	51.47%	0.0001	0.0003
50.5	20,067,160	46.29%	49.31%	50.31%	0.0009	0.0016
51.5	18,182,091	45.58%	47.92%	49.17%	0.0005	0.0013
52.5	16,999,203	44.10%	46.53%	48.03%	0.0006	0.0015
53.5	10,632,091	43.07%	45.14%	46.90%	0.0004	0.0015
54.5	9,203,782	41.22%	43.76%	45.79%	0.0006	0.0021
55.5	8,901,757	39.73%	42.38%	44.68%	0.0007	0.0025
56.5	10,370,229	39.01%	41.00%	43.59%	0.0004	0.0021
57.5	9,630,206	38.47%	39.63%	42.50%	0.0001	0.0016
58.5	8,714,591	37.97%	38.27%	41.43%	0.0000	0.0012
59.5	5,982,823	37.23%	36.91%	40.37%	0.0000	0.0010

Account 353 Curve Fitting

[1]	[2]	[3]	[4]	[5]	[6]	[7]
Age (Years)	Exposures (Dollars)	Observed Life Table (OLT)	NIPSCO S0-50	OUCC L0.5-55	NIPSCO SSD	OUCC SSD
60.5	5,296,943	36.88%	35.56%	39.32%	0.0002	0.0006
61.5	4,776,143	36.11%	34.23%	38.28%	0.0004	0.0005
62.5	4,155,661	35.22%	32.90%	37.26%	0.0005	0.0004
63.5	3,573,774	33.49%	31.58%	36.25%	0.0004	0.0008
64.5	3,062,152	32.32%	30.27%	35.26%	0.0004	0.0009
65.5	2,814,534	31.94%	28.97%	34.27%	0.0009	0.0005
66.5	1,986,497	31.79%	27.69%	33.30%	0.0017	0.0002
67.5	1,296,834	31.54%	26.42%	32.35%	0.0026	0.0001
68.5	880,605	30.88%	25.17%	31.41%	0.0033	0.0000
69.5	784,846	30.43%	23.93%	30.48%	0.0042	0.0000
70.5	707,384	28.74%	22.71%	29.57%	0.0036	0.0001
71.5	641,009	27.44%	21.51%	28.68%	0.0035	0.0002
72.5	585,899	27.37%	20.32%	27.80%	0.0050	0.0000
73.5	576,356	27.20%	19.16%	26.93%	0.0065	0.0000
74.5	477,338	26.78%	18.02%	26.08%	0.0077	0.0000
75.5	434,790	26.09%	16.90%	25.25%	0.0085	0.0001
76.5	433,342	26.06%	15.80%	24.43%	0.0105	0.0003
77.5	429,517	25.97%	14.73%	23.62%	0.0126	0.0006
78.5	359,655	24.13%	13.68%	22.84%	0.0109	0.0002
79.5	358,249	24.05%	12.65%	22.06%	0.0130	0.0004
80.5	357,369	24.03%	11.66%	21.31%	0.0153	0.0007
81.5	288,073	19.44%	10.69%	20.57%	0.0077	0.0001
82.5	247,615	19.39%	9.75%	19.84%	0.0093	0.0000
83.5	247,608	19.39%	8.85%	19.14%	0.0111	0.0000
84.5	247,118	19.37%	7.97%	18.45%	0.0130	0.0001
85.5	66,200	19.37%	7.13%	17.77%	0.0150	0.0003
86.5	27,843	19.20%	6.33%	17.11%	0.0166	0.0004
87.5	27,843	19.20%	5.56%	16.47%	0.0186	0.0007
88.5	27,843	19.20%	4.83%	15.84%	0.0206	0.0011
89.5	27,843	19.20%	4.14%	15.23%	0.0227	0.0016
90.5	27,261	19.20%	3.50%	14.63%	0.0247	0.0021
91.5	27,261	19.20%	2.89%	14.05%	0.0266	0.0027
92.5	25,205	17.75%	2.34%	13.49%	0.0238	0.0018
93.5	20,329	14.32%	1.83%	12.94%	0.0156	0.0002
94.5	20,329	14.32%	1.37%	12.40%	0.0168	0.0004
95.5	20,329	14.32%	0.97%	11.89%	0.0178	0.0006
96.5	8,370	14.32%	0.63%	11.38%	0.0187	0.0009
97.5			0.35%	10.89%		
Sum of Squared Differences				[8]	0.3997	0.0377
Up to 1% of Beginning Exposures				[9]	0.0073	0.0063

[1] Age in years using half-year convention

[2] Dollars exposed to retirement at the beginning of each age interval

[3] Observed life table based on the Company's property records. These numbers form the original survivor curve.

[4] The Company's selected Iowa curve to be fitted to the OLT.

[5] My selected Iowa curve to be fitted to the OLT.

[6] = ([4] - [3])². This is the squared difference between each point on the Company's curve and the observed survivor curve.

[7] = ([5] - [3])². This is the squared difference between each point on my curve and the observed survivor curve.

[8] = Sum of squared differences. The smallest SSD represents the best mathematical fit.

Account 355 Curve Fitting

[1]	[2]	[3]	[4]	[5]	[6]	[7]
Age (Years)	Exposures (Dollars)	Observed Life Table (OLT)	NIPSCO R1-60	OUCG R0.5-69	NIPSCO SSD	OUCG SSD
0.0	539,798,113	100.00%	100.00%	100.00%	0.0000	0.0000
0.5	518,048,065	99.94%	99.79%	99.73%	0.0000	0.0000
1.5	486,787,585	99.85%	99.35%	99.17%	0.0000	0.0000
2.5	468,876,782	99.72%	98.90%	98.62%	0.0001	0.0001
3.5	230,804,150	99.59%	98.44%	98.06%	0.0001	0.0002
4.5	217,869,048	99.19%	97.98%	97.50%	0.0001	0.0003
5.5	200,224,190	98.73%	97.50%	96.93%	0.0002	0.0003
6.5	182,001,099	98.17%	97.01%	96.36%	0.0001	0.0003
7.5	168,104,285	97.46%	96.51%	95.78%	0.0001	0.0003
8.5	153,632,170	95.71%	96.01%	95.20%	0.0000	0.0000
9.5	146,892,855	94.82%	95.49%	94.62%	0.0000	0.0000
10.5	140,586,278	94.28%	94.96%	94.04%	0.0000	0.0000
11.5	132,723,261	93.74%	94.42%	93.45%	0.0000	0.0000
12.5	128,205,303	93.06%	93.88%	92.85%	0.0001	0.0000
13.5	115,647,523	92.58%	93.32%	92.25%	0.0001	0.0000
14.5	106,982,162	91.96%	92.75%	91.65%	0.0001	0.0000
15.5	104,035,483	91.34%	92.18%	91.05%	0.0001	0.0000
16.5	100,881,977	90.50%	91.59%	90.44%	0.0001	0.0000
17.5	98,063,746	90.16%	90.99%	89.83%	0.0001	0.0000
18.5	96,258,602	89.75%	90.39%	89.21%	0.0000	0.0000
19.5	94,085,503	89.24%	89.77%	88.59%	0.0000	0.0000
20.5	80,429,785	88.70%	89.15%	87.97%	0.0000	0.0001
21.5	70,405,682	88.13%	88.52%	87.35%	0.0000	0.0001
22.5	67,123,425	87.56%	87.87%	86.72%	0.0000	0.0001
23.5	63,784,818	86.84%	87.22%	86.08%	0.0000	0.0001
24.5	60,779,645	85.90%	86.55%	85.44%	0.0000	0.0000
25.5	59,132,165	85.19%	85.87%	84.80%	0.0000	0.0000
26.5	56,773,359	84.56%	85.18%	84.16%	0.0000	0.0000
27.5	55,259,702	84.20%	84.48%	83.51%	0.0000	0.0000
28.5	51,452,380	83.31%	83.76%	82.85%	0.0000	0.0000
29.5	48,386,925	82.55%	83.04%	82.20%	0.0000	0.0000
30.5	42,038,681	81.91%	82.29%	81.53%	0.0000	0.0000
31.5	39,996,981	80.40%	81.53%	80.87%	0.0001	0.0000
32.5	38,716,328	79.71%	80.76%	80.19%	0.0001	0.0000
33.5	36,348,792	78.88%	79.98%	79.52%	0.0001	0.0000
34.5	35,204,154	77.95%	79.17%	78.83%	0.0001	0.0001
35.5	31,332,680	77.24%	78.35%	78.14%	0.0001	0.0001
36.5	29,563,437	76.64%	77.52%	77.45%	0.0001	0.0001
37.5	26,985,768	76.22%	76.67%	76.75%	0.0000	0.0000
38.5	25,059,175	75.56%	75.80%	76.05%	0.0000	0.0000
39.5	22,554,277	74.89%	74.91%	75.34%	0.0000	0.0000
40.5	21,265,159	74.48%	74.01%	74.62%	0.0000	0.0000
41.5	18,792,239	73.28%	73.08%	73.90%	0.0000	0.0000
42.5	17,185,010	72.88%	72.14%	73.17%	0.0001	0.0000
43.5	15,868,555	72.51%	71.19%	72.43%	0.0002	0.0000
44.5	13,708,257	71.55%	70.21%	71.69%	0.0002	0.0000
45.5	12,342,891	70.42%	69.22%	70.94%	0.0001	0.0000
46.5	9,950,588	68.40%	68.20%	70.18%	0.0000	0.0003
47.5	7,263,915	66.09%	67.18%	69.42%	0.0001	0.0011
48.5	6,725,788	64.48%	66.13%	68.65%	0.0003	0.0017
49.5	6,306,040	64.03%	65.06%	67.88%	0.0001	0.0015
50.5	4,759,528	63.24%	63.98%	67.10%	0.0001	0.0015
51.5	4,371,486	62.59%	62.88%	66.31%	0.0000	0.0014
52.5	4,052,743	61.44%	61.76%	65.51%	0.0000	0.0017
53.5	3,700,347	60.77%	60.63%	64.71%	0.0000	0.0016
54.5	3,460,386	59.83%	59.48%	63.90%	0.0000	0.0017
55.5	3,328,569	59.42%	58.31%	63.08%	0.0001	0.0013
56.5	3,134,216	58.94%	57.13%	62.26%	0.0003	0.0011
57.5	3,058,449	58.37%	55.94%	61.43%	0.0006	0.0009
58.5	2,717,841	57.87%	54.73%	60.59%	0.0010	0.0007

Account 355 Curve Fitting

[1]	[2]	[3]	[4]	[5]	[6]	[7]
Age (Years)	Exposures (Dollars)	Observed Life Table (OLT)	NIPSCO R1-60	OUCC R0.5-69	NIPSCO SSD	OUCC SSD
59.5	2,532,598	56.55%	53.51%	59.75%	0.0009	0.0010
60.5	2,306,042	55.90%	52.28%	58.90%	0.0013	0.0009
61.5	2,058,202	55.45%	51.03%	58.04%	0.0020	0.0007
62.5	1,813,405	54.59%	49.78%	57.18%	0.0023	0.0007
63.5	1,559,284	54.06%	48.51%	56.32%	0.0031	0.0005
64.5	1,195,030	53.58%	47.24%	55.44%	0.0040	0.0003
65.5	973,726	53.21%	45.95%	54.56%	0.0053	0.0002
66.5	723,665	52.92%	44.66%	53.68%	0.0068	0.0001
67.5	480,190	52.11%	43.37%	52.79%	0.0076	0.0000
68.5	392,328	51.72%	42.07%	51.90%	0.0093	0.0000
69.5	233,599	51.31%	40.77%	51.00%	0.0111	0.0000
70.5	212,958	51.24%	39.46%	50.09%	0.0139	0.0001
71.5	149,893	51.02%	38.16%	49.19%	0.0166	0.0003
72.5	111,099	50.78%	36.85%	48.28%	0.0194	0.0006
73.5	68,342	50.64%	35.54%	47.36%	0.0228	0.0011
74.5	48,497	50.62%	34.24%	46.44%	0.0268	0.0017
75.5	47,346	50.21%	32.95%	45.52%	0.0298	0.0022
76.5	45,047	50.14%	31.66%	44.60%	0.0342	0.0031
77.5	35,953	44.04%	30.37%	43.68%	0.0187	0.0000
78.5	35,236	44.01%	29.10%	42.75%	0.0222	0.0002
79.5	35,466	43.88%	27.83%	41.82%	0.0258	0.0004
80.5	35,161	43.88%	26.58%	40.89%	0.0299	0.0009
81.5	34,759	43.88%	25.34%	39.96%	0.0344	0.0015
82.5	33,585	43.88%	24.12%	39.03%	0.0391	0.0024
83.5	32,560	43.88%	22.91%	38.10%	0.0440	0.0033
84.5	31,378	43.88%	21.72%	37.17%	0.0491	0.0045
85.5	15,123	43.81%	20.55%	36.24%	0.0541	0.0057
86.5	14,945	43.68%	19.39%	35.32%	0.0590	0.0070
87.5	14,827	43.68%	18.27%	34.39%	0.0646	0.0086
88.5	14,827	43.68%	17.16%	33.47%	0.0703	0.0104
89.5	14,783	43.68%	16.09%	32.55%	0.0761	0.0124
90.5	13,570	43.68%	15.04%	31.63%	0.0821	0.0145
91.5	7,247	39.51%	14.01%	30.72%	0.0650	0.0077
92.5	1,051	39.51%	13.02%	29.82%	0.0702	0.0094
93.5	59	39.51%	12.06%	28.91%	0.0754	0.0112
94.5	59	39.51%	11.13%	28.02%	0.0805	0.0132
95.5			10.24%	27.13%		
Sum of Squared Differences				[8]	1.1832	0.1462
Up to 1% of Beginning Exposures				[9]	0.0035	0.0073

[1] Age in years using half-year convention

[2] Dollars exposed to retirement at the beginning of each age interval

[3] Observed life table based on the Company's property records. These numbers form the original survivor curve.

[4] The Company's selected Iowa curve to be fitted to the OLT.

[5] My selected Iowa curve to be fitted to the OLT.

[6] = ([4] - [3])². This is the squared difference between each point on the Company's curve and the observed survivor curve.

[7] = ([5] - [3])². This is the squared difference between each point on my curve and the observed survivor curve.

[8] = Sum of squared differences. The smallest SSD represents the best mathematical fit.

Account 356 Curve Fitting

[1]	[2]	[3]	[4]	[5]	[6]	[7]
Age (Years)	Exposures (Dollars)	Observed Life Table (OLT)	NIPSCO R2-65	OUCG R2-71	NIPSCO SSD	OUCG SSD
0.0	325,052,813	100.00%	100.00%	100.00%	0.0000	0.0000
0.5	309,007,761	99.93%	99.93%	99.93%	0.0000	0.0000
1.5	278,236,923	99.84%	99.78%	99.80%	0.0000	0.0000
2.5	267,030,102	99.70%	99.62%	99.65%	0.0000	0.0000
3.5	185,234,175	99.08%	99.45%	99.50%	0.0000	0.0000
4.5	175,164,882	98.77%	99.27%	99.34%	0.0000	0.0000
5.5	167,719,599	98.56%	99.09%	99.18%	0.0000	0.0000
6.5	161,382,358	98.18%	98.89%	99.00%	0.0001	0.0001
7.5	154,567,085	97.92%	98.69%	98.82%	0.0001	0.0001
8.5	149,046,548	97.51%	98.47%	98.63%	0.0001	0.0001
9.5	144,776,817	96.92%	98.25%	98.43%	0.0002	0.0002
10.5	142,905,672	96.69%	98.01%	98.22%	0.0002	0.0002
11.5	139,193,356	96.34%	97.77%	98.01%	0.0002	0.0003
12.5	138,215,880	96.02%	97.51%	97.78%	0.0002	0.0003
13.5	131,201,084	95.85%	97.24%	97.54%	0.0002	0.0003
14.5	129,577,001	95.56%	96.95%	97.30%	0.0002	0.0003
15.5	128,868,508	95.13%	96.66%	97.04%	0.0002	0.0004
16.5	127,058,181	94.90%	96.35%	96.77%	0.0002	0.0004
17.5	125,281,421	94.61%	96.02%	96.50%	0.0002	0.0004
18.5	123,767,714	94.49%	95.68%	96.21%	0.0001	0.0003
19.5	122,763,058	94.28%	95.33%	95.90%	0.0001	0.0003
20.5	114,733,908	94.07%	94.96%	95.59%	0.0001	0.0002
21.5	110,271,277	93.63%	94.58%	95.26%	0.0001	0.0003
22.5	108,609,525	93.33%	94.17%	94.92%	0.0001	0.0003
23.5	107,028,352	92.94%	93.75%	94.57%	0.0001	0.0003
24.5	105,765,221	92.51%	93.32%	94.20%	0.0001	0.0003
25.5	104,562,058	92.23%	92.86%	93.82%	0.0000	0.0003
26.5	103,323,447	91.87%	92.39%	93.42%	0.0000	0.0002
27.5	102,213,456	91.69%	91.90%	93.01%	0.0000	0.0002
28.5	99,369,465	91.42%	91.39%	92.59%	0.0000	0.0001
29.5	95,284,832	90.65%	90.85%	92.14%	0.0000	0.0002
30.5	92,010,538	90.27%	90.30%	91.69%	0.0000	0.0002
31.5	87,180,829	89.89%	89.72%	91.21%	0.0000	0.0002
32.5	85,712,514	89.32%	89.13%	90.72%	0.0000	0.0002
33.5	83,436,011	88.57%	88.50%	90.20%	0.0000	0.0003
34.5	81,374,394	87.77%	87.86%	89.67%	0.0000	0.0004
35.5	78,498,099	87.07%	87.19%	89.13%	0.0000	0.0004
36.5	75,420,277	86.91%	86.50%	88.56%	0.0000	0.0003
37.5	72,229,849	86.64%	85.78%	87.97%	0.0001	0.0002
38.5	66,342,626	86.39%	85.03%	87.36%	0.0002	0.0001
39.5	62,258,318	86.14%	84.26%	86.73%	0.0004	0.0000
40.5	58,224,621	85.89%	83.45%	86.08%	0.0006	0.0000
41.5	55,208,423	85.35%	82.63%	85.41%	0.0007	0.0000
42.5	46,230,883	85.09%	81.77%	84.72%	0.0011	0.0000
43.5	40,754,883	84.77%	80.88%	84.00%	0.0015	0.0001
44.5	31,812,522	84.29%	79.96%	83.26%	0.0019	0.0001
45.5	28,264,283	84.01%	79.01%	82.49%	0.0025	0.0002
46.5	25,642,289	83.51%	78.03%	81.70%	0.0030	0.0003
47.5	21,857,991	83.20%	77.02%	80.89%	0.0038	0.0005
48.5	20,955,597	82.72%	75.97%	80.05%	0.0046	0.0007
49.5	20,080,268	82.43%	74.90%	79.19%	0.0057	0.0011
50.5	16,752,784	80.98%	73.78%	78.30%	0.0052	0.0007
51.5	15,464,852	80.28%	72.64%	77.38%	0.0058	0.0008
52.5	14,673,604	79.79%	71.46%	76.43%	0.0069	0.0011
53.5	12,481,685	79.52%	70.25%	75.46%	0.0086	0.0016
54.5	11,163,607	78.78%	69.01%	74.46%	0.0095	0.0019
55.5	10,874,853	78.31%	67.73%	73.43%	0.0112	0.0024
56.5	10,230,557	77.97%	66.42%	72.38%	0.0133	0.0031
57.5	9,563,564	76.79%	65.07%	71.30%	0.0137	0.0030
58.5	8,547,001	76.17%	63.70%	70.18%	0.0156	0.0036
59.5	8,145,669	75.93%	62.29%	69.04%	0.0186	0.0047
60.5	7,552,486	74.78%	60.85%	67.88%	0.0194	0.0048
61.5	7,096,263	74.01%	59.38%	66.68%	0.0214	0.0054
62.5	6,748,249	73.17%	57.89%	65.46%	0.0234	0.0059
63.5	6,429,875	72.82%	56.36%	64.21%	0.0271	0.0074
64.5	5,210,904	72.76%	54.81%	62.93%	0.0322	0.0097
65.5	4,639,694	72.34%	53.23%	61.63%	0.0365	0.0115
66.5	4,148,037	72.01%	51.64%	60.30%	0.0415	0.0137

Account 356 Curve Fitting

[1]	[2]	[3]	[4]	[5]	[6]	[7]
Age (Years)	Exposures (Dollars)	Observed Life Table (OLT)	NIPSCO R2-65	OUCC R2-71	NIPSCO SSD	OUCC SSD
67.5	3,706,564	71.89%	50.02%	58.94%	0.0478	0.0168
68.5	3,113,287	71.54%	48.38%	57.56%	0.0536	0.0195
69.5	2,349,436	71.30%	46.73%	56.17%	0.0604	0.0229
70.5	2,217,075	71.19%	45.07%	54.74%	0.0682	0.0271
71.5	2,004,210	71.18%	43.40%	53.30%	0.0772	0.0320
72.5	1,955,956	71.05%	41.72%	51.84%	0.0860	0.0369
73.5	1,942,941	71.04%	40.03%	50.36%	0.0961	0.0428
74.5	1,884,730	71.04%	38.35%	48.87%	0.1069	0.0492
75.5	1,877,454	71.00%	36.67%	47.36%	0.1178	0.0559
76.5	1,860,537	70.87%	35.00%	45.84%	0.1287	0.0626
77.5	1,834,204	70.83%	33.34%	44.32%	0.1406	0.0703
78.5	1,808,435	70.72%	31.69%	42.78%	0.1523	0.0781
79.5	1,766,758	70.34%	30.06%	41.24%	0.1622	0.0847
80.5	1,720,133	70.21%	28.46%	39.70%	0.1743	0.0931
81.5	1,661,802	70.09%	26.87%	38.16%	0.1868	0.1019
82.5	1,612,030	69.72%	25.32%	36.62%	0.1971	0.1095
83.5	1,618,666	69.63%	23.80%	35.09%	0.2100	0.1193
84.5	1,591,806	69.33%	22.32%	33.57%	0.2210	0.1279
85.5	838,728	69.26%	20.88%	32.06%	0.2341	0.1384
86.5	832,026	69.18%	19.47%	30.56%	0.2471	0.1491
87.5	824,461	68.55%	18.12%	29.09%	0.2543	0.1557
88.5	823,112	68.52%	16.80%	27.63%	0.2674	0.1672
89.5	807,628	67.80%	15.54%	26.19%	0.2731	0.1731
90.5	752,927	67.57%	14.33%	24.78%	0.2834	0.1831
91.5	578,476	64.43%	13.17%	23.40%	0.2628	0.1683
92.5	280,122	63.36%	12.06%	22.05%	0.2631	0.1706
93.5	250,942	62.68%	11.01%	20.74%	0.2670	0.1759
94.5	249,644	62.51%	10.01%	19.45%	0.2756	0.1854
95.5	221,997	62.18%	9.06%	18.21%	0.2822	0.1933
96.5	200,173	62.18%	8.17%	17.00%	0.2917	0.2041
97.5	84,437	60.56%	7.33%	15.84%	0.2833	0.2000
98.5	28,621	60.56%	6.55%	14.72%	0.2918	0.2101
99.5	24,653	60.56%	5.81%	13.64%	0.2998	0.2202
100.5	24,615	60.56%	5.13%	12.60%	0.3073	0.2300
101.5	11,440	60.56%	4.49%	11.61%	0.3144	0.2396
102.5	11,440	60.56%	3.91%	10.67%	0.3210	0.2489
103.5	11,440	60.56%	3.37%	9.76%	0.3271	0.2580
104.5	10,747	60.56%	2.88%	8.91%	0.3327	0.2668
105.5	10,747	60.56%	2.43%	8.10%	0.3379	0.2752
106.5	10,747	60.56%	2.02%	7.33%	0.3426	0.2833
107.5	10,747	60.56%	1.67%	6.61%	0.3469	0.2911
108.5	10,747	60.56%	1.34%	5.93%	0.3507	0.2984
109.5			1.07%	5.29%		
Sum of Squared Differences				[8]	9.6832	6.3289
Up to 1% of Beginning Exposures				[9]	0.5006	0.1518

[1] Age in years using half-year convention

[2] Dollars exposed to retirement at the beginning of each age interval

[3] Observed life table based on the Company's property records. These numbers form the original survivor curve.

[4] The Company's selected Iowa curve to be fitted to the OLT.

[5] My selected Iowa curve to be fitted to the OLT.

[6] = ([4] - [3])². This is the squared difference between each point on the Company's curve and the observed survivor curve.

[7] = ([5] - [3])². This is the squared difference between each point on my curve and the observed survivor curve.

[8] = Sum of squared differences. The smallest SSD represents the best mathematical fit.

Account 365 Curve Fitting

[1]	[2]	[3]	[4]	[5]	[6]	[7]
Age (Years)	Exposures (Dollars)	Observed Life Table (OLT)	NIPSCO R1.5-60	OUCG R1-68	NIPSCO SSD	OUCG SSD
0.0	347,307,252	100.00%	100.00%	100.00%	0.0000	0.0000
0.5	322,074,110	99.95%	99.85%	99.81%	0.0000	0.0000
1.5	301,998,111	99.74%	99.55%	99.43%	0.0000	0.0000
2.5	265,004,537	99.48%	99.24%	99.03%	0.0000	0.0000
3.5	243,237,332	99.06%	98.92%	98.63%	0.0000	0.0000
4.5	231,505,672	98.69%	98.59%	98.22%	0.0000	0.0000
5.5	220,613,356	98.21%	98.25%	97.81%	0.0000	0.0000
6.5	215,226,629	97.66%	97.90%	97.38%	0.0000	0.0000
7.5	206,633,596	97.22%	97.53%	96.95%	0.0000	0.0000
8.5	196,667,740	96.79%	97.16%	96.51%	0.0000	0.0000
9.5	191,756,016	96.34%	96.34%	96.07%	0.0000	0.0000
10.5	185,643,820	95.90%	96.38%	95.61%	0.0000	0.0000
11.5	182,242,967	95.42%	95.97%	95.15%	0.0000	0.0000
12.5	177,843,429	94.85%	95.55%	94.68%	0.0000	0.0000
13.5	171,138,660	94.33%	95.12%	94.20%	0.0001	0.0000
14.5	162,849,907	93.68%	94.67%	93.71%	0.0001	0.0000
15.5	157,036,315	92.97%	94.21%	93.22%	0.0002	0.0000
16.5	152,516,132	92.49%	93.74%	92.72%	0.0002	0.0000
17.5	150,263,883	91.93%	93.26%	92.21%	0.0002	0.0000
18.5	143,625,944	91.29%	92.76%	91.69%	0.0002	0.0000
19.5	139,138,554	90.75%	92.25%	91.17%	0.0002	0.0000
20.5	133,224,402	90.03%	91.72%	90.64%	0.0003	0.0000
21.5	128,361,240	89.38%	91.18%	90.10%	0.0003	0.0001
22.5	123,243,985	88.76%	90.62%	89.56%	0.0003	0.0001
23.5	116,508,723	88.03%	90.05%	89.00%	0.0004	0.0001
24.5	111,473,174	87.30%	89.46%	88.44%	0.0005	0.0001
25.5	106,721,988	86.64%	88.85%	87.87%	0.0005	0.0002
26.5	103,095,430	85.85%	88.23%	87.30%	0.0006	0.0002
27.5	98,862,280	85.17%	87.59%	86.71%	0.0006	0.0002
28.5	96,501,868	84.48%	86.93%	86.11%	0.0006	0.0003
29.5	93,910,195	83.69%	86.24%	85.51%	0.0007	0.0003
30.5	89,577,881	83.11%	85.54%	84.89%	0.0006	0.0003
31.5	87,516,794	82.46%	84.82%	84.27%	0.0006	0.0003
32.5	84,880,201	81.70%	84.08%	83.64%	0.0006	0.0004
33.5	81,327,663	80.98%	83.31%	82.99%	0.0005	0.0004
34.5	77,675,255	80.32%	82.52%	82.34%	0.0005	0.0004
35.5	72,793,900	79.69%	81.71%	81.67%	0.0004	0.0004
36.5	67,886,067	79.08%	80.87%	80.99%	0.0003	0.0004
37.5	62,818,997	78.46%	80.01%	80.30%	0.0002	0.0003
38.5	57,647,107	77.98%	79.12%	79.60%	0.0001	0.0003
39.5	52,239,424	77.31%	78.21%	78.89%	0.0001	0.0002
40.5	48,155,119	76.72%	77.27%	78.16%	0.0000	0.0002
41.5	41,380,150	75.92%	76.31%	77.42%	0.0000	0.0002
42.5	37,172,886	75.32%	75.31%	76.67%	0.0000	0.0002
43.5	33,920,355	74.57%	74.29%	75.90%	0.0000	0.0002
44.5	29,530,512	73.76%	73.25%	75.12%	0.0000	0.0002
45.5	25,117,503	72.84%	72.17%	74.33%	0.0000	0.0002
46.5	22,364,862	71.93%	71.06%	73.52%	0.0001	0.0003
47.5	20,001,338	71.02%	69.93%	72.70%	0.0001	0.0003
48.5	18,594,576	70.25%	68.77%	71.86%	0.0002	0.0003
49.5	17,515,330	69.49%	67.58%	71.02%	0.0004	0.0002
50.5	16,277,452	68.83%	66.36%	70.15%	0.0006	0.0002
51.5	15,436,591	68.14%	65.12%	69.28%	0.0009	0.0001
52.5	14,572,310	67.57%	63.84%	68.38%	0.0014	0.0001
53.5	13,792,055	66.78%	62.54%	67.48%	0.0018	0.0000
54.5	12,875,931	66.22%	61.21%	66.56%	0.0025	0.0000
55.5	12,143,360	65.42%	59.85%	65.63%	0.0031	0.0000
56.5	11,481,980	64.95%	58.47%	64.68%	0.0042	0.0000
57.5	10,827,953	64.46%	57.07%	63.72%	0.0055	0.0001
58.5	10,054,586	64.04%	55.64%	62.75%	0.0071	0.0002
59.5	9,064,829	63.69%	54.19%	61.76%	0.0090	0.0004
60.5	8,254,960	62.76%	52.72%	60.76%	0.0101	0.0004
61.5	7,472,871	62.43%	51.23%	59.75%	0.0125	0.0007
62.5	6,455,512	62.10%	49.73%	58.73%	0.0153	0.0011
63.5	5,458,910	61.57%	48.21%	57.69%	0.0179	0.0015
64.5	4,844,620	61.37%	46.67%	56.64%	0.0216	0.0022
65.5	3,984,923	60.64%	45.13%	55.59%	0.0241	0.0026
66.5	3,220,988	60.19%	43.58%	54.52%	0.0276	0.0032
67.5	2,784,286	59.67%	42.02%	53.44%	0.0312	0.0039

Account 365 Curve Fitting

[1]	[2]	[3]	[4]	[5]	[6]	[7]
Age (Years)	Exposures (Dollars)	Observed Life Table (OLT)	NIPSCO R1.5-60	OUCC R1-68	NIPSCO SSD	OUCC SSD
68.5	2,492,634	59.48%	40.46%	52.35%	0.0362	0.0051
69.5	1,914,286	59.32%	38.89%	51.25%	0.0417	0.0065
70.5	1,474,521	59.20%	37.33%	50.15%	0.0478	0.0082
71.5	1,076,832	58.68%	35.78%	49.03%	0.0524	0.0093
72.5	761,715	58.39%	34.24%	47.91%	0.0583	0.0110
73.5	678,405	58.03%	32.70%	46.78%	0.0641	0.0126
74.5	584,926	57.54%	31.18%	45.65%	0.0695	0.0141
75.5	521,361	57.06%	29.68%	44.51%	0.0750	0.0157
76.5	492,576	56.84%	28.20%	43.37%	0.0820	0.0181
77.5	365,217	56.32%	26.75%	42.22%	0.0875	0.0199
78.5	302,926	55.95%	25.31%	41.07%	0.0939	0.0221
79.5	260,966	55.64%	23.91%	39.92%	0.1007	0.0247
80.5	213,875	54.78%	22.54%	38.77%	0.1039	0.0256
81.5	204,879	54.36%	21.21%	37.62%	0.1099	0.0280
82.5	226,101	54.17%	19.91%	36.47%	0.1174	0.0313
83.5	222,962	53.97%	18.64%	35.31%	0.1248	0.0348
84.5	211,320	53.82%	17.42%	34.17%	0.1325	0.0386
85.5	204,855	53.51%	16.24%	33.02%	0.1389	0.0420
86.5	200,343	53.44%	15.10%	31.88%	0.1470	0.0465
87.5	200,049	53.36%	14.00%	30.75%	0.1549	0.0511
88.5	197,916	53.28%	12.94%	29.62%	0.1627	0.0560
89.5	181,620	53.12%	11.93%	28.50%	0.1696	0.0606
90.5	129,553	52.86%	10.97%	27.39%	0.1755	0.0649
91.5	66,921	52.86%	10.05%	26.29%	0.1833	0.0706
92.5	46,178	52.18%	9.17%	25.19%	0.1850	0.0728
93.5	29,715	51.99%	8.34%	24.12%	0.1905	0.0777
94.5	28,950	51.83%	7.55%	23.05%	0.1960	0.0828
95.5	2,778	51.80%	6.81%	21.99%	0.2024	0.0888
96.5	2,752	51.33%	6.12%	20.96%	0.2044	0.0923
97.5	2,752	51.33%	5.46%	19.93%	0.2104	0.0986
98.5	2,486	47.97%	4.86%	18.93%	0.1859	0.0843
99.5	1,998	47.97%	4.29%	17.94%	0.1908	0.0902
100.5	1,878	47.97%	3.77%	16.97%	0.1953	0.0961
101.5	1,878	47.97%	3.29%	16.02%	0.1996	0.1021
102.5	1,878	47.97%	2.86%	15.10%	0.2035	0.1081
103.5	1,679	46.24%	2.46%	14.19%	0.1916	0.1027
104.5	1,678	46.24%	2.11%	13.31%	0.1948	0.1084
105.5	1,678	46.24%	1.79%	12.45%	0.1975	0.1142
106.5	1,678	46.24%	1.52%	11.62%	0.2000	0.1199
107.5	1,676	46.24%	1.27%	10.81%	0.2022	0.1255
108.5	1,216	46.24%	1.06%	10.03%	0.2041	0.1311
109.5	1,216	46.24%	0.87%	9.28%	0.2058	0.1366
110.5	1,216	46.24%	0.72%	8.55%	0.2072	0.1420
111.5	582	46.24%	0.58%	7.86%	0.2085	0.1473
112.5	37	46.24%	0.46%	7.19%	0.2096	0.1525
113.5			0.35%	6.55%		
Sum of Squared Differences				[8]	6.9220	3.0157
Up to 1% of Beginning Exposures				[9]	0.1483	0.0170

[1] Age in years using half-year convention

[2] Dollars exposed to retirement at the beginning of each age interval

[3] Observed life table based on the Company's property records. These numbers form the original survivor curve.

[4] The Company's selected Iowa curve to be fitted to the OLT.

[5] My selected Iowa curve to be fitted to the OLT.

[6] = $([4] - [3])^2$. This is the squared difference between each point on the Company's curve and the observed survivor curve.

[7] = $([5] - [3])^2$. This is the squared difference between each point on my curve and the observed survivor curve.

[8] = Sum of squared differences. The smallest SSD represents the best mathematical fit.

Account 367 Curve Fitting

[1]	[2]	[3]	[4]	[5]	[6]	[7]
Age (Years)	Exposures (Dollars)	Observed Life Table (OLT)	NIPSCO R2.5-52	OUCG R2-57	NIPSCO SSD	OUCG SSD
0.0	520,693,367	100.00%	100.00%	100.00%	0.0000	0.0000
0.5	478,405,943	99.99%	99.95%	99.92%	0.0000	0.0000
1.5	452,710,333	99.89%	99.83%	99.74%	0.0000	0.0000
2.5	411,140,607	99.77%	99.71%	99.56%	0.0000	0.0000
3.5	363,718,616	99.68%	99.58%	99.36%	0.0000	0.0000
4.5	335,564,504	99.54%	99.44%	99.16%	0.0000	0.0000
5.5	306,861,493	99.42%	99.28%	98.94%	0.0000	0.0000
6.5	287,282,482	99.19%	99.12%	98.71%	0.0000	0.0000
7.5	272,336,034	99.02%	98.94%	98.46%	0.0000	0.0000
8.5	260,255,190	98.77%	98.75%	98.20%	0.0000	0.0000
9.5	248,463,527	98.64%	98.54%	97.93%	0.0000	0.0001
10.5	241,847,146	98.45%	98.31%	97.64%	0.0000	0.0001
11.5	233,936,607	98.28%	98.07%	97.34%	0.0000	0.0001
12.5	223,754,070	97.88%	97.81%	97.02%	0.0000	0.0001
13.5	208,874,143	97.73%	97.53%	96.69%	0.0000	0.0001
14.5	190,721,288	97.38%	97.23%	96.33%	0.0000	0.0001
15.5	173,756,573	97.03%	96.91%	95.96%	0.0000	0.0001
16.5	157,541,692	96.67%	96.56%	95.57%	0.0000	0.0001
17.5	147,574,429	95.96%	96.19%	95.16%	0.0000	0.0001
18.5	137,042,104	95.43%	95.79%	94.73%	0.0000	0.0000
19.5	127,610,523	94.98%	95.36%	94.28%	0.0000	0.0000
20.5	118,734,016	94.59%	94.90%	93.81%	0.0000	0.0001
21.5	109,814,621	94.24%	94.42%	93.31%	0.0000	0.0001
22.5	102,078,195	93.63%	93.90%	92.79%	0.0000	0.0001
23.5	93,284,313	93.07%	93.34%	92.25%	0.0000	0.0001
24.5	84,296,944	92.20%	92.75%	91.68%	0.0000	0.0000
25.5	76,411,385	91.61%	92.13%	91.08%	0.0000	0.0000
26.5	69,282,299	90.57%	91.46%	90.46%	0.0001	0.0000
27.5	62,174,081	89.57%	90.75%	89.81%	0.0001	0.0000
28.5	56,802,479	88.56%	89.99%	89.13%	0.0002	0.0000
29.5	52,782,395	87.61%	89.19%	88.42%	0.0003	0.0001
30.5	47,830,317	86.86%	88.34%	87.67%	0.0002	0.0001
31.5	41,716,490	85.97%	87.45%	86.90%	0.0002	0.0001
32.5	36,365,400	84.77%	86.50%	86.10%	0.0003	0.0002
33.5	31,094,649	84.24%	85.49%	85.25%	0.0002	0.0001
34.5	27,246,826	83.90%	84.43%	84.38%	0.0000	0.0000
35.5	24,918,791	83.18%	83.31%	83.47%	0.0000	0.0000
36.5	22,660,999	82.45%	82.13%	82.52%	0.0000	0.0000
37.5	19,998,711	81.22%	80.88%	81.54%	0.0000	0.0000
38.5	18,491,700	80.65%	79.57%	80.51%	0.0001	0.0000
39.5	16,573,135	79.78%	78.19%	79.45%	0.0003	0.0000
40.5	13,748,861	78.41%	76.73%	78.34%	0.0003	0.0000
41.5	9,057,790	77.44%	75.20%	77.20%	0.0005	0.0000
42.5	5,592,320	76.12%	73.59%	76.01%	0.0006	0.0000
43.5	4,164,423	73.23%	71.90%	74.78%	0.0002	0.0002
44.5	3,333,653	71.26%	70.14%	73.51%	0.0001	0.0005
45.5	2,297,943	68.45%	68.29%	72.19%	0.0000	0.0014
46.5	2,134,467	63.55%	66.36%	70.83%	0.0008	0.0053
47.5	1,785,090	62.08%	64.35%	69.43%	0.0005	0.0054
48.5	1,428,028	61.22%	62.27%	67.98%	0.0001	0.0046
49.5	1,298,870	59.30%	60.10%	66.49%	0.0001	0.0052
50.5	1,141,427	58.73%	57.87%	64.96%	0.0001	0.0039
51.5	953,523	58.27%	55.56%	63.38%	0.0007	0.0026
52.5	822,751	58.00%	53.19%	61.76%	0.0023	0.0014
53.5	753,692	57.83%	50.77%	60.11%	0.0050	0.0005
54.5	720,888	56.56%	48.30%	58.41%	0.0068	0.0003
55.5	671,525	54.82%	45.80%	56.68%	0.0081	0.0003
56.5	662,640	54.09%	43.28%	54.92%	0.0117	0.0001
57.5	656,088	53.99%	40.75%	53.12%	0.0175	0.0001
58.5	617,087	53.79%	38.22%	51.30%	0.0243	0.0006

Account 367 Curve Fitting

[1]	[2]	[3]	[4]	[5]	[6]	[7]
Age (Years)	Exposures (Dollars)	Observed Life Table (OLT)	NIPSCO R2.5-52	OUCC R2-57	NIPSCO SSD	OUCC SSD
59.5	537,484	53.54%	35.71%	49.45%	0.0318	0.0017
60.5	503,690	52.97%	33.22%	47.57%	0.0390	0.0029
61.5	494,064	52.20%	30.79%	45.68%	0.0458	0.0042
62.5	481,987	51.42%	28.41%	43.78%	0.0529	0.0058
63.5	409,311	47.65%	26.11%	41.86%	0.0464	0.0033
64.5	386,219	46.50%	23.88%	39.94%	0.0511	0.0043
65.5	327,079	46.22%	21.76%	38.03%	0.0598	0.0067
66.5	222,313	46.22%	19.73%	36.11%	0.0702	0.0102
67.5	187,808	46.22%	17.81%	34.21%	0.0807	0.0144
68.5	171,940	45.91%	16.00%	32.32%	0.0894	0.0185
69.5	154,482	43.46%	14.31%	30.46%	0.0850	0.0169
70.5	141,339	43.46%	12.73%	28.62%	0.0944	0.0220
71.5	141,272	43.44%	11.27%	26.82%	0.1035	0.0276
72.5	140,406	43.38%	9.92%	25.05%	0.1119	0.0336
73.5	112,809	43.31%	8.69%	23.33%	0.1199	0.0399
74.5	111,157	42.89%	7.56%	21.66%	0.1248	0.0451
75.5	110,604	42.89%	6.53%	20.04%	0.1322	0.0522
76.5	107,994	42.87%	5.61%	18.47%	0.1388	0.0595
77.5	105,883	42.87%	4.78%	16.96%	0.1451	0.0671
78.5	99,355	42.80%	4.04%	15.52%	0.1502	0.0744
79.5	99,156	42.80%	3.39%	14.15%	0.1553	0.0821
80.5	99,007	42.80%	2.82%	12.83%	0.1599	0.0898
81.5	68,413	42.80%	2.32%	11.59%	0.1639	0.0974
82.5	68,413	42.80%	1.89%	10.42%	0.1674	0.1048
83.5	35,834	42.80%	1.52%	9.32%	0.1704	0.1121
84.5	34,815	41.68%	1.21%	8.29%	0.1638	0.1115
85.5	34,080	40.80%	0.95%	7.33%	0.1588	0.1120
86.5	34,080	40.80%	0.73%	6.44%	0.1605	0.1181
87.5	33,332	39.90%	0.55%	5.61%	0.1548	0.1176
88.5	24,136	39.88%	0.40%	4.85%	0.1559	0.1227
89.5	7,570	39.05%	0.28%	4.16%	0.1503	0.1218
90.5	4,906	39.05%	0.18%	3.52%	0.1511	0.1262
91.5	4,906	39.05%	0.11%	2.95%	0.1517	0.1303
92.5	4,382	39.05%	0.06%	2.44%	0.1520	0.1341
93.5	11	39.05%	0.03%	1.98%	0.1523	0.1374
94.5			0.01%	1.58%		
Sum of Squared Differences				[8]	4.2231	2.2628
Up to 1% of Beginning Exposures				[9]	0.0036	0.0020

[1] Age in years using half-year convention

[2] Dollars exposed to retirement at the beginning of each age interval

[3] Observed life table based on the Company's property records. These numbers form the original survivor curve.

[4] The Company's selected Iowa curve to be fitted to the OLT.

[5] My selected Iowa curve to be fitted to the OLT.

[6] = $(([4] - [3]))^2$. This is the squared difference between each point on the Company's curve and the observed survivor curve.

[7] = $(([5] - [3]))^2$. This is the squared difference between each point on my curve and the observed survivor curve.

[8] = Sum of squared differences. The smallest SSD represents the best mathematical fit.

Account 373 Curve Fitting

[1]	[2]	[3]	[4]	[5]	[6]	[7]
Age (Years)	Exposures (Dollars)	Observed Life Table (OLT)	NIPSCO L0-31	OUCG O3-42	NIPSCO SSD	OUCG SSD
0.0	91,851,151	100.00%	100.00%	100.00%	0.0000	0.0000
0.5	88,408,671	99.21%	99.75%	99.02%	0.0000	0.0000
1.5	82,355,218	97.21%	98.94%	97.05%	0.0003	0.0000
2.5	68,657,922	93.78%	97.85%	95.09%	0.0017	0.0002
3.5	65,796,589	91.80%	96.57%	93.14%	0.0023	0.0002
4.5	60,708,381	89.67%	95.14%	91.19%	0.0030	0.0002
5.5	57,830,037	87.18%	93.59%	89.26%	0.0041	0.0004
6.5	55,324,739	85.19%	91.95%	87.34%	0.0046	0.0005
7.5	53,447,177	83.22%	90.22%	85.42%	0.0049	0.0005
8.5	51,703,447	81.36%	88.42%	83.53%	0.0050	0.0005
9.5	50,113,623	79.56%	86.57%	81.64%	0.0049	0.0004
10.5	48,747,461	77.79%	84.66%	79.78%	0.0047	0.0004
11.5	47,324,384	75.98%	82.72%	77.93%	0.0045	0.0004
12.5	45,879,028	74.21%	80.75%	76.10%	0.0043	0.0004
13.5	44,134,817	72.67%	78.76%	74.29%	0.0037	0.0003
14.5	41,977,268	70.68%	76.75%	72.50%	0.0037	0.0003
15.5	40,272,662	69.32%	74.74%	70.74%	0.0029	0.0002
16.5	37,369,631	67.71%	72.72%	69.01%	0.0025	0.0002
17.5	36,072,769	65.91%	70.71%	67.30%	0.0023	0.0002
18.5	34,489,216	64.00%	68.71%	65.61%	0.0022	0.0003
19.5	33,110,811	62.02%	66.71%	63.96%	0.0022	0.0004
20.5	31,497,956	60.19%	64.72%	62.34%	0.0020	0.0005
21.5	30,267,590	58.73%	62.74%	60.75%	0.0016	0.0004
22.5	29,370,957	57.47%	60.77%	59.19%	0.0011	0.0003
23.5	28,087,601	55.91%	58.82%	57.67%	0.0008	0.0003
24.5	26,797,416	54.19%	56.88%	56.18%	0.0007	0.0004
25.5	25,922,061	53.15%	54.96%	54.73%	0.0003	0.0002
26.5	24,901,841	51.90%	53.06%	53.31%	0.0001	0.0002
27.5	23,928,879	50.54%	51.19%	51.93%	0.0000	0.0002
28.5	23,081,950	49.29%	49.33%	50.58%	0.0000	0.0002
29.5	22,080,025	47.92%	47.51%	49.27%	0.0000	0.0002
30.5	21,072,349	46.34%	45.70%	48.00%	0.0000	0.0003
31.5	19,719,550	43.79%	43.93%	46.76%	0.0000	0.0009
32.5	17,572,260	40.26%	42.19%	45.56%	0.0004	0.0028
33.5	16,457,503	39.09%	40.48%	44.39%	0.0002	0.0028
34.5	15,566,596	37.83%	38.80%	43.26%	0.0001	0.0029
35.5	14,498,673	36.49%	37.15%	42.16%	0.0000	0.0032
36.5	13,002,871	35.43%	35.54%	41.09%	0.0000	0.0032
37.5	12,385,432	35.03%	33.97%	40.06%	0.0001	0.0025
38.5	11,375,369	34.72%	32.43%	39.06%	0.0005	0.0019
39.5	10,553,798	34.53%	30.93%	38.09%	0.0013	0.0013
40.5	9,943,433	34.34%	29.47%	37.15%	0.0024	0.0008
41.5	9,136,475	34.13%	28.04%	36.24%	0.0037	0.0004
42.5	8,358,191	33.85%	26.66%	35.36%	0.0052	0.0002
43.5	7,656,883	33.65%	25.32%	34.51%	0.0069	0.0001
44.5	7,066,172	33.53%	24.02%	33.68%	0.0091	0.0000
45.5	6,526,416	33.29%	22.75%	32.88%	0.0111	0.0000
46.5	5,945,171	33.18%	21.53%	32.11%	0.0136	0.0001
47.5	5,536,760	33.04%	20.35%	31.35%	0.0161	0.0003
48.5	5,174,646	32.89%	19.21%	30.63%	0.0187	0.0005
49.5	4,900,487	32.76%	18.12%	29.92%	0.0214	0.0008
50.5	4,435,603	32.53%	17.06%	29.24%	0.0239	0.0011
51.5	4,147,137	32.42%	16.04%	28.57%	0.0268	0.0015
52.5	3,720,279	32.25%	15.07%	27.93%	0.0295	0.0019
53.5	3,382,471	32.10%	14.13%	27.30%	0.0323	0.0023
54.5	3,059,500	31.87%	13.24%	26.70%	0.0347	0.0027
55.5	2,841,208	31.70%	12.38%	26.11%	0.0373	0.0031
56.5	2,658,362	31.58%	11.57%	25.54%	0.0401	0.0037
57.5	2,390,240	31.48%	10.79%	24.98%	0.0428	0.0042
58.5	2,183,776	31.39%	10.05%	24.44%	0.0456	0.0048
59.5	1,913,610	31.01%	9.34%	23.92%	0.0470	0.0050
60.5	1,652,012	30.89%	8.67%	23.41%	0.0494	0.0056
61.5	1,213,590	30.47%	8.04%	22.91%	0.0503	0.0057
62.5	937,671	30.32%	7.44%	22.43%	0.0524	0.0062
63.5	781,793	30.01%	6.87%	21.96%	0.0535	0.0065

Account 373 Curve Fitting

[1]	[2]	[3]	[4]	[5]	[6]	[7]
Age (Years)	Exposures (Dollars)	Observed Life Table (OLT)	NIPSCO L0-31	OUCC O3-42	NIPSCO SSD	OUCC SSD
64.5	655,710	29.60%	6.34%	21.50%	0.0541	0.0066
65.5	514,994	29.41%	5.84%	21.06%	0.0556	0.0070
66.5	402,713	28.98%	5.36%	20.62%	0.0558	0.0070
67.5	344,387	28.92%	4.92%	20.20%	0.0576	0.0076
68.5	302,085	28.45%	4.50%	19.79%	0.0573	0.0075
69.5	218,602	27.99%	4.11%	19.38%	0.0570	0.0074
70.5	165,220	27.92%	3.75%	18.99%	0.0584	0.0080
71.5	129,520	27.82%	3.41%	18.61%	0.0596	0.0085
72.5	81,986	27.81%	3.10%	18.23%	0.0611	0.0092
73.5	75,294	27.81%	2.81%	17.87%	0.0625	0.0099
74.5	66,118	27.78%	2.54%	17.51%	0.0637	0.0106
75.5	62,772	27.65%	2.29%	17.16%	0.0643	0.0110
76.5	59,334	27.52%	2.06%	16.81%	0.0648	0.0115
77.5	58,094	27.25%	1.85%	16.48%	0.0645	0.0116
78.5	57,972	27.20%	1.66%	16.15%	0.0652	0.0122
79.5	55,633	27.18%	1.48%	15.83%	0.0660	0.0129
80.5	54,025	27.04%	1.32%	15.51%	0.0662	0.0133
81.5	49,998	27.04%	1.17%	15.21%	0.0669	0.0140
82.5	46,167	25.63%	1.04%	14.90%	0.0605	0.0115
83.5	38,196	24.68%	0.92%	14.61%	0.0565	0.0101
84.5	35,076	24.46%	0.81%	14.32%	0.0559	0.0103
85.5	30,441	24.22%	0.71%	14.03%	0.0553	0.0104
86.5	25,856	24.20%	0.62%	13.75%	0.0556	0.0109
87.5	23,495	24.03%	0.54%	13.47%	0.0552	0.0111
88.5	21,879	23.94%	0.47%	13.20%	0.0551	0.0115
89.5	17,692	23.58%	0.41%	12.94%	0.0537	0.0113
90.5	17,272	23.56%	0.35%	12.68%	0.0539	0.0118
91.5	12,498	23.29%	0.30%	12.42%	0.0529	0.0118
92.5	10,726	23.26%	0.26%	12.17%	0.0529	0.0123
93.5	8,695	23.20%	0.22%	11.92%	0.0528	0.0127
94.5	7,524	23.10%	0.19%	11.67%	0.0525	0.0131
95.5	5,506	17.16%	0.16%	11.43%	0.0289	0.0033
96.5	3,960	15.27%	0.13%	11.19%	0.0229	0.0017
97.5	3,410	14.84%	0.11%	10.96%	0.0217	0.0015
98.5	2,858	14.84%	0.09%	10.73%	0.0218	0.0017
99.5	2,513	14.84%	0.08%	10.50%	0.0218	0.0019
100.5	2,290	14.79%	0.06%	10.28%	0.0217	0.0020
101.5	1,843	14.79%	0.05%	10.06%	0.0217	0.0022
102.5	1,477	14.79%	0.04%	9.84%	0.0218	0.0025
103.5	1,470	14.79%	0.03%	9.63%	0.0218	0.0027
104.5	832	14.79%	0.03%	9.41%	0.0218	0.0029
105.5			0.02%	9.20%		
Sum of Squared Differences				[8]	2.7862	0.4349
Up to 1% of Beginning Exposures				[9]	0.6935	0.0816

[1] Age in years using half-year convention

[2] Dollars exposed to retirement at the beginning of each age interval

[3] Observed life table based on the Company's property records. These numbers form the original survivor curve.

[4] The Company's selected Iowa curve to be fitted to the OLT.

[5] My selected Iowa curve to be fitted to the OLT.

[6] = ([4] - [3])². This is the squared difference between each point on the Company's curve and the observed survivor curve.

[7] = ([5] - [3])². This is the squared difference between each point on my curve and the observed survivor curve.

[8] = Sum of squared differences. The smallest SSD represents the best mathematical fit.

NIPSCO
Electric Division
353.00 Station Equipment

Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2021
Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 55 *Survivor Curve: L0.5*

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1924	8,370.48	55.00	152.19	18.33	2,789.50
1925	11,958.41	55.00	217.42	18.52	4,026.94
1931	582.90	55.00	10.60	19.73	209.05
1935	37,787.13	55.00	687.03	20.57	14,132.70
1936	180,917.40	55.00	3,289.35	20.79	68,380.94
1937	169.68	55.00	3.09	21.01	64.82
1938	7.39	55.00	0.13	21.23	2.85
1939	39,737.19	55.00	722.48	21.46	15,502.40
1940	1,118.66	55.00	20.34	21.68	441.03
1941	443.04	55.00	8.06	21.91	176.52
1942	282.29	55.00	5.13	22.15	113.68
1943	39,465.22	55.00	717.54	22.38	16,060.12
1944	2,316.49	55.00	42.12	22.62	952.65
1945	907.78	55.00	16.50	22.86	377.27
1946	24,621.34	55.00	447.65	23.10	10,340.83
1947	79,731.56	55.00	1,449.64	23.34	33,841.44
1948	102.34	55.00	1.86	23.59	43.90
1949	45,236.10	55.00	822.46	23.84	19,609.58
1950	22,126.87	55.00	402.30	24.09	9,693.20
1951	33,794.54	55.00	614.44	24.35	14,960.94
1952	65,118.89	55.00	1,183.96	24.61	29,133.02
1953	388,858.69	55.00	7,070.04	24.87	175,818.39
1954	674,219.84	55.00	12,258.34	25.13	308,054.93
1955	813,272.39	55.00	14,786.53	25.40	375,506.82
1956	169,056.25	55.00	3,073.70	25.66	78,880.37
1957	371,012.58	55.00	6,745.57	25.93	174,937.35
1958	376,936.69	55.00	6,853.28	26.21	179,604.96

NIPSCO
Electric Division
353.00 Station Equipment

Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2021
Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 55 Survivor Curve: L0.5

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1959	501,815.83	55.00	9,123.78	26.48	241,638.72
1960	368,124.66	55.00	6,693.07	26.76	179,127.67
1961	629,125.81	55.00	11,438.47	27.04	309,350.65
1962	2,561,269.35	55.00	46,567.78	27.33	1,272,666.01
1963	783,340.03	55.00	14,242.31	27.62	393,327.95
1964	594,335.84	55.00	10,805.93	27.91	301,576.18
1965	537,614.10	55.00	9,774.64	28.20	275,658.84
1966	325,906.74	55.00	5,925.48	28.50	168,861.45
1967	593,401.88	55.00	10,788.95	28.80	310,686.09
1968	5,287,371.81	55.00	96,132.47	29.10	2,797,356.67
1969	319,561.96	55.00	5,810.12	29.40	170,843.08
1970	1,283,865.90	55.00	23,342.64	29.71	693,592.67
1971	4,068,274.25	55.00	73,967.42	30.02	2,220,865.79
1972	1,901,434.81	55.00	34,570.98	30.34	1,048,866.72
1973	499,115.14	55.00	9,074.67	30.66	278,205.59
1974	1,756,864.64	55.00	31,942.48	30.98	989,530.07
1975	10,978,049.88	55.00	199,597.67	31.30	6,248,110.74
1976	4,829,414.22	55.00	87,806.11	31.63	2,777,395.88
1977	8,832,150.23	55.00	160,581.94	31.96	5,132,502.99
1978	4,680,451.32	55.00	85,097.73	32.30	2,748,334.51
1979	9,398,839.31	55.00	170,885.21	32.63	5,576,664.21
1980	5,682,586.70	55.00	103,318.08	32.98	3,406,936.85
1981	16,207,891.90	55.00	294,684.16	33.32	9,818,950.66
1982	14,577,359.48	55.00	265,038.60	33.67	8,923,420.22
1983	12,513,487.71	55.00	227,514.27	34.02	7,740,062.57
1984	6,243,554.35	55.00	113,517.33	34.38	3,902,214.07
1985	15,585,892.40	55.00	283,375.26	34.73	9,842,908.53

NIPSCO
Electric Division
353.00 Station Equipment

Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2021
Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 55

Survivor Curve: L0.5

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1986	9,283,849.64	55.00	168,794.53	35.10	5,924,257.73
1987	6,673,478.94	55.00	121,334.01	35.46	4,302,969.91
1988	1,345,794.37	55.00	24,468.59	35.83	876,808.45
1989	3,064,563.17	55.00	55,718.43	36.21	2,017,457.91
1990	8,697,188.40	55.00	158,128.13	36.59	5,785,374.57
1991	8,864,733.70	55.00	161,174.36	36.97	5,958,722.69
1992	5,898,999.03	55.00	107,252.79	37.36	4,007,045.19
1993	5,285,803.67	55.00	96,103.96	37.76	3,628,771.58
1994	8,147,745.01	55.00	148,138.41	38.17	5,653,738.60
1995	4,328,252.79	55.00	78,694.23	38.58	3,036,088.59
1996	4,404,688.91	55.00	80,083.95	39.01	3,123,787.64
1997	9,509,577.35	55.00	172,898.60	39.44	6,819,380.78
1998	6,864,541.71	55.00	124,807.82	39.89	4,978,585.14
1999	8,860,371.01	55.00	161,095.04	40.35	6,500,335.64
2000	2,320,149.81	55.00	42,183.86	40.82	1,722,151.96
2001	18,860,132.79	55.00	342,905.94	41.31	14,166,289.78
2002	7,756,875.22	55.00	141,031.81	41.81	5,897,118.53
2003	10,447,063.78	55.00	189,943.53	42.33	8,040,037.84
2004	17,242,331.67	55.00	313,491.85	42.86	13,436,403.43
2005	12,678,748.59	55.00	230,518.96	43.41	10,006,285.06
2006	11,944,576.01	55.00	217,170.59	43.97	9,549,078.44
2007	16,761,438.31	55.00	304,748.48	44.55	13,576,239.75
2008	29,839,397.73	55.00	542,525.70	45.14	24,490,257.74
2009	24,041,241.28	55.00	437,106.39	45.75	19,998,987.83
2010	20,858,273.09	55.00	379,235.18	46.38	17,589,538.69
2011	22,832,217.76	55.00	415,124.50	47.03	19,521,984.44
2012	9,291,903.45	55.00	168,940.96	47.69	8,056,629.54

NIPSCO
Electric Division
353.00 Station Equipment

Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2021
Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 55 Survivor Curve: L0.5

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
2013	14,141,074.42	55.00	257,106.27	48.37	12,435,852.68
2014	33,571,560.52	55.00	610,382.11	49.06	29,947,468.46
2015	12,417,698.69	55.00	225,772.68	49.78	11,238,974.44
2016	26,466,065.26	55.00	481,193.38	50.52	24,307,790.21
2017	82,583,883.47	55.00	1,501,500.79	51.27	76,983,932.79
2018	135,558,260.40	55.00	2,464,655.66	52.05	128,282,097.88
2019	77,071,572.11	55.00	1,401,278.58	52.85	74,052,247.19
2020	40,337,268.08	55.00	733,392.98	53.68	39,366,372.43
2021	46,417,908.96	55.00	843,948.29	54.54	46,033,156.78
<i>Total</i>	899,598,481.49	55.00	16,356,070.66	45.89	750,615,531.87

Composite Average Remaining Life ... 45.89 Years

NIPSCO
Electric Division
355.00 Poles and Fixtures

Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2021
Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 69 Survivor Curve: R0.5

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1926	58.87	69.00	0.85	18.14	15.48
1928	991.82	69.00	14.37	18.96	272.52
1929	6,196.55	69.00	89.80	19.37	1,739.45
1930	5,028.96	69.00	72.88	19.78	1,441.85
1931	1,213.50	69.00	17.59	20.20	355.22
1932	43.71	69.00	0.63	20.62	13.06
1934	118.47	69.00	1.72	21.46	36.84
1935	131.18	69.00	1.90	21.88	41.60
1936	16,202.81	69.00	234.82	22.31	5,239.23
1937	639.01	69.00	9.26	22.74	210.61
1938	350.44	69.00	5.08	23.18	117.70
1939	240.51	69.00	3.49	23.61	82.30
1940	378.00	69.00	5.48	24.05	131.75
1941	189.20	69.00	2.74	24.49	67.15
1942	49.00	69.00	0.71	24.94	17.71
1943	784.47	69.00	11.37	25.38	288.58
1945	2,103.73	69.00	30.49	26.29	801.46
1946	633.11	69.00	9.18	26.74	245.39
1947	18,561.45	69.00	269.00	27.20	7,318.02
1948	40,705.07	69.00	589.92	27.67	16,321.41
1949	37,112.90	69.00	537.86	28.13	15,132.11
1950	61,765.78	69.00	895.14	28.60	25,604.03
1951	19,595.18	69.00	283.98	29.08	8,257.28
1952	155,363.40	69.00	2,251.61	29.55	66,540.84
1953	82,205.99	69.00	1,191.37	30.03	35,779.90
1954	230,198.54	69.00	3,336.16	30.52	101,803.41
1955	241,177.92	69.00	3,495.28	31.00	108,359.68

NIPSCO
Electric Division
355.00 Poles and Fixtures

Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2021
Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 69 Survivor Curve: R0.5

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1956	208,695.77	69.00	3,024.53	31.49	95,245.90
1957	349,618.95	69.00	5,066.86	31.98	162,060.55
1958	234,714.27	69.00	3,401.60	32.48	110,486.15
1959	210,383.13	69.00	3,048.98	32.98	100,555.09
1960	225,958.44	69.00	3,274.71	33.48	109,648.92
1961	196,677.57	69.00	2,850.35	33.99	96,882.40
1962	114,586.34	69.00	1,660.64	34.50	57,292.16
1963	315,653.84	69.00	4,574.62	35.01	160,169.91
1964	42,758.61	69.00	619.68	35.53	22,017.01
1965	166,507.26	69.00	2,413.11	36.05	86,990.41
1966	105,417.60	69.00	1,527.77	36.57	55,874.22
1967	188,006.18	69.00	2,724.68	37.10	101,081.74
1968	286,257.20	69.00	4,148.59	37.63	156,100.59
1969	195,088.09	69.00	2,827.32	38.16	107,892.71
1970	197,034.25	69.00	2,855.52	38.70	110,497.55
1971	1,395,675.03	69.00	20,226.85	39.24	793,612.52
1972	272,236.66	69.00	3,945.40	39.78	156,936.35
1973	296,353.05	69.00	4,294.90	40.32	173,181.40
1974	2,271,076.11	69.00	32,913.62	40.87	1,345,181.62
1975	1,909,863.43	69.00	27,678.74	41.42	1,146,487.51
1976	1,064,506.54	69.00	15,427.38	41.97	647,557.51
1977	1,793,840.59	69.00	25,997.27	42.53	1,105,694.94
1978	958,822.33	69.00	13,895.75	43.09	598,768.59
1979	1,458,821.18	69.00	21,142.00	43.65	922,872.49
1980	2,006,965.82	69.00	29,086.00	44.22	1,286,066.56
1981	1,098,677.10	69.00	15,922.60	44.78	713,049.71
1982	2,241,512.44	69.00	32,485.17	45.35	1,473,261.66

NIPSCO
Electric Division
355.00 Poles and Fixtures

Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2021
Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 69

Survivor Curve: R0.5

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1983	1,641,971.35	69.00	23,796.31	45.92	1,092,794.00
1984	2,294,299.39	69.00	33,250.18	46.50	1,546,028.78
1985	1,493,602.58	69.00	21,646.07	47.07	1,018,930.43
1986	3,393,107.73	69.00	49,174.69	47.65	2,343,193.59
1987	658,193.74	69.00	9,538.89	48.23	460,060.09
1988	1,238,484.20	69.00	17,948.76	48.81	876,098.51
1989	684,779.56	69.00	9,924.18	49.40	490,205.76
1990	657,880.36	69.00	9,534.35	49.98	476,524.27
1991	5,713,129.44	69.00	82,797.65	50.57	4,186,821.71
1992	1,807,787.57	69.00	26,199.40	51.15	1,340,225.17
1993	2,122,280.69	69.00	30,757.20	51.74	1,591,524.67
1994	1,022,358.20	69.00	14,816.55	52.34	775,431.48
1995	1,678,906.65	69.00	24,331.59	52.93	1,287,822.28
1996	975,034.17	69.00	14,130.70	53.52	756,292.61
1997	1,830,172.73	69.00	26,523.82	54.12	1,435,345.40
1998	2,213,519.33	69.00	32,079.48	54.71	1,755,112.45
1999	2,368,085.70	69.00	34,319.53	55.31	1,898,131.11
2000	9,197,319.04	69.00	133,292.34	55.91	7,451,774.30
2001	12,859,958.27	69.00	186,373.22	56.50	10,530,765.86
2002	1,200,992.29	69.00	17,405.41	57.10	993,905.53
2003	1,037,399.87	69.00	15,034.54	57.70	867,541.75
2004	1,701,556.92	69.00	24,659.85	58.30	1,437,783.71
2005	1,025,590.02	69.00	14,863.39	58.91	875,550.75
2006	1,661,023.84	69.00	24,072.42	59.51	1,432,545.70
2007	7,393,288.18	69.00	107,147.39	60.11	6,441,035.30
2008	11,342,806.12	69.00	164,385.86	60.72	9,981,268.66
2009	3,627,332.61	69.00	52,569.20	61.33	3,223,814.73

NIPSCO
Electric Division
355.00 Poles and Fixtures

Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2021
Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 69 *Survivor Curve: R0.5*

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
2010	6,978,955.10	69.00	101,142.66	61.93	6,263,979.66
2011	5,064,139.24	69.00	73,392.15	62.54	4,590,010.72
2012	5,077,632.75	69.00	73,587.70	63.15	4,647,075.44
2013	8,631,061.72	69.00	125,085.85	63.76	7,975,617.77
2014	11,697,130.18	69.00	169,520.91	64.37	10,912,536.52
2015	14,877,229.83	69.00	215,608.57	64.99	14,011,560.25
2016	14,020,201.33	69.00	203,188.07	65.60	13,329,177.34
2017	10,460,617.84	69.00	151,600.73	66.22	10,038,287.80
2018	236,341,344.20	69.00	3,425,182.01	66.83	228,913,540.42
2019	16,732,751.06	69.00	242,499.75	67.45	16,356,649.09
2020	28,331,701.52	69.00	410,597.79	68.07	27,949,334.44
2021	21,498,854.98	69.00	311,572.62	68.69	21,401,961.73
<i>Total</i>	483,280,227.65	69.00	7,003,949.09	63.57	445,247,960.56

Composite Average Remaining Life ... 63.57 Years

NIPSCO
Electric Division
356.00 Overhead Conductors and Devices
Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2021
Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 71 Survivor Curve: R2

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1912	10,746.65	71.00	151.36	6.12	926.09
1917	693.31	71.00	9.76	7.57	73.94
1920	13,175.32	71.00	185.57	8.45	1,568.72
1922	3,968.60	71.00	55.90	9.05	505.59
1923	55,815.89	71.00	786.14	9.35	7,348.88
1924	110,500.18	71.00	1,556.34	9.65	15,013.08
1925	21,823.96	71.00	307.38	9.95	3,059.46
1926	26,325.89	71.00	370.79	10.26	3,806.09
1927	636.97	71.00	8.97	10.57	94.84
1928	26,191.15	71.00	368.89	10.89	4,017.13
1929	288,710.27	71.00	4,066.33	11.21	45,571.09
1930	139,475.85	71.00	1,964.44	11.53	22,655.85
1931	51,923.72	71.00	731.32	11.86	8,674.27
1932	6,813.86	71.00	95.97	12.20	1,170.52
1933	966.34	71.00	13.61	12.54	170.66
1935	5,829.92	71.00	82.11	13.24	1,086.89
1936	751,429.73	71.00	10,583.50	13.60	143,883.92
1937	1,227.61	71.00	17.29	13.96	241.39
1938	944.27	71.00	13.30	14.33	190.64
1939	36,903.54	71.00	519.77	14.71	7,647.71
1940	48,061.64	71.00	676.92	15.10	10,222.29
1941	28,399.66	71.00	399.99	15.50	6,198.17
1942	31,800.14	71.00	447.89	15.90	7,120.50
1943	14,265.54	71.00	200.92	16.31	3,276.61
1944	25,978.37	71.00	365.89	16.73	6,119.95
1945	74.60	71.00	1.05	17.15	18.02
1946	5,621.36	71.00	79.17	17.59	1,392.38

NIPSCO
Electric Division
356.00 Overhead Conductors and Devices
Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2021
Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 71 Survivor Curve: R2

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1947	55,757.19	71.00	785.31	18.03	14,157.87
1948	12,107.09	71.00	170.52	18.48	3,150.92
1949	42,547.39	71.00	599.26	18.94	11,348.80
1950	212,329.23	71.00	2,990.55	19.40	58,030.17
1951	123,371.93	71.00	1,737.63	19.88	34,546.10
1952	727,774.37	71.00	10,250.32	20.36	208,743.11
1953	518,605.61	71.00	7,304.29	20.86	152,350.77
1954	409,135.78	71.00	5,762.47	21.36	123,075.56
1955	465,199.19	71.00	6,552.09	21.87	143,269.54
1956	511,292.36	71.00	7,201.29	22.39	161,203.04
1957	1,161,383.58	71.00	16,357.49	22.91	374,756.47
1958	285,292.02	71.00	4,018.19	23.45	94,209.31
1959	252,277.32	71.00	3,553.20	23.99	85,233.03
1960	386,155.98	71.00	5,438.81	24.54	133,452.66
1961	450,542.78	71.00	6,345.66	25.10	159,262.60
1962	307,861.50	71.00	4,336.07	25.66	111,280.49
1963	919,713.95	71.00	12,953.69	26.24	339,908.71
1964	434,335.41	71.00	6,117.39	26.82	164,085.01
1965	475,284.32	71.00	6,694.13	27.41	183,500.91
1966	140,436.04	71.00	1,977.97	28.01	55,408.98
1967	1,227,447.08	71.00	17,287.96	28.62	494,755.45
1968	2,004,416.45	71.00	28,231.17	29.23	825,315.75
1969	605,467.37	71.00	8,527.69	29.86	254,596.77
1970	973,742.79	71.00	13,714.66	30.48	418,064.25
1971	2,860,668.39	71.00	40,291.03	31.12	1,253,934.77
1972	608,163.58	71.00	8,565.67	31.76	272,086.59
1973	728,399.50	71.00	10,259.13	32.42	332,576.73

NIPSCO
Electric Division
356.00 Overhead Conductors and Devices
Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2021
Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 71

Survivor Curve: R2

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1974	3,578,805.19	71.00	50,405.61	33.08	1,667,178.13
1975	2,318,335.98	71.00	32,652.56	33.74	1,101,752.19
1976	3,368,859.87	71.00	47,448.64	34.41	1,632,882.83
1977	8,603,733.49	71.00	121,179.12	35.09	4,252,385.41
1978	5,144,800.71	71.00	72,461.85	35.78	2,592,644.52
1979	8,674,036.50	71.00	122,169.30	36.47	4,455,676.74
1980	2,589,040.82	71.00	36,465.30	37.17	1,355,477.77
1981	3,743,852.43	71.00	52,730.22	37.88	1,997,267.53
1982	3,844,458.98	71.00	54,147.21	38.59	2,089,437.85
1983	5,649,631.26	71.00	79,572.13	39.31	3,127,851.20
1984	2,801,259.90	71.00	39,454.29	40.03	1,579,447.47
1985	2,721,154.23	71.00	38,326.05	40.76	1,562,340.11
1986	2,135,533.77	71.00	30,077.89	41.50	1,248,262.65
1987	901,212.30	71.00	12,693.11	42.24	536,192.94
1988	1,396,236.73	71.00	19,665.27	42.99	845,479.23
1989	498,495.95	71.00	7,021.06	43.75	307,153.42
1990	3,592,733.39	71.00	50,601.79	44.51	2,252,244.56
1991	2,658,321.82	71.00	37,441.08	45.27	1,695,141.43
1992	2,270,201.30	71.00	31,974.61	46.05	1,472,288.62
1993	959,892.48	71.00	13,519.59	46.82	633,049.66
1994	621,236.47	71.00	8,749.79	47.61	416,547.80
1995	354,673.14	71.00	4,995.39	48.40	241,756.68
1996	540,739.17	71.00	7,616.03	49.19	374,624.58
1997	684,003.17	71.00	9,633.83	49.99	481,561.89
1998	817,236.41	71.00	11,510.35	50.79	584,635.17
1999	1,081,147.02	71.00	15,227.39	51.60	785,737.89
2000	3,898,002.49	71.00	54,901.34	52.42	2,877,681.37

NIPSCO
Electric Division
356.00 Overhead Conductors and Devices
Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2021
Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 71 Survivor Curve: R2

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
2001	7,708,463.52	71.00	108,569.71	53.23	5,779,591.81
2002	329,822.60	71.00	4,645.38	54.06	251,122.48
2003	1,266,433.73	71.00	17,837.06	54.89	979,021.68
2004	1,198,661.43	71.00	16,882.52	55.72	940,686.32
2005	1,424,521.10	71.00	20,063.64	56.56	1,134,775.47
2006	638,866.83	71.00	8,998.11	57.40	516,499.83
2007	927,387.59	71.00	13,061.77	58.25	760,834.52
2008	6,478,927.95	71.00	91,252.34	59.10	5,393,043.45
2009	1,644,647.73	71.00	23,164.01	59.96	1,388,812.96
2010	2,817,123.52	71.00	39,677.72	60.82	2,413,087.56
2011	1,389,496.14	71.00	19,570.33	61.68	1,207,123.78
2012	3,151,389.20	71.00	44,385.68	62.55	2,776,365.91
2013	3,829,842.14	71.00	53,941.34	63.42	3,421,152.83
2014	6,607,045.62	71.00	93,056.81	64.30	5,983,536.92
2015	5,053,969.08	71.00	71,182.53	65.18	4,639,812.71
2016	5,897,263.95	71.00	83,059.90	66.07	5,487,454.12
2017	8,060,636.32	71.00	113,529.88	66.96	7,601,470.40
2018	79,728,899.26	71.00	1,122,940.19	67.85	76,189,023.26
2019	10,748,093.65	71.00	151,381.32	68.74	10,406,438.68
2020	29,975,935.14	71.00	422,195.50	69.64	29,403,377.62
2021	16,841,059.69	71.00	237,197.59	70.55	16,733,514.71
<i>Total</i>	289,774,133.70	71.00	4,081,318.36	56.93	232,337,805.69

Composite Average Remaining Life ... 56.93 Years

NIPSCO
Electric Division
365.00 Overhead Conductors and Devices
Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2021
Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 68 Survivor Curve: R1

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1908	37.32	68.00	0.55	7.34	4.03
1909	544.33	68.00	8.00	7.64	61.18
1910	634.64	68.00	9.33	7.95	74.23
1913	459.94	68.00	6.76	8.90	60.21
1914	2.23	68.00	0.03	9.22	0.30
1917	0.04	68.00	0.00	10.20	0.01
1918	132.14	68.00	1.94	10.54	20.48
1921	157.30	68.00	2.31	11.56	26.75
1922	487.06	68.00	7.16	11.91	85.31
1923	86.93	68.00	1.28	12.26	15.68
1926	26,601.84	68.00	391.20	13.34	5,219.67
1927	672.66	68.00	9.89	13.71	135.62
1928	16,299.99	68.00	239.70	14.08	3,375.32
1929	19,875.64	68.00	292.28	14.46	4,225.46
1930	62,630.65	68.00	921.02	14.84	13,664.77
1931	51,185.82	68.00	752.72	15.22	11,455.10
1932	15,715.99	68.00	231.11	15.61	3,606.70
1933	1,825.29	68.00	26.84	16.00	429.36
1935	4,229.36	68.00	62.20	16.79	1,044.25
1936	5,818.46	68.00	85.56	17.19	1,471.13
1937	11,032.38	68.00	162.24	17.60	2,855.46
1938	986.35	68.00	14.50	18.01	261.27
1940	8,025.43	68.00	118.02	18.85	2,224.49
1941	45,390.12	68.00	667.49	19.27	12,864.77
1942	53,062.10	68.00	780.31	19.70	15,374.12
1943	60,645.54	68.00	891.83	20.14	17,958.18
1944	121,507.40	68.00	1,786.84	20.57	36,763.40

NIPSCO
Electric Division
365.00 Overhead Conductors and Devices
Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2021
Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 68 Survivor Curve: R1

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1945	40,187.45	68.00	590.98	21.02	12,420.72
1946	59,311.93	68.00	872.22	21.46	18,722.07
1947	87,813.93	68.00	1,291.36	21.92	28,302.31
1948	79,154.82	68.00	1,164.02	22.37	26,043.78
1949	312,063.71	68.00	4,589.09	22.84	104,792.93
1950	384,920.44	68.00	5,660.49	23.30	131,901.74
1951	439,041.16	68.00	6,456.37	23.77	153,487.48
1952	572,273.48	68.00	8,415.63	24.25	204,076.90
1953	290,578.96	68.00	4,273.14	24.73	105,676.46
1954	446,847.23	68.00	6,571.16	25.22	165,704.92
1955	746,261.17	68.00	10,974.22	25.71	282,120.89
1956	832,481.59	68.00	12,242.14	26.20	320,795.50
1957	688,591.12	68.00	10,126.15	26.70	270,417.45
1958	942,826.32	68.00	13,864.83	27.21	377,283.55
1959	992,189.49	68.00	14,590.75	27.72	404,490.79
1960	730,448.96	68.00	10,741.69	28.24	303,337.37
1961	696,595.31	68.00	10,243.85	28.76	294,617.35
1962	1,001,839.07	68.00	14,732.65	29.29	431,481.56
1963	721,219.96	68.00	10,605.97	29.82	316,258.72
1964	648,228.79	68.00	9,532.60	30.35	289,361.13
1965	722,403.74	68.00	10,623.38	30.90	328,241.95
1966	696,698.72	68.00	10,245.38	31.44	322,159.52
1967	794,102.91	68.00	11,677.76	32.00	373,662.07
1968	747,011.30	68.00	10,985.25	32.55	357,618.00
1969	828,377.87	68.00	12,181.80	33.12	403,435.20
1970	843,670.67	68.00	12,406.69	33.68	417,915.93
1971	1,189,303.07	68.00	17,489.42	34.26	599,157.17

NIPSCO
Electric Division
365.00 Overhead Conductors and Devices
Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2021
Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 68 Survivor Curve: R1

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1972	1,070,247.19	68.00	15,738.63	34.84	548,259.27
1973	1,238,132.05	68.00	18,207.48	35.42	644,884.41
1974	2,193,043.72	68.00	32,250.03	36.01	1,161,181.94
1975	2,572,289.47	68.00	37,827.07	36.60	1,384,420.69
1976	4,119,290.38	68.00	60,576.65	37.20	2,253,171.94
1977	4,129,216.23	68.00	60,722.62	37.80	2,295,187.35
1978	3,042,420.81	68.00	44,740.63	38.40	1,718,223.44
1979	4,010,278.85	68.00	58,973.57	39.01	2,300,806.69
1980	6,336,031.00	68.00	93,175.16	39.63	3,692,640.58
1981	3,800,112.01	68.00	55,882.94	40.25	2,249,304.35
1982	4,950,772.69	68.00	72,804.10	40.88	2,975,930.06
1983	4,828,563.70	68.00	71,006.94	41.50	2,947,045.03
1984	4,691,058.28	68.00	68,984.84	42.14	2,906,840.33
1985	4,466,205.30	68.00	65,678.24	42.77	2,809,278.53
1986	4,367,545.57	68.00	64,227.39	43.41	2,788,422.91
1987	3,396,538.04	68.00	49,948.14	44.06	2,200,643.36
1988	2,957,664.78	68.00	43,494.25	44.71	1,944,511.57
1989	2,269,777.74	68.00	33,378.45	45.36	1,513,988.92
1990	2,213,011.24	68.00	32,543.67	46.01	1,497,457.97
1991	3,900,137.50	68.00	57,353.88	46.67	2,676,789.28
1992	2,658,754.50	68.00	39,098.59	47.33	1,850,662.77
1993	3,148,843.38	68.00	46,305.64	48.00	2,222,535.31
1994	3,678,898.89	68.00	54,100.43	48.66	2,632,774.54
1995	3,247,519.28	68.00	47,756.73	49.33	2,356,034.67
1996	4,251,961.19	68.00	62,527.65	50.01	3,126,810.21
1997	4,134,968.78	68.00	60,807.21	50.68	3,081,802.44
1998	6,000,986.79	68.00	88,248.13	51.36	4,532,262.27

NIPSCO
Electric Division
365.00 Overhead Conductors and Devices
Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2021
Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 68 Survivor Curve: R1

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1999	4,544,649.92	68.00	66,831.82	52.04	3,477,833.70
2000	3,927,635.53	68.00	57,758.25	52.72	3,045,007.17
2001	4,855,379.81	68.00	71,401.29	53.40	3,813,159.73
2002	4,037,284.68	68.00	59,370.71	54.09	3,211,381.70
2003	5,681,101.28	68.00	83,544.02	54.78	4,576,491.57
2004	1,507,988.11	68.00	22,175.88	55.47	1,230,086.82
2005	4,258,155.45	68.00	62,618.75	56.16	3,516,868.44
2006	4,929,538.46	68.00	72,491.84	56.86	4,121,754.09
2007	7,706,827.85	68.00	113,333.55	57.56	6,523,097.53
2008	6,339,757.01	68.00	93,229.95	58.26	5,431,271.84
2009	3,969,124.46	68.00	58,368.37	58.96	3,441,419.18
2010	3,158,175.90	68.00	46,442.88	59.67	2,771,054.78
2011	5,597,760.41	68.00	82,318.44	60.37	4,969,970.15
2012	4,571,807.78	68.00	67,231.19	61.09	4,106,894.95
2013	8,613,280.11	68.00	126,663.48	61.80	7,827,778.13
2014	8,068,446.59	68.00	118,651.38	62.52	7,417,868.34
2015	5,393,703.86	68.00	79,317.67	63.24	5,015,886.99
2016	11,282,469.76	68.00	165,915.53	63.96	10,612,365.32
2017	12,210,714.49	68.00	179,565.92	64.69	11,615,868.28
2018	21,302,218.51	68.00	313,261.98	65.42	20,493,445.71
2019	36,473,098.73	68.00	536,358.93	66.15	35,481,366.65
2020	19,975,091.04	68.00	293,745.77	66.89	19,648,600.09
2021	25,163,456.61	68.00	370,043.81	67.63	25,025,859.15
Total	328,284,425.83	68.00	4,827,620.57	55.28	266,863,961.83

Composite Average Remaining Life ... 55.28 Years

NIPSCO
Electric Division
367.00 Underground Conductors and Devices
Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2021
Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 57 Survivor Curve: R2

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1927	11.19	57.00	0.20	3.03	0.60
1928	4,370.47	57.00	76.67	3.31	253.86
1929	524.10	57.00	9.19	3.59	33.04
1931	2,664.66	57.00	46.75	4.17	194.96
1932	16,064.38	57.00	281.83	4.46	1,255.61
1933	9,179.14	57.00	161.04	4.74	763.78
1937	76.38	57.00	1.34	5.90	7.91
1938	32,579.03	57.00	571.56	6.20	3,541.04
1940	30,593.73	57.00	536.73	6.78	3,641.27
1941	149.10	57.00	2.62	7.08	18.52
1942	198.86	57.00	3.49	7.38	25.74
1943	6,354.33	57.00	111.48	7.68	856.31
1944	2,110.97	57.00	37.03	7.98	295.68
1945	2,555.45	57.00	44.83	8.29	371.72
1946	552.93	57.00	9.70	8.60	83.47
1947	562.29	57.00	9.86	8.92	88.04
1948	27,380.20	57.00	480.35	9.25	4,441.78
1949	661.96	57.00	11.61	9.58	111.21
1951	13,142.49	57.00	230.57	10.26	2,365.12
1952	8,303.33	57.00	145.67	10.61	1,545.33
1953	14,572.22	57.00	255.65	10.97	2,803.83
1954	34,505.43	57.00	605.36	11.34	6,861.78
1955	104,765.98	57.00	1,837.99	11.71	21,526.79
1956	56,828.97	57.00	997.00	12.10	12,061.04
1957	13,236.55	57.00	232.22	12.49	2,900.93
1958	37,358.82	57.00	655.42	12.90	8,452.67
1959	5,180.13	57.00	90.88	13.31	1,209.65

***NIPSCO
Electric Division***

367.00 Underground Conductors and Devices

***Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2021
Based Upon Broad Group/Remaining Life Procedure and Technique***

Average Service Life: 57

Survivor Curve: R2

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1960	2,620.44	57.00	45.97	13.73	631.42
1961	28,069.62	57.00	492.45	14.17	6,977.59
1962	76,711.27	57.00	1,345.81	14.61	19,667.28
1963	36,550.55	57.00	641.24	15.07	9,661.91
1964	5,293.95	57.00	92.88	15.53	1,442.66
1965	2,830.49	57.00	49.66	16.01	794.97
1966	27,151.84	57.00	476.35	16.50	7,857.48
1967	16,169.71	57.00	283.68	16.99	4,819.85
1968	66,649.32	57.00	1,169.28	17.50	20,460.31
1969	126,374.42	57.00	2,217.09	18.02	39,943.18
1970	179,071.16	57.00	3,141.59	18.54	58,258.03
1971	144,904.60	57.00	2,542.18	19.08	48,506.63
1972	84,349.21	57.00	1,479.81	19.63	29,048.56
1973	332,469.19	57.00	5,832.77	20.19	117,758.84
1974	284,979.15	57.00	4,999.62	20.76	103,783.08
1976	927,001.06	57.00	16,263.11	21.92	356,564.67
1977	718,707.70	57.00	12,608.86	22.52	283,998.85
1978	1,215,903.16	57.00	21,331.55	23.13	493,444.38
1979	3,310,842.27	57.00	58,084.73	23.75	1,379,391.06
1980	4,520,449.50	57.00	79,305.83	24.38	1,933,142.91
1981	2,545,671.07	57.00	44,660.73	25.01	1,117,082.45
1982	1,720,349.37	57.00	30,181.45	25.66	774,405.01
1983	1,364,429.82	57.00	23,937.27	26.31	629,808.68
1984	2,326,696.36	57.00	40,819.08	26.97	1,101,088.49
1985	2,037,855.64	57.00	35,751.72	27.65	988,438.51
1986	2,095,189.73	57.00	36,757.58	28.33	1,041,269.32
1987	3,722,563.60	57.00	65,307.89	29.02	1,894,908.77

***NIPSCO
Electric Division***

367.00 Underground Conductors and Devices

***Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2021
Based Upon Broad Group/Remaining Life Procedure and Technique***

Average Service Life: 57

Survivor Curve: R2

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1988	5,039,556.47	57.00	88,412.94	29.71	2,627,009.65
1989	4,772,301.11	57.00	83,724.26	30.42	2,546,787.28
1990	5,622,031.70	57.00	98,631.76	31.13	3,070,629.75
1991	4,498,823.04	57.00	78,926.42	31.85	2,513,928.81
1992	3,414,693.88	57.00	59,906.68	32.58	1,951,829.87
1993	4,669,878.50	57.00	81,927.38	33.32	2,729,666.58
1994	6,365,779.35	57.00	111,679.92	34.06	3,804,073.21
1995	6,308,451.14	57.00	110,674.16	34.81	3,852,961.73
1996	7,351,574.60	57.00	128,974.51	35.57	4,587,745.42
1997	8,116,188.88	57.00	142,388.74	36.34	5,173,980.36
1998	8,184,266.79	57.00	143,583.08	37.11	5,328,341.00
1999	7,024,103.76	57.00	123,229.42	37.89	4,669,072.33
2000	8,476,919.94	57.00	148,717.33	38.67	5,751,550.91
2001	8,358,100.43	57.00	146,632.79	39.47	5,787,251.85
2002	8,778,735.85	57.00	154,012.33	40.27	6,201,648.53
2003	9,711,691.76	57.00	170,379.91	41.07	6,998,015.58
2004	8,813,029.33	57.00	154,613.97	41.88	6,475,858.58
2005	15,566,258.65	57.00	273,091.22	42.70	11,661,738.84
2006	16,291,208.51	57.00	285,809.59	43.53	12,440,514.10
2007	17,406,174.52	57.00	305,370.33	44.36	13,545,503.88
2008	14,460,770.88	57.00	253,696.78	45.19	11,465,280.42
2009	9,223,288.09	57.00	161,811.46	46.04	7,449,020.49
2010	7,497,401.70	57.00	131,532.87	46.88	6,166,654.65
2011	6,140,258.19	57.00	107,723.42	47.74	5,142,304.19
2012	11,588,226.08	57.00	203,301.44	48.59	9,879,198.31
2013	11,349,788.42	57.00	199,118.34	49.46	9,848,017.43
2014	14,453,692.19	57.00	253,572.59	50.33	12,761,656.11

NIPSCO
Electric Division
367.00 Underground Conductors and Devices
Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2021
Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 57 Survivor Curve: R2

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
2015	18,880,139.69	57.00	331,229.27	51.20	16,959,500.94
2016	28,421,211.50	57.00	498,615.86	52.08	25,967,946.25
2017	27,775,404.61	57.00	487,285.96	52.96	25,808,856.69
2018	47,017,070.84	57.00	824,857.77	53.85	44,421,524.89
2019	41,008,262.15	57.00	719,440.48	54.75	39,387,305.82
2020	25,092,840.08	57.00	440,223.60	55.64	24,495,991.42
2021	42,275,916.84	57.00	741,679.95	56.55	41,939,954.32
<i>Total</i>	498,298,376.76	57.00	8,742,043.73	46.44	405,950,186.77

Composite Average Remaining Life ... 46.44 Years

***NIPSCO
Electric Division***

373.00 Street Lighting and Signal Systems

***Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2021
Based Upon Broad Group/Remaining Life Procedure and Technique***

Average Service Life: 42

Survivor Curve: 03

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1916	832.49	41.42	20.10	26.27	527.95
1917	637.42	41.42	15.39	26.67	410.46
1918	7.25	41.42	0.18	27.07	4.74
1919	365.73	41.42	8.83	27.47	242.55
1920	446.71	41.42	10.79	27.86	300.51
1921	213.82	41.42	5.16	28.25	145.85
1922	344.81	41.42	8.32	28.64	238.42
1923	552.77	41.42	13.35	29.02	387.33
1924	437.24	41.42	10.56	29.40	310.37
1925	940.19	41.42	22.70	29.78	675.90
1926	83.51	41.42	2.02	30.15	60.78
1927	1,134.64	41.42	27.39	30.51	835.89
1928	2,003.17	41.42	48.36	30.88	1,493.28
1929	1,755.71	41.42	42.39	31.23	1,323.95
1930	4,579.32	41.42	110.56	31.59	3,492.31
1931	403.27	41.42	9.74	31.94	310.94
1932	3,854.84	41.42	93.07	32.28	3,004.27
1933	1,531.08	41.42	36.97	32.62	1,205.81
1934	2,183.33	41.42	52.71	32.95	1,737.08
1935	4,558.01	41.42	110.05	33.28	3,662.67
1936	4,286.11	41.42	103.48	33.61	3,477.78
1937	2,776.35	41.42	67.03	33.93	2,274.06
1938	6,257.75	41.42	151.08	34.24	5,173.02
1939	1,237.44	41.42	29.88	34.55	1,032.12
1940	4,025.61	41.42	97.19	34.85	3,387.04
1941	1,322.01	41.42	31.92	35.15	1,121.78
1942	2,296.48	41.42	55.45	35.43	1,964.71

***NIPSCO
Electric Division***

373.00 Street Lighting and Signal Systems

***Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2021
Based Upon Broad Group/Remaining Life Procedure and Technique***

Average Service Life: 42

Survivor Curve: 03

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1944	670.89	41.42	16.20	36.00	583.09
1945	3,133.56	41.42	75.66	36.27	2,743.95
1946	3,047.09	41.42	73.57	36.53	2,687.78
1947	9,095.47	41.42	219.60	36.79	8,079.55
1948	6,692.29	41.42	161.58	37.04	5,985.54
1949	47,495.95	41.42	1,146.72	37.29	42,761.86
1950	35,090.03	41.42	847.20	37.53	31,793.13
1951	52,863.23	41.42	1,276.31	37.76	48,191.71
1952	78,595.72	41.42	1,897.59	37.98	72,073.04
1953	36,605.88	41.42	883.80	38.20	33,759.18
1954	57,547.06	41.42	1,389.39	38.41	53,362.72
1955	104,815.09	41.42	2,530.62	38.61	97,699.58
1956	136,501.84	41.42	3,295.65	38.80	127,873.33
1957	115,409.44	41.42	2,786.40	38.99	108,633.22
1958	146,306.05	41.42	3,532.36	39.16	138,336.58
1959	269,915.96	41.42	6,516.75	39.33	256,319.91
1960	415,610.85	41.42	10,034.35	39.49	396,280.59
1961	254,240.77	41.42	6,138.30	39.65	243,354.66
1962	243,731.49	41.42	5,884.56	39.79	234,149.43
1963	199,633.94	41.42	4,819.89	39.92	192,432.47
1964	259,570.07	41.42	6,266.96	40.05	251,006.83
1965	172,035.41	41.42	4,153.56	40.17	166,857.21
1966	220,416.71	41.42	5,321.66	40.28	214,356.25
1967	345,650.13	41.42	8,345.25	40.38	336,997.34
1968	359,098.52	41.42	8,669.94	40.47	350,897.91
1969	404,747.92	41.42	9,772.08	40.56	396,326.52
1970	309,012.22	41.42	7,460.68	40.63	303,149.92

***NIPSCO
Electric Division***

373.00 Street Lighting and Signal Systems

***Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2021
Based Upon Broad Group/Remaining Life Procedure and Technique***

Average Service Life: 42

Survivor Curve: 03

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1971	431,505.78	41.42	10,418.12	40.70	423,989.36
1972	252,658.53	41.42	6,100.09	40.76	248,612.81
1973	337,034.21	41.42	8,137.23	40.80	332,025.59
1974	383,165.48	41.42	9,251.01	40.84	377,847.95
1975	561,182.80	41.42	13,548.99	40.88	553,843.00
1976	488,535.50	41.42	11,795.02	40.90	482,406.11
1977	563,664.67	41.42	13,608.91	40.92	556,815.17
1978	652,516.01	41.42	15,754.11	40.92	644,732.83
1979	702,692.29	41.42	16,965.54	40.92	694,276.41
1980	745,280.97	41.42	17,993.79	40.92	736,244.78
1981	552,771.70	41.42	13,345.92	40.90	545,861.71
1982	759,386.66	41.42	18,334.35	40.88	749,521.30
1983	899,967.57	41.42	21,728.48	40.85	887,715.51
1984	471,124.33	41.42	11,374.65	40.82	464,313.50
1985	1,075,453.79	41.42	25,965.36	40.78	1,058,932.07
1986	516,393.53	41.42	12,467.61	40.74	507,941.44
1987	361,401.43	41.42	8,725.54	40.69	355,050.21
1988	603,094.82	41.42	14,560.90	40.64	591,765.70
1989	557,942.79	41.42	13,470.76	40.58	546,708.95
1990	191,510.70	41.42	4,623.76	40.53	187,395.00
1991	278,327.07	41.42	6,719.83	40.47	271,961.43
1992	360,771.49	41.42	8,710.33	40.41	351,985.16
1993	255,045.37	41.42	6,157.72	40.35	248,471.37
1994	319,641.80	41.42	7,717.31	40.29	310,938.03
1995	411,137.19	41.42	9,926.34	40.23	399,372.05
1996	363,717.96	41.42	8,781.47	40.18	352,830.20
1997	424,309.34	41.42	10,244.37	40.12	411,054.45

***NIPSCO
Electric Division***

373.00 Street Lighting and Signal Systems

***Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2021
Based Upon Broad Group/Remaining Life Procedure and Technique***

Average Service Life: 42 Survivor Curve: 03

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1998	485,629.32	41.42	11,724.85	40.08	469,892.84
1999	247,460.00	41.42	5,974.58	40.03	239,183.46
2000	465,573.27	41.42	11,240.63	39.99	449,547.18
2001	636,575.25	41.42	15,369.24	39.96	614,170.46
2002	413,759.40	41.42	9,989.65	39.93	398,930.01
2003	540,020.08	41.42	13,038.04	39.92	520,430.81
2004	302,041.60	41.42	7,292.38	39.91	291,016.40
2005	1,971,017.38	41.42	47,587.51	39.90	1,898,960.64
2006	898,913.75	41.42	21,703.04	39.91	866,232.31
2007	958,546.13	41.42	23,142.78	39.93	924,122.93
2008	802,774.90	41.42	19,381.90	39.96	774,467.95
2009	444,313.28	41.42	10,727.34	40.00	429,063.33
2010	384,413.68	41.42	9,281.14	40.05	371,672.64
2011	348,768.75	41.42	8,420.54	40.11	337,719.20
2012	543,096.07	41.42	13,112.31	40.18	526,833.76
2013	642,538.10	41.42	15,513.20	40.26	624,576.70
2014	697,720.69	41.42	16,845.51	40.36	679,809.02
2015	1,287,588.81	41.42	31,087.07	40.46	1,257,813.28
2016	1,294,352.53	41.42	31,250.37	40.58	1,268,081.18
2017	3,659,525.70	41.42	88,354.23	40.71	3,596,599.87
2018	1,514,013.87	41.42	36,553.79	40.85	1,493,068.37
2019	10,893,066.73	41.42	262,998.17	41.00	10,781,940.15
2020	4,315,069.15	41.42	104,181.43	41.16	4,287,852.53
2021	2,721,723.21	41.42	65,712.28	41.33	2,715,824.87

***NIPSCO
Electric Division***

373.00 Street Lighting and Signal Systems

***Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2021
Based Upon Broad Group/Remaining Life Procedure and Technique***

Average Service Life: 42 Survivor Curve: 03

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
<i>Total</i>	54,325,336.07	41.42	1,311,610.81	40.61	53,265,916.84

Composite Average Remaining Life ... 40.61 Years



NIPSCO
Electric Division
353.00 Station Equipment

Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2023
Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 55 Survivor Curve: L0.5

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1924	8,164.84	55.00	148.45	17.95	2,665.14
1925	11,664.63	55.00	212.08	18.14	3,847.14
1931	568.58	55.00	10.34	19.31	199.65
1935	36,858.82	55.00	670.15	20.14	13,498.82
1936	176,472.81	55.00	3,208.54	20.36	65,311.82
1937	165.51	55.00	3.01	20.57	61.90
1938	7.21	55.00	0.13	20.79	2.73
1939	38,760.97	55.00	704.73	21.01	14,807.07
1940	1,091.18	55.00	19.84	21.23	421.24
1941	432.16	55.00	7.86	21.46	168.60
1942	275.35	55.00	5.01	21.68	108.56
1943	38,495.68	55.00	699.91	21.91	15,337.76
1944	2,259.58	55.00	41.08	22.15	909.91
1945	885.48	55.00	16.10	22.38	360.34
1946	24,016.47	55.00	436.66	22.62	9,876.66
1947	77,772.80	55.00	1,414.03	22.86	32,322.05
1948	99.83	55.00	1.82	23.10	41.93
1949	44,124.79	55.00	802.26	23.34	18,728.42
1950	21,583.28	55.00	392.42	23.59	9,258.46
1951	32,964.31	55.00	599.34	23.84	14,289.83
1952	63,519.12	55.00	1,154.87	24.09	27,826.05
1953	379,305.62	55.00	6,896.35	24.35	167,919.66
1954	657,656.31	55.00	11,957.19	24.61	294,223.63
1955	793,292.76	55.00	14,423.27	24.87	358,679.03
1956	164,903.05	55.00	2,998.19	25.13	75,345.15
1957	361,897.93	55.00	6,579.86	25.40	167,096.71
1958	367,676.50	55.00	6,684.92	25.66	171,555.07

NIPSCO
Electric Division
353.00 Station Equipment

Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2023
Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 55

Survivor Curve: L0.5

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1959	489,487.74	55.00	8,899.63	25.93	230,799.96
1960	359,080.96	55.00	6,528.64	26.21	171,096.96
1961	613,670.10	55.00	11,157.46	26.48	295,499.76
1962	2,498,346.76	55.00	45,423.75	26.76	1,215,683.40
1963	764,095.75	55.00	13,892.42	27.04	375,717.40
1964	579,734.82	55.00	10,540.46	27.33	288,063.73
1965	524,406.56	55.00	9,534.51	27.62	263,313.18
1966	317,900.20	55.00	5,779.91	27.91	161,308.00
1967	578,823.80	55.00	10,523.90	28.20	296,788.90
1968	5,157,477.19	55.00	93,770.79	28.50	2,672,234.02
1969	311,711.30	55.00	5,667.39	28.80	163,201.99
1970	1,252,325.23	55.00	22,769.18	29.10	662,559.86
1971	3,968,329.14	55.00	72,150.27	29.40	2,121,534.09
1972	1,854,722.35	55.00	33,721.68	29.71	1,001,990.80
1973	486,853.40	55.00	8,851.74	30.02	265,772.66
1974	1,713,703.83	55.00	31,157.75	30.34	945,310.83
1975	10,708,352.63	55.00	194,694.16	30.66	5,968,810.27
1976	4,710,770.22	55.00	85,648.98	30.98	2,653,277.14
1977	8,615,171.20	55.00	156,636.94	31.30	4,903,288.32
1978	4,565,466.89	55.00	83,007.14	31.63	2,625,599.78
1979	9,167,938.45	55.00	166,687.09	31.96	5,327,634.86
1980	5,542,982.85	55.00	100,779.87	32.30	3,254,808.14
1981	15,809,713.36	55.00	287,444.67	32.63	9,380,462.82
1982	14,219,238.16	55.00	258,527.41	32.98	8,524,999.09
1983	12,206,069.43	55.00	221,924.93	33.32	7,394,594.82
1984	6,090,169.24	55.00	110,728.55	33.67	3,728,050.98
1985	15,202,994.49	55.00	276,413.60	34.02	9,403,623.62

NIPSCO
Electric Division
353.00 Station Equipment

Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2023
Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 55 Survivor Curve: L0.5

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1986	9,055,773.73	55.00	164,647.76	34.38	5,659,847.85
1987	6,509,531.89	55.00	118,353.21	34.73	4,110,943.75
1988	1,312,732.30	55.00	23,867.47	35.10	837,687.46
1989	2,989,276.19	55.00	54,349.59	35.46	1,927,445.28
1990	8,483,524.97	55.00	154,243.41	35.83	5,527,164.11
1991	8,646,954.19	55.00	157,214.80	36.21	5,692,447.87
1992	5,754,078.59	55.00	104,617.91	36.59	3,827,616.28
1993	5,155,947.57	55.00	93,742.98	36.97	3,465,739.95
1994	7,947,579.73	55.00	144,499.11	37.36	5,398,595.75
1995	4,221,920.80	55.00	76,760.95	37.76	2,898,402.43
1996	4,296,479.12	55.00	78,116.53	38.17	2,981,336.53
1997	9,275,956.00	55.00	168,651.01	38.58	6,506,695.78
1998	6,695,900.83	55.00	121,741.68	39.01	4,748,705.92
1999	8,642,698.68	55.00	157,137.43	39.44	6,197,736.36
2000	2,263,150.80	55.00	41,147.53	39.89	1,641,375.26
2001	18,396,796.77	55.00	334,481.79	40.35	13,496,653.08
2002	7,566,312.42	55.00	137,567.08	40.82	5,616,163.10
2003	10,190,411.24	55.00	185,277.20	41.31	7,654,257.81
2004	16,818,740.10	55.00	305,790.31	41.81	12,786,347.74
2005	12,367,270.35	55.00	224,855.81	42.33	9,517,824.69
2006	11,651,134.16	55.00	211,835.37	42.86	9,079,360.14
2007	16,349,660.82	55.00	297,261.74	43.41	12,903,431.73
2008	28,787,954.34	55.00	523,408.86	43.97	23,014,499.12
2009	23,450,621.20	55.00	426,368.01	44.55	18,994,268.25
2010	20,345,848.85	55.00	369,918.52	45.14	16,698,563.65
2011	22,271,299.71	55.00	404,926.15	45.75	18,526,641.23
2012	9,063,629.68	55.00	164,790.59	46.38	7,643,253.31

NIPSCO
Electric Division
353.00 Station Equipment

Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2023
Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 55 *Survivor Curve: L0.5*

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
2013	13,793,671.29	55.00	250,789.95	47.03	11,793,853.72
2014	32,746,809.53	55.00	595,386.88	47.69	28,393,419.54
2015	12,112,633.65	55.00	220,226.13	48.37	10,652,014.35
2016	25,815,874.64	55.00	469,371.92	49.06	23,029,018.60
2017	80,555,048.98	55.00	1,464,613.49	49.78	72,908,528.30
2018	132,228,006.81	55.00	2,404,106.57	50.52	121,444,975.59
2019	75,178,158.32	55.00	1,366,853.43	51.27	70,080,384.26
2020	39,346,304.26	55.00	715,375.74	52.05	37,234,370.22
2021	45,277,562.31	55.00	823,215.05	52.85	43,503,786.74
2022	125,319,569.84	55.00	2,278,500.67	53.68	122,303,197.36
2023	64,560,837.44	55.00	1,173,814.36	54.54	64,025,700.82
<i>Total</i>	1,067,060,113.72	55.00	19,400,778.21	46.31	898,483,142.66

Composite Average Remaining Life ... 46.31 Years

NIPSCO
Electric Division
355.00 Poles and Fixtures

Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2023
Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 69 Survivor Curve: R0.5

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1926	57.77	69.00	0.84	17.33	14.51
1928	973.37	69.00	14.11	18.14	255.91
1929	6,081.28	69.00	88.13	18.55	1,634.79
1930	4,935.41	69.00	71.53	18.96	1,356.07
1931	1,190.93	69.00	17.26	19.37	334.31
1932	42.90	69.00	0.62	19.78	12.30
1934	116.27	69.00	1.69	20.62	34.74
1935	128.74	69.00	1.87	21.04	39.25
1936	15,901.39	69.00	230.45	21.46	4,945.26
1937	627.12	69.00	9.09	21.88	198.89
1938	343.92	69.00	4.98	22.31	111.21
1939	236.04	69.00	3.42	22.74	77.80
1940	370.97	69.00	5.38	23.18	124.60
1941	185.68	69.00	2.69	23.61	63.54
1942	48.09	69.00	0.70	24.05	16.76
1943	769.88	69.00	11.16	24.49	273.26
1945	2,064.59	69.00	29.92	25.38	759.49
1946	621.33	69.00	9.00	25.83	232.63
1947	18,216.15	69.00	264.00	26.29	6,939.85
1948	39,947.84	69.00	578.94	26.74	15,483.56
1949	36,422.49	69.00	527.85	27.20	14,359.90
1950	60,616.76	69.00	878.49	27.67	24,305.36
1951	19,230.65	69.00	278.70	28.13	7,840.95
1952	152,473.20	69.00	2,209.72	28.60	63,205.36
1953	80,676.72	69.00	1,169.21	29.08	33,996.65
1954	225,916.19	69.00	3,274.10	29.55	96,758.01
1955	236,691.32	69.00	3,430.25	30.03	103,019.15

NIPSCO
Electric Division
355.00 Poles and Fixtures

Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2023
Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 69 Survivor Curve: R0.5

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1956	204,813.43	69.00	2,968.26	30.52	90,577.06
1957	343,115.04	69.00	4,972.60	31.00	154,159.37
1958	230,347.91	69.00	3,338.32	31.49	105,127.65
1959	206,469.40	69.00	2,992.26	31.98	95,705.75
1960	221,754.97	69.00	3,213.79	32.48	104,385.87
1961	193,018.80	69.00	2,797.33	32.98	92,255.60
1962	112,454.71	69.00	1,629.75	33.48	54,569.94
1963	309,781.78	69.00	4,489.52	33.99	152,596.98
1964	41,963.18	69.00	608.15	34.50	20,981.22
1965	163,409.75	69.00	2,368.22	35.01	82,917.81
1966	103,456.53	69.00	1,499.35	35.53	53,271.21
1967	184,508.73	69.00	2,674.00	36.05	96,395.14
1968	280,932.00	69.00	4,071.41	36.57	148,901.66
1969	191,458.89	69.00	2,774.72	37.10	102,938.09
1970	193,368.85	69.00	2,802.40	37.63	105,447.10
1971	1,369,711.48	69.00	19,850.57	38.16	757,513.64
1972	267,172.28	69.00	3,872.00	38.70	149,831.22
1973	290,840.04	69.00	4,215.01	39.24	165,378.25
1974	2,228,827.60	69.00	32,301.33	39.78	1,284,852.93
1975	1,874,334.51	69.00	27,163.83	40.32	1,095,314.78
1976	1,044,703.67	69.00	15,140.39	40.87	618,788.68
1977	1,760,470.02	69.00	25,513.65	41.42	1,056,806.92
1978	940,985.49	69.00	13,637.25	41.97	572,417.55
1979	1,431,682.93	69.00	20,748.70	42.53	882,466.69
1980	1,969,630.51	69.00	28,544.91	43.09	1,230,001.48
1981	1,078,238.56	69.00	15,626.40	43.65	682,110.13
1982	2,199,813.90	69.00	31,880.85	44.22	1,409,643.88

NIPSCO
Electric Division
355.00 Poles and Fixtures

Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2023
Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 69

Survivor Curve: R0.5

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1983	1,611,425.98	69.00	23,353.63	44.78	1,045,827.60
1984	2,251,618.86	69.00	32,631.63	45.35	1,479,904.23
1985	1,465,817.30	69.00	21,243.39	45.92	975,556.82
1986	3,329,986.22	69.00	48,259.90	46.50	2,243,933.19
1987	645,949.45	69.00	9,361.44	47.07	440,664.44
1988	1,215,444.85	69.00	17,614.86	47.65	839,355.19
1989	672,040.70	69.00	9,739.56	48.23	469,738.75
1990	645,641.90	69.00	9,356.98	48.81	456,724.36
1991	5,606,848.89	69.00	81,257.38	49.40	4,013,714.50
1992	1,774,157.55	69.00	25,712.02	49.98	1,285,080.35
1993	2,082,800.20	69.00	30,185.03	50.57	1,526,363.65
1994	1,003,339.41	69.00	14,540.92	51.15	743,837.80
1995	1,647,674.18	69.00	23,878.95	51.74	1,235,611.35
1996	956,895.74	69.00	13,867.83	52.34	725,779.95
1997	1,796,126.28	69.00	26,030.40	52.93	1,377,736.78
1998	2,172,341.54	69.00	31,482.71	53.52	1,684,993.10
1999	2,324,032.53	69.00	33,681.09	54.12	1,822,663.70
2000	9,026,222.59	69.00	130,812.72	54.71	7,156,944.79
2001	12,620,726.25	69.00	182,906.15	55.31	10,116,100.61
2002	1,178,650.40	69.00	17,081.62	55.91	954,956.19
2003	1,018,101.26	69.00	14,754.85	56.50	833,703.02
2004	1,669,903.09	69.00	24,201.11	57.10	1,381,962.18
2005	1,006,511.11	69.00	14,586.88	57.70	841,710.54
2006	1,630,124.04	69.00	23,624.61	58.30	1,377,424.27
2007	7,255,751.87	69.00	105,154.14	58.91	6,194,267.55
2008	11,131,797.47	69.00	161,327.81	59.51	9,600,589.84
2009	3,559,853.84	69.00	51,591.26	60.11	3,101,345.94

NIPSCO
Electric Division
355.00 Poles and Fixtures

Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2023
Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 69 Survivor Curve: R0.5

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
2010	6,849,126.57	69.00	99,261.11	60.72	6,026,989.41
2011	4,969,931.76	69.00	72,026.84	61.33	4,417,058.19
2012	4,983,174.25	69.00	72,218.76	61.93	4,472,661.27
2013	8,470,499.28	69.00	122,758.89	62.54	7,677,451.31
2014	11,479,530.09	69.00	166,367.34	63.15	10,506,124.59
2015	14,600,470.79	69.00	211,597.64	63.76	13,491,709.14
2016	13,759,385.47	69.00	199,408.19	64.37	12,836,464.51
2017	10,266,020.42	69.00	148,780.52	64.99	9,668,665.83
2018	231,944,718.96	69.00	3,361,463.83	65.60	220,512,688.70
2019	16,421,474.01	69.00	237,988.57	66.22	15,758,484.32
2020	27,804,650.81	69.00	402,959.50	66.83	26,930,798.24
2021	21,098,914.76	69.00	305,776.48	67.45	20,624,674.54
2022	55,598,094.86	69.00	805,756.59	68.07	54,847,738.19
2023	21,672,899.41	69.00	314,094.96	68.69	21,575,221.75
<i>Total</i>	551,560,826.90	69.00	7,993,507.14	63.18	505,014,971.35

Composite Average Remaining Life ... 63.18 Years

***NIPSCO
Electric Division***

356.00 Overhead Conductors and Devices

***Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2023
Based Upon Broad Group/Remaining Life Procedure and Technique***

Average Service Life: 71

Survivor Curve: R2

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1912	10,511.33	71.00	148.05	5.54	820.52
1917	678.13	71.00	9.55	6.99	66.78
1920	12,886.82	71.00	181.50	7.87	1,428.10
1922	3,881.70	71.00	54.67	8.45	462.17
1923	54,593.68	71.00	768.92	8.75	6,731.07
1924	108,080.55	71.00	1,522.26	9.05	13,769.16
1925	21,346.08	71.00	300.65	9.35	2,810.49
1926	25,749.43	71.00	362.67	9.65	3,498.44
1927	623.02	71.00	8.77	9.95	87.34
1928	25,617.64	71.00	360.81	10.26	3,703.69
1929	282,388.35	71.00	3,977.29	10.57	42,047.29
1930	136,421.73	71.00	1,921.43	10.89	20,924.02
1931	50,786.74	71.00	715.30	11.21	8,016.37
1932	6,664.66	71.00	93.87	11.53	1,082.58
1933	945.18	71.00	13.31	11.86	157.90
1935	5,702.26	71.00	80.31	12.54	1,007.02
1936	734,975.60	71.00	10,351.75	12.88	133,365.35
1937	1,200.73	71.00	16.91	13.24	223.86
1938	923.59	71.00	13.01	13.60	176.85
1939	36,095.46	71.00	508.39	13.96	7,097.72
1940	47,009.23	71.00	662.10	14.33	9,490.93
1941	27,777.79	71.00	391.24	14.71	5,756.53
1942	31,103.81	71.00	438.08	15.10	6,615.51
1943	13,953.17	71.00	196.52	15.50	3,045.25
1944	25,409.52	71.00	357.88	15.90	5,689.55
1945	72.97	71.00	1.03	16.31	16.76
1946	5,498.27	71.00	77.44	16.73	1,295.27

NIPSCO
Electric Division
356.00 Overhead Conductors and Devices
Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2023
Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 71 Survivor Curve: R2

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1947	54,536.27	71.00	768.12	17.15	13,174.54
1948	11,841.98	71.00	166.79	17.59	2,933.20
1949	41,615.73	71.00	586.14	18.03	10,567.07
1950	207,679.84	71.00	2,925.06	18.48	54,049.59
1951	120,670.44	71.00	1,699.58	18.94	32,186.80
1952	711,838.22	71.00	10,025.87	19.40	194,547.36
1953	507,249.65	71.00	7,144.35	19.88	142,037.97
1954	400,176.89	71.00	5,636.28	20.36	114,780.31
1955	455,012.68	71.00	6,408.62	20.86	133,669.08
1956	500,096.54	71.00	7,043.60	21.36	150,438.22
1957	1,135,952.65	71.00	15,999.30	21.87	349,844.58
1958	279,044.95	71.00	3,930.20	22.39	87,978.81
1959	246,753.18	71.00	3,475.39	22.91	79,622.57
1960	377,700.28	71.00	5,319.71	23.45	124,724.42
1961	440,677.20	71.00	6,206.71	23.99	148,884.79
1962	301,120.23	71.00	4,241.12	24.54	104,064.93
1963	899,574.88	71.00	12,670.05	25.10	317,991.19
1964	424,824.72	71.00	5,983.44	25.66	153,558.35
1965	464,876.97	71.00	6,547.55	26.24	171,809.65
1966	137,360.90	71.00	1,934.66	26.82	51,892.76
1967	1,200,569.55	71.00	16,909.40	27.41	463,523.81
1968	1,960,525.54	71.00	27,612.99	28.01	773,524.47
1969	592,209.39	71.00	8,340.96	28.62	238,705.87
1970	952,420.65	71.00	13,414.35	29.23	392,157.91
1971	2,798,028.04	71.00	39,408.77	29.86	1,176,560.35
1972	594,846.56	71.00	8,378.11	30.48	255,389.91
1973	712,449.66	71.00	10,034.48	31.12	312,292.54

NIPSCO
Electric Division
356.00 Overhead Conductors and Devices
Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2023
Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 71 Survivor Curve: R2

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1974	3,500,439.73	71.00	49,301.88	31.76	1,566,063.40
1975	2,267,571.14	71.00	31,937.56	32.42	1,035,340.34
1976	3,295,091.60	71.00	46,409.66	33.08	1,535,010.81
1977	8,415,336.67	71.00	118,525.65	33.74	3,999,254.51
1978	5,032,144.49	71.00	70,875.14	34.41	2,439,075.13
1979	8,484,100.24	71.00	119,494.15	35.09	4,193,256.82
1980	2,532,348.33	71.00	35,666.81	35.78	1,276,138.65
1981	3,661,872.91	71.00	51,575.58	36.47	1,881,029.89
1982	3,760,276.47	71.00	52,961.54	37.17	1,968,671.61
1983	5,525,920.71	71.00	77,829.73	37.88	2,947,963.95
1984	2,739,920.43	71.00	38,590.36	38.59	1,489,128.51
1985	2,661,568.84	71.00	37,486.82	39.31	1,473,545.95
1986	2,088,771.77	71.00	29,419.27	40.03	1,177,721.96
1987	881,478.36	71.00	12,415.17	40.76	506,097.37
1988	1,365,663.19	71.00	19,234.66	41.50	798,257.73
1989	487,580.33	71.00	6,867.32	42.24	290,094.94
1990	3,514,062.94	71.00	49,493.75	42.99	2,127,910.80
1991	2,600,112.28	71.00	36,621.23	43.75	1,602,085.99
1992	2,220,490.47	71.00	31,274.46	44.51	1,392,000.75
1993	938,873.62	71.00	13,223.55	45.27	598,694.85
1994	607,633.19	71.00	8,558.20	46.05	394,067.01
1995	346,906.83	71.00	4,886.00	46.82	228,785.26
1996	528,898.55	71.00	7,449.26	47.61	354,633.92
1997	669,025.48	71.00	9,422.88	48.40	456,029.40
1998	799,341.30	71.00	11,258.31	49.19	553,784.37
1999	1,057,473.03	71.00	14,893.96	49.99	744,497.60
2000	3,812,647.54	71.00	53,699.16	50.79	2,727,494.52

NIPSCO
Electric Division
356.00 Overhead Conductors and Devices
Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2023
Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 71 Survivor Curve: R2

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
2001	7,539,670.51	71.00	106,192.35	51.60	5,479,555.25
2002	322,600.44	71.00	4,543.66	52.42	238,158.21
2003	1,238,702.50	71.00	17,446.48	53.23	928,744.72
2004	1,172,414.22	71.00	16,512.85	54.06	892,660.37
2005	1,393,328.22	71.00	19,624.31	54.89	1,077,117.97
2006	624,877.50	71.00	8,801.08	55.72	490,391.78
2007	907,080.49	71.00	12,775.76	56.56	722,581.57
2008	6,337,058.21	71.00	89,254.18	57.40	5,123,273.46
2009	1,608,634.71	71.00	22,656.79	58.25	1,319,733.87
2010	2,755,436.68	71.00	38,808.90	59.10	2,293,618.61
2011	1,359,070.20	71.00	19,141.80	59.96	1,147,658.72
2012	3,082,382.91	71.00	43,413.76	60.82	2,640,303.06
2013	3,745,979.70	71.00	52,760.18	61.68	3,254,317.18
2014	6,462,370.47	71.00	91,019.14	62.55	5,693,332.03
2015	4,943,301.81	71.00	69,623.84	63.42	4,415,793.23
2016	5,768,130.96	71.00	81,241.13	64.30	5,223,790.87
2017	7,884,131.75	71.00	111,043.91	65.18	7,238,052.73
2018	77,983,067.48	71.00	1,098,351.05	66.07	72,563,905.70
2019	10,512,741.56	71.00	148,066.51	66.96	9,913,893.97
2020	29,319,549.05	71.00	412,950.64	67.85	28,017,793.11
2021	16,472,289.30	71.00	232,003.65	68.74	15,948,676.48
2022	37,228,045.54	71.00	524,337.71	69.64	36,516,968.56
2023	17,308,040.66	71.00	243,774.77	70.55	17,197,513.60
<i>Total</i>	337,965,006.34	71.00	4,760,061.80	57.65	274,424,768.70

Composite Average Remaining Life ... 57.65 Years

NIPSCO
Electric Division
365.00 Overhead Conductors and Devices
Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2023
Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 68 Survivor Curve: R1

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1908	36.44	68.00	0.54	6.73	3.61
1909	531.42	68.00	7.81	7.03	54.96
1910	619.59	68.00	9.11	7.34	66.87
1913	449.03	68.00	6.60	8.27	54.61
1914	2.18	68.00	0.03	8.58	0.28
1917	0.04	68.00	0.00	9.55	0.01
1918	129.01	68.00	1.90	9.87	18.73
1921	153.57	68.00	2.26	10.88	24.56
1922	475.51	68.00	6.99	11.22	78.43
1923	84.87	68.00	1.25	11.56	14.43
1926	25,971.10	68.00	381.92	12.62	4,819.62
1927	656.71	68.00	9.66	12.98	125.35
1928	15,913.51	68.00	234.02	13.34	3,122.46
1929	19,404.38	68.00	285.35	13.71	3,912.40
1930	61,145.64	68.00	899.18	14.08	12,661.73
1931	49,972.18	68.00	734.87	14.46	10,623.83
1932	15,343.36	68.00	225.63	14.84	3,347.62
1933	1,782.01	68.00	26.21	15.22	398.80
1935	4,129.08	68.00	60.72	16.00	971.28
1936	5,680.50	68.00	83.54	16.39	1,369.25
1937	10,770.80	68.00	158.39	16.79	2,659.36
1938	962.96	68.00	14.16	17.19	243.47
1940	7,835.14	68.00	115.22	18.01	2,075.39
1941	44,313.90	68.00	651.66	18.43	12,008.98
1942	51,803.97	68.00	761.81	18.85	14,359.05
1943	59,207.60	68.00	870.68	19.27	16,781.01
1944	118,626.40	68.00	1,744.47	19.70	34,370.60

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Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 68 Survivor Curve: R1

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1945	39,234.58	68.00	576.97	20.14	11,618.03
1946	57,905.61	68.00	851.54	20.57	17,519.98
1947	85,731.82	68.00	1,260.74	21.02	26,497.09
1948	77,278.02	68.00	1,136.42	21.46	24,393.15
1949	304,664.51	68.00	4,480.28	21.92	98,192.97
1950	375,793.77	68.00	5,526.27	22.37	123,644.91
1951	428,631.26	68.00	6,303.28	22.84	143,937.04
1952	558,704.57	68.00	8,216.09	23.30	191,452.82
1953	283,689.18	68.00	4,171.82	23.77	99,176.89
1954	436,252.25	68.00	6,415.35	24.25	155,570.73
1955	728,566.92	68.00	10,714.02	24.73	264,961.96
1956	812,743.01	68.00	11,951.88	25.22	301,390.51
1957	672,264.26	68.00	9,886.05	25.71	254,146.67
1958	920,471.41	68.00	13,536.09	26.20	354,702.24
1959	968,664.15	68.00	14,244.79	26.70	380,405.26
1960	713,129.63	68.00	10,487.00	27.21	285,367.59
1961	680,078.67	68.00	10,000.97	27.72	277,251.03
1962	978,084.94	68.00	14,383.33	28.24	406,174.47
1963	704,119.45	68.00	10,354.50	28.76	297,799.60
1964	632,858.94	68.00	9,306.57	29.29	272,565.70
1965	705,275.16	68.00	10,371.50	29.82	309,266.84
1966	680,179.62	68.00	10,002.45	30.35	303,623.58
1967	775,274.31	68.00	11,400.88	30.90	352,264.99
1968	729,299.27	68.00	10,724.79	31.44	337,234.30
1969	808,736.59	68.00	11,892.96	32.00	380,547.90
1970	823,666.79	68.00	12,112.52	32.55	394,315.42
1971	1,161,104.06	68.00	17,074.74	33.12	565,478.95

NIPSCO
Electric Division
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Original Cost Of Utility Plant In Service
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Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 68 Survivor Curve: R1

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1972	1,044,871.06	68.00	15,365.46	33.68	517,581.42
1973	1,208,775.28	68.00	17,775.77	34.26	608,967.04
1974	2,141,045.49	68.00	31,485.37	34.84	1,096,800.86
1975	2,511,299.12	68.00	36,930.17	35.42	1,308,016.90
1976	4,021,619.82	68.00	59,140.35	36.01	2,129,384.05
1977	4,031,310.33	68.00	59,282.85	36.60	2,169,673.94
1978	2,970,283.40	68.00	43,679.81	37.20	1,624,687.41
1979	3,915,193.02	68.00	57,575.28	37.80	2,176,224.49
1980	6,185,800.35	68.00	90,965.93	38.40	3,493,463.87
1981	3,710,009.34	68.00	54,557.93	39.01	2,128,533.85
1982	4,833,387.25	68.00	71,077.88	39.63	2,816,899.40
1983	4,714,075.90	68.00	69,323.33	40.25	2,790,283.92
1984	4,579,830.80	68.00	67,349.18	40.88	2,752,955.35
1985	4,360,309.21	68.00	64,120.98	41.50	2,661,252.58
1986	4,263,988.75	68.00	62,704.53	42.14	2,642,204.32
1987	3,316,004.32	68.00	48,763.84	42.77	2,085,792.99
1988	2,887,536.98	68.00	42,462.97	43.41	1,843,523.81
1989	2,215,960.11	68.00	32,587.03	44.06	1,435,737.76
1990	2,160,539.57	68.00	31,772.04	44.71	1,420,442.99
1991	3,807,663.18	68.00	55,993.98	45.36	2,539,790.46
1992	2,595,714.02	68.00	38,171.54	46.01	1,756,417.94
1993	3,074,182.64	68.00	45,207.71	46.67	2,109,910.01
1994	3,591,670.25	68.00	52,817.68	47.33	2,500,031.65
1995	3,170,518.88	68.00	46,624.39	48.00	2,237,834.44
1996	4,151,144.94	68.00	61,045.09	48.66	2,970,733.64
1997	4,036,926.48	68.00	59,365.44	49.33	2,928,739.73
1998	5,858,700.22	68.00	86,155.72	50.01	4,308,375.09

NIPSCO
Electric Division
365.00 Overhead Conductors and Devices
Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2023
Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 68 Survivor Curve: R1

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1999	4,436,893.86	68.00	65,247.20	50.68	3,306,827.95
2000	3,834,509.21	68.00	56,388.77	51.36	2,896,023.94
2001	4,740,256.18	68.00	69,708.33	52.04	3,627,523.12
2002	3,941,558.52	68.00	57,963.00	52.72	3,055,801.35
2003	5,546,399.36	68.00	81,563.15	53.40	4,355,850.11
2004	1,472,232.91	68.00	21,650.07	54.09	1,171,059.81
2005	4,157,192.33	68.00	61,134.02	54.78	3,348,885.14
2006	4,812,656.49	68.00	70,773.02	55.47	3,925,750.67
2007	7,524,094.88	68.00	110,646.36	56.16	6,214,252.18
2008	6,189,438.02	68.00	91,019.42	56.86	5,175,198.79
2009	3,875,014.42	68.00	56,984.43	57.56	3,279,831.53
2010	3,083,293.88	68.00	45,341.70	58.26	2,641,458.84
2011	5,465,034.55	68.00	80,366.63	58.96	4,738,444.19
2012	4,463,407.80	68.00	65,637.10	59.67	3,916,294.70
2013	8,409,054.68	68.00	123,660.22	60.37	7,465,977.04
2014	7,877,139.45	68.00	115,838.09	61.09	7,076,103.32
2015	5,265,816.29	68.00	77,437.01	61.80	4,785,591.68
2016	11,014,956.43	68.00	161,981.58	62.52	10,126,794.01
2017	11,921,191.99	68.00	175,308.32	63.24	11,086,139.20
2018	20,797,131.63	68.00	305,834.37	63.96	19,561,918.90
2019	35,608,302.25	68.00	523,641.57	64.69	33,873,640.14
2020	19,501,471.06	68.00	286,780.90	65.42	18,761,066.52
2021	24,566,817.73	68.00	361,269.88	66.15	23,898,826.74
2022	37,939,014.70	68.00	557,916.10	66.89	37,318,905.14
2023	28,961,468.81	68.00	425,895.87	67.63	28,803,103.27

NIPSCO

Electric Division

365.00 Overhead Conductors and Devices

Original Cost Of Utility Plant In Service

And Development Of Composite Remaining Life as of December 31, 2023

Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 68 Survivor Curve: R1

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
<i>Total</i>	387,401,111.79	68.00	5,696,967.11	56.21	320,219,195.49

Composite Average Remaining Life ... 56.21 Years

NIPSCO
Electric Division
367.00 Underground Conductors and Devices
Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2023
Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 57 Survivor Curve: R2

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1927	10.92	57.00	0.19	2.47	0.47
1928	4,266.84	57.00	74.86	2.76	206.97
1929	511.67	57.00	8.98	3.03	27.23
1931	2,601.48	57.00	45.64	3.59	164.00
1932	15,683.49	57.00	275.15	3.89	1,070.30
1933	8,961.50	57.00	157.22	4.17	655.67
1937	74.57	57.00	1.31	5.33	6.97
1938	31,806.56	57.00	558.01	5.61	3,132.56
1940	29,868.34	57.00	524.00	6.20	3,246.42
1941	145.56	57.00	2.55	6.49	16.58
1942	194.14	57.00	3.41	6.78	23.11
1943	6,203.67	57.00	108.84	7.08	770.45
1944	2,060.92	57.00	36.16	7.38	266.73
1945	2,494.86	57.00	43.77	7.68	336.21
1946	539.82	57.00	9.47	7.98	75.61
1947	548.96	57.00	9.63	8.29	79.85
1948	26,731.00	57.00	468.96	8.60	4,035.06
1949	646.26	57.00	11.34	8.92	101.19
1951	12,830.87	57.00	225.10	9.58	2,155.62
1952	8,106.45	57.00	142.22	9.91	1,409.75
1953	14,226.70	57.00	249.59	10.26	2,560.23
1954	33,687.29	57.00	591.00	10.61	6,269.55
1955	102,281.92	57.00	1,794.41	10.97	19,680.01
1956	55,481.53	57.00	973.36	11.34	11,033.11
1957	12,922.70	57.00	226.71	11.71	2,655.29
1958	36,473.02	57.00	639.88	12.10	7,740.81
1959	5,057.31	57.00	88.72	12.49	1,108.36

***NIPSCO
Electric Division***

367.00 Underground Conductors and Devices

***Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2023
Based Upon Broad Group/Remaining Life Procedure and Technique***

Average Service Life: 57

Survivor Curve: R2

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1960	2,558.31	57.00	44.88	12.90	578.83
1961	27,404.07	57.00	480.77	13.31	6,399.35
1962	74,892.41	57.00	1,313.90	13.73	18,046.14
1963	35,683.92	57.00	626.03	14.17	8,870.36
1964	5,168.43	57.00	90.67	14.61	1,325.09
1965	2,763.38	57.00	48.48	15.07	730.48
1966	26,508.06	57.00	465.05	15.53	7,223.74
1967	15,786.32	57.00	276.95	16.01	4,433.75
1968	65,069.03	57.00	1,141.56	16.50	18,830.36
1969	123,378.02	57.00	2,164.52	16.99	36,776.38
1970	174,825.29	57.00	3,067.10	17.50	53,668.66
1971	141,468.84	57.00	2,481.90	18.02	44,714.08
1972	82,349.25	57.00	1,444.72	18.54	26,791.05
1973	324,586.17	57.00	5,694.47	19.08	108,654.80
1974	278,222.14	57.00	4,881.07	19.63	95,815.39
1976	905,021.37	57.00	15,877.51	20.76	329,588.70
1977	701,666.76	57.00	12,309.90	21.34	262,634.54
1978	1,187,073.45	57.00	20,825.77	21.92	456,599.75
1979	3,232,340.45	57.00	56,707.51	22.52	1,277,266.06
1980	4,413,267.25	57.00	77,425.45	23.13	1,791,015.91
1981	2,485,311.86	57.00	43,601.80	23.75	1,035,451.61
1982	1,679,558.98	57.00	29,465.84	24.38	718,253.25
1983	1,332,078.47	57.00	23,369.71	25.01	584,538.00
1984	2,271,529.16	57.00	39,851.24	25.66	1,022,515.31
1985	1,989,537.00	57.00	34,904.03	26.31	918,352.60
1986	2,045,511.67	57.00	35,886.03	26.97	968,020.32
1987	3,634,299.65	57.00	63,759.40	27.65	1,762,775.36

***NIPSCO
Electric Division***

367.00 Underground Conductors and Devices

***Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2023
Based Upon Broad Group/Remaining Life Procedure and Technique***

Average Service Life: 57 Survivor Curve: R2

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1988	4,920,065.92	57.00	86,316.62	28.33	2,445,178.88
1989	4,659,147.32	57.00	81,739.12	29.02	2,371,661.06
1990	5,488,730.35	57.00	96,293.15	29.71	2,861,154.09
1991	4,392,153.56	57.00	77,055.03	30.42	2,343,917.65
1992	3,333,729.68	57.00	58,486.26	31.13	1,820,809.64
1993	4,559,153.21	57.00	79,984.84	31.85	2,547,641.13
1994	6,214,843.35	57.00	109,031.93	32.58	3,552,387.81
1995	6,158,874.42	57.00	108,050.02	33.32	3,600,023.78
1996	7,177,264.87	57.00	125,916.45	34.06	4,289,002.10
1997	7,923,749.75	57.00	139,012.63	34.81	4,839,524.60
1998	7,990,213.49	57.00	140,178.65	35.57	4,986,287.61
1999	6,857,558.54	57.00	120,307.59	36.34	4,371,617.48
2000	8,275,927.68	57.00	145,191.16	37.11	5,388,016.54
2001	8,159,925.44	57.00	143,156.05	37.89	5,424,077.35
2002	8,570,587.38	57.00	150,360.61	38.67	5,815,103.84
2003	9,481,422.41	57.00	166,340.12	39.47	6,565,053.85
2004	8,604,067.74	57.00	150,947.99	40.27	6,078,256.02
2005	15,197,174.42	57.00	266,616.09	41.07	10,950,724.75
2006	15,904,935.33	57.00	279,032.90	41.88	11,687,027.01
2007	16,993,464.91	57.00	298,129.84	42.70	12,730,955.73
2008	14,117,898.35	57.00	247,681.49	43.53	10,780,901.45
2009	9,004,599.05	57.00	157,974.82	44.36	7,007,388.74
2010	7,319,634.34	57.00	128,414.15	45.19	5,803,401.56
2011	5,994,669.42	57.00	105,169.24	46.04	4,841,485.48
2012	11,313,463.11	57.00	198,481.06	46.88	9,305,386.41
2013	11,080,678.93	57.00	194,397.14	47.74	9,279,776.17
2014	14,110,987.50	57.00	247,560.25	48.59	12,029,903.71

***NIPSCO
Electric Division***

367.00 Underground Conductors and Devices

***Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2023
Based Upon Broad Group/Remaining Life Procedure and Technique***

Average Service Life: 57 Survivor Curve: R2

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
2015	18,432,481.58	57.00	323,375.65	49.46	15,993,549.24
2016	27,747,329.53	57.00	486,793.41	50.33	24,499,060.37
2017	27,116,835.06	57.00	475,732.15	51.20	24,358,293.81
2018	45,902,271.20	57.00	805,299.96	52.08	41,940,073.92
2019	40,035,934.55	57.00	702,382.16	52.96	37,201,319.37
2020	24,497,875.56	57.00	429,785.67	53.85	23,145,486.73
2021	41,273,532.47	57.00	724,094.32	54.75	39,642,090.65
2022	57,587,104.13	57.00	1,010,296.25	55.64	56,217,359.39
2023	43,960,211.76	57.00	771,228.87	56.55	43,610,864.32
<i>Total</i>	588,030,774.37	57.00	10,316,290.37	46.72	481,953,460.23

Composite Average Remaining Life ... 46.72 Years

***NIPSCO
Electric Division***

373.00 Street Lighting and Signal Systems

***Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2023
Based Upon Broad Group/Remaining Life Procedure and Technique***

Average Service Life: 42

Survivor Curve: 03

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1916	812.75	41.42	19.62	25.45	499.39
1917	622.31	41.42	15.02	25.86	388.55
1918	7.08	41.42	0.17	26.27	4.49
1919	357.06	41.42	8.62	26.67	229.93
1920	436.12	41.42	10.53	27.07	285.05
1921	208.75	41.42	5.04	27.47	138.44
1922	336.63	41.42	8.13	27.86	226.46
1923	539.66	41.42	13.03	28.25	368.12
1924	426.87	41.42	10.31	28.64	295.16
1925	917.90	41.42	22.16	29.02	643.18
1926	81.53	41.42	1.97	29.40	57.87
1927	1,107.74	41.42	26.74	29.78	796.36
1928	1,955.67	41.42	47.22	30.15	1,423.42
1929	1,714.08	41.42	41.38	30.51	1,262.76
1930	4,470.74	41.42	107.94	30.88	3,332.75
1931	393.71	41.42	9.51	31.23	296.89
1932	3,763.44	41.42	90.86	31.59	2,870.10
1933	1,494.78	41.42	36.09	31.94	1,152.53
1934	2,131.56	41.42	51.46	32.28	1,661.23
1935	4,449.94	41.42	107.44	32.62	3,504.57
1936	4,184.48	41.42	101.03	32.95	3,329.22
1937	2,710.52	41.42	65.44	33.28	2,178.09
1938	6,109.38	41.42	147.50	33.61	4,957.19
1939	1,208.10	41.42	29.17	33.93	989.53
1940	3,930.16	41.42	94.89	34.24	3,248.90
1941	1,290.66	41.42	31.16	34.55	1,076.51
1942	2,242.03	41.42	54.13	34.85	1,886.38

***NIPSCO
Electric Division***

373.00 Street Lighting and Signal Systems

***Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2023
Based Upon Broad Group/Remaining Life Procedure and Technique***

Average Service Life: 42

Survivor Curve: 03

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1944	654.98	41.42	15.81	35.43	560.35
1945	3,059.26	41.42	73.86	35.72	2,638.31
1946	2,974.84	41.42	71.82	36.00	2,585.53
1947	8,879.81	41.42	214.39	36.27	7,775.73
1948	6,533.61	41.42	157.75	36.53	5,763.17
1949	46,369.80	41.42	1,119.54	36.79	41,190.53
1950	34,258.03	41.42	827.11	37.04	30,640.16
1951	51,609.81	41.42	1,246.05	37.29	46,465.68
1952	76,732.17	41.42	1,852.59	37.53	69,522.76
1953	35,737.94	41.42	862.84	37.76	32,579.78
1954	56,182.59	41.42	1,356.45	37.98	51,519.98
1955	102,329.87	41.42	2,470.61	38.20	94,372.07
1956	133,265.31	41.42	3,217.51	38.41	123,575.38
1957	112,673.02	41.42	2,720.34	38.61	105,024.07
1958	142,837.06	41.42	3,448.61	38.80	133,808.09
1959	263,516.11	41.42	6,362.24	38.99	248,043.87
1960	405,756.50	41.42	9,796.43	39.16	383,654.44
1961	248,212.59	41.42	5,992.75	39.33	235,709.77
1962	237,952.49	41.42	5,745.04	39.49	226,885.21
1963	194,900.51	41.42	4,705.61	39.65	186,555.24
1964	253,415.53	41.42	6,118.37	39.79	243,452.75
1965	167,956.36	41.42	4,055.08	39.92	161,897.60
1966	215,190.51	41.42	5,195.48	40.05	208,091.35
1967	337,454.58	41.42	8,147.38	40.17	327,297.32
1968	350,584.10	41.42	8,464.37	40.28	340,944.62
1969	395,151.13	41.42	9,540.38	40.38	385,259.17
1970	301,685.38	41.42	7,283.78	40.47	294,795.89

***NIPSCO
Electric Division***

373.00 Street Lighting and Signal Systems

***Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2023
Based Upon Broad Group/Remaining Life Procedure and Technique***

Average Service Life: 42 Survivor Curve: 03

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1971	421,274.55	41.42	10,171.10	40.56	412,509.29
1972	246,667.86	41.42	5,955.46	40.63	241,988.30
1973	329,042.95	41.42	7,944.29	40.70	323,311.33
1974	374,080.42	41.42	9,031.66	40.76	368,090.41
1975	547,876.86	41.42	13,227.74	40.80	539,734.94
1976	476,952.06	41.42	11,515.35	40.84	470,332.96
1977	550,299.88	41.42	13,286.24	40.88	543,102.42
1978	637,044.51	41.42	15,380.57	40.90	629,051.86
1979	686,031.08	41.42	16,563.28	40.92	677,694.62
1980	727,609.96	41.42	17,567.15	40.92	718,931.06
1981	539,665.19	41.42	13,029.48	40.92	533,201.82
1982	741,381.20	41.42	17,899.63	40.92	732,392.29
1983	878,628.86	41.42	21,213.29	40.90	867,645.46
1984	459,953.72	41.42	11,104.95	40.88	453,978.36
1985	1,049,954.21	41.42	25,349.71	40.85	1,035,660.25
1986	504,149.57	41.42	12,172.00	40.82	496,861.31
1987	352,832.41	41.42	8,518.66	40.78	347,412.00
1988	588,795.12	41.42	14,215.65	40.74	579,158.00
1989	544,713.67	41.42	13,151.37	40.69	535,140.94
1990	186,969.88	41.42	4,514.13	40.64	183,457.66
1991	271,727.79	41.42	6,560.50	40.58	266,256.71
1992	352,217.41	41.42	8,503.81	40.53	344,648.00
1993	248,998.11	41.42	6,011.72	40.47	243,303.25
1994	312,062.92	41.42	7,534.33	40.41	304,462.85
1995	401,388.91	41.42	9,690.99	40.35	391,042.79
1996	355,094.01	41.42	8,573.26	40.29	345,424.89
1997	414,248.74	41.42	10,001.47	40.23	402,394.56

NIPSCO
Electric Division

373.00 Street Lighting and Signal Systems

Original Cost Of Utility Plant In Service
And Development Of Composite Remaining Life as of December 31, 2023
Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 42 ***Survivor Curve: 03***

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
1998	474,114.79	41.42	11,446.85	40.18	459,922.34
1999	241,592.59	41.42	5,832.92	40.12	234,045.54
2000	454,534.28	41.42	10,974.11	40.08	439,805.41
2001	621,481.71	41.42	15,004.82	40.03	600,695.64
2002	403,948.95	41.42	9,752.79	39.99	390,044.11
2003	527,215.92	41.42	12,728.91	39.96	508,660.12
2004	294,880.03	41.42	7,119.47	39.93	284,311.35
2005	1,924,283.51	41.42	46,459.19	39.92	1,854,479.99
2006	877,600.03	41.42	21,188.45	39.91	845,565.65
2007	935,818.49	41.42	22,594.06	39.90	901,606.70
2008	783,740.68	41.42	18,922.34	39.91	755,246.54
2009	433,778.38	41.42	10,472.98	39.93	418,200.58
2010	375,299.03	41.42	9,061.08	39.96	362,065.47
2011	340,499.26	41.42	8,220.89	40.00	328,812.47
2012	530,218.97	41.42	12,801.41	40.05	512,645.35
2013	627,303.18	41.42	15,145.38	40.11	607,429.21
2014	681,177.36	41.42	16,446.09	40.18	660,780.38
2015	1,257,059.40	41.42	30,349.98	40.26	1,221,919.77
2016	1,263,662.75	41.42	30,509.41	40.36	1,231,222.38
2017	3,572,756.41	41.42	86,259.31	40.46	3,490,136.31
2018	1,478,115.80	41.42	35,687.08	40.58	1,448,114.63
2019	10,634,786.35	41.42	256,762.35	40.71	10,451,920.38
2020	4,212,756.58	41.42	101,711.24	40.85	4,154,475.53
2021	2,657,189.71	41.42	64,154.21	41.00	2,630,082.16
2022	6,278,243.98	41.42	151,579.60	41.16	6,238,644.95
2023	4,792,617.01	41.42	115,711.17	41.33	4,782,230.77

NIPSCO

Electric Division

373.00 Street Lighting and Signal Systems

Original Cost Of Utility Plant In Service

And Development Of Composite Remaining Life as of December 31, 2023

Based Upon Broad Group/Remaining Life Procedure and Technique

Average Service Life: 42 Survivor Curve: 03

<i>Year</i>	<i>Original Cost</i>	<i>Avg. Service Life</i>	<i>Avg. Annual Accrual</i>	<i>Avg. Remaining Life</i>	<i>Future Annual Accruals</i>
<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
<i>Total</i>	64,108,114.54	41.42	1,547,802.59	40.59	62,827,963.97

Composite Average Remaining Life ... 40.59 Years

Cause No. 45772
Northern Indiana Public Service Company LLC's
Objections and Responses to
NIPSCO Industrial Group's Sixth Set of Data Requests

Industrials Request 6-017:

Please refer to Spanos Attachment 15-B at VIII-4.

- a. Please provide the detailed workpapers, with all formulas and links intact, that show the procedure utilized to calculate the terminal and interim net salvage rates for each plant. Additionally, please show the detail at the unit level, rather than at the plant level.
- b. Please identify and provide Mr. Spanos' source for the inflation rate used with these calculations.

Objections:

Response:

- a. The terminal and net salvage percentages are based on the tables on page VIII-3 and VIII-4 of Petitioner's Exhibit No. 15, Attachment 15-B. Additionally, the attached file, Industrials Request 6-017 Attachment A (Terminal Net Salvage.xlsx), provides the calculations that were used in the determination of the interim and terminal net salvage estimates as well as the calculations of the weighted net salvage percentage used in determining depreciation rates. All calculations of weighted net salvage were performed only at the plant level.
- b. The 2.5% escalation rate used in the terminal net salvage calculation is supported by recent CPI data series, which are available at www.bls.gov, and long term CPI forecasts, which are available from the Federal Reserve Bank of Philadelphia's Livingston Survey at <https://www.philadelphiafed.org/research-and-data/real-time-center/livingston-survey>.

AFFIRMATION

I affirm, under the penalties for perjury, that the foregoing representations are true.



David J. Garrett
Resolve Utility Consulting, Inc.
Consultant for the
Indiana Office of Utility Consumer Counselor

Cause No. 45772
NIPSCO

1-17-2023

Date

Certificate of Service

This is to certify that a copy of the Indiana Office of Utility Consumer Counselor's Testimony Filing has been served upon the following parties of record in the captioned proceeding by electronic service on January 20, 2023.

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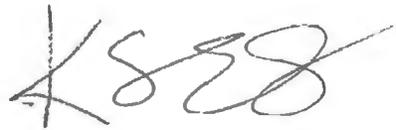
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