

**BEFORE THE CORPORATION COMMISSION OF OKLAHOMA**

IN THE MATTER OF THE APPLICATION  
OF OKLAHOMA NATURAL GAS  
COMPANY, A DIVISION OF ONE GAS,  
INC., FOR A REVIEW AND CHANGE OR  
MODIFICATION IN ITS RATES,  
CHARGES, TARIFFS, AND TERMS AND  
CONDITIONS OF SERVICE

CAUSE NO. PUD 201500213



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CORPORATION COMMISSION  
OF OKLAHOMA

**RESPONSIVE TESTIMONY  
OF  
DAVID J. GARRETT**

**THE RATE OF DEPRECIATION**

**ON BEHALF OF  
THE PUBLIC UTILITY DIVISION**

**OCTOBER 19, 2015**

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## INTRODUCTION

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

2 A. My name is David Garrett. I am employed as a public utility regulatory analyst at the  
3 Public Utility Division (“PUD”) of the Oklahoma Corporation Commission (the  
4 “Commission”).

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

6 A. I received a B.B.A. degree with a major in Finance, an M.B.A. degree, and a Juris Doctor  
7 degree from the University of Oklahoma. I worked in private legal practice before  
8 joining the Commission in 2011. At the Commission, I worked in the Office of General  
9 Counsel representing PUD in regulatory proceedings before joining PUD as a regulatory  
10 analyst in 2012. I have attended numerous training courses and seminars covering a  
11 variety of regulatory issues. I am a Certified Depreciation Professional through the  
12 Society of Depreciation Professionals. I am also a Certified Rate of Return Analyst  
13 through the Society of Utility and Regulatory Financial Analysts. I have testified in  
14 many regulatory proceedings and the Commission has accepted my credentials. A more  
15 complete description of my qualifications and regulatory experience is included in my  
16 curriculum vitae.<sup>1</sup>

17 **Q. Describe the purpose, scope, and organization of your testimony.**

18 A. In this cause, I am testifying on the two primary capital recovery mechanisms in the rate  
19 base rate of return model: cost of capital and depreciation. Because these are two  
20 separate issues, and the testimonies are voluminous, I have filed two separate responsive  
21 testimony documents. The exhibits attached to both testimonies each have a different

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<sup>1</sup> Exhibit DG-D-1.

1 number. The cost of capital exhibits are labeled “DG-C,” and the depreciation exhibits  
 2 are labeled “DG-D.” In this testimony, I will address depreciation rates and other related  
 3 issues.

**EXECUTIVE SUMMARY**

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

5 A. In the context of utility ratemaking, “depreciation” refers to a cost allocation system  
 6 designed to measure the rate by which a utility may recover its capital investments in a  
 7 systematic and rational manner. I employed a well-established depreciation system and  
 8 used actuarial analysis to statistically analyze the Company’s depreciable assets in order  
 9 to develop reasonable depreciation rates in this case. The table below summarizes PUD’s  
 10 adjustment to ONG’s proposed depreciation rates by plant function.<sup>2</sup>

**Figure 1:  
 Summary Adjustments to ONG’s Proposed Depreciation Rates**

Plant Function	Original Cost	ONG's Proposal		PUD's Proposal		PUD Adjustment	
		Rate	Accrual	Rate	Accrual	Rate	Accrual
Transmission	\$ 133,457,557	1.47%	\$ 1,956,943	1.09%	\$ 1,459,403	-0.37%	(497,540)
Distribution	1,718,887,566	3.05%	52,341,036	2.50%	42,952,810	-0.55%	(9,388,226)
General	102,692,936	6.70%	6,875,605	7.76%	7,968,717	1.06%	1,093,112
<b>Total Depreciable Plant</b>	<b>\$ 1,955,038,059</b>	<b>3.13%</b>	<b>\$ 61,173,584</b>	<b>2.68%</b>	<b>\$ 52,380,930</b>	<b>-0.45%</b>	<b>\$ (8,792,654)</b>

11 PUD is recommending a 0.45 percent decrease to ONG’s proposed composite  
 12 depreciation rate.

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<sup>2</sup> See also Exhibit DG-D-2.



1 **Q. State PUD’s recommendation to the Commission.**

2 A. PUD recommends an adjustment of \$8,792,654 to decrease to the ONG’s proposed  
3 depreciation expense.

**LEGAL STANDARD**

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

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

[T]he company has the burden of making a convincing showing that the amounts it has charged to operating expenses for depreciation have not been excessive. That burden is not sustained by proof that its general accounting system has been correct. The calculations are mathematical, but the predictions underlying them are essentially matters of opinion.<sup>5</sup>

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<sup>3</sup> *Lindheimer v. Illinois Bell Tel. Co.*, 292 U.S. 151, 167 (1934).

<sup>4</sup> *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.”

<sup>5</sup> *Id.* at 169 (emphasis added).

1 Thus, the Commission must ultimately determine if the Company has met its burden of  
2 proof by making a convincing showing that its proposed depreciation rates are not  
3 excessive.

4 **Q. Depreciation should represent an allocated cost of capital to operation, rather than**  
5 **a mechanism to determine loss of value.**

6 A. Yes. While the *Lindheimer* case and other early literature recognized depreciation as a  
7 necessary expense, the language indicated that depreciation was primarily a mechanism  
8 to determine loss of value.<sup>6</sup> Adoption of this “value concept” would require annual  
9 appraisals of extensive utility plant, and is thus not practical in this context. Rather, the  
10 “cost allocation concept” recognizes that depreciation is a cost of providing service, and  
11 that in addition to receiving a “return on” invested capital through the allowed rate of  
12 return, a utility should also receive a “return of” its invested capital in the form of  
13 recovered depreciation expense. The cost allocation concept also satisfies several  
14 fundamental accounting principles, including verifiability, neutrality, and the matching  
15 principle.<sup>7</sup> The definition of “depreciation accounting” published by the American  
16 Institute of Certified Public Accountants (“AICPA”) properly reflects the cost allocation  
17 concept:

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<sup>6</sup> See Frank K. Wolf & W. Chester Fitch, *Depreciation Systems* 71 (Iowa State University Press 1994).

<sup>7</sup> National Association of Regulatory Utility Commissioners, *Public Utility Depreciation Practices* 12 (NARUC 1996).

Depreciation accounting is a system of accounting that aims to distribute cost or other basic value of tangible capital assets, less salvage (if any), over the estimated useful life of the unit (which may be a group of assets) in a systematic and rational manner. It is a process of allocation, not of valuation.<sup>8</sup>

1 According to Wolf, “the concept of depreciation as the allocation of cost has proven to be  
2 the most useful and most widely used concept.”<sup>9</sup>

3 **Q. Discuss the definition and purpose of a depreciation system, as well as the**  
4 **depreciation system you employed for this project.**

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

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<sup>8</sup> American Institute of Accountants, *Accounting Terminology Bulletins Number 1: Review and Résumé* 25 (American Institute of Accountants 1953).

<sup>9</sup> Wolf *supra* n. 6, at 73.

## ANALYTIC METHODS

1 **Q. Generally describe the actuarial process used to analyze the Company’s depreciable**  
2 **property.**

3 A. The process designed to study the retirement patterns of industrial property is derived  
4 from the actuarial process used to study human mortality. While actuaries study  
5 historical human mortality data in order to predict how long a group of people will live,  
6 depreciation analysts study historical plant data in order to estimate the average lives of  
7 property groups. The most common actuarial method used by depreciation analysts is  
8 called the “retirement rate method.” In the retirement rate method, original property data,  
9 including additions, retirements, transfers, and other transactions, are organized by  
10 vintage and transaction year.<sup>10</sup> The retirement rate method is ultimately used to develop  
11 an “observed life table,” which shows the percent of property surviving at each age  
12 interval. This pattern of property retirement is described as a “survivor curve.” The  
13 survivor curve derived from the observed life table, however, must be fitted and  
14 smoothed with a complete curve in order to determine the ultimate average life of the  
15 group.<sup>11</sup> The most widely used survivor curves for this curve fitting process were  
16 developed at Iowa State University in the early 1900s, and are commonly known as the  
17 “Iowa curves.”<sup>12</sup>

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<sup>10</sup> 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).

<sup>11</sup> See Appendix C for a more detailed discussion of the actuarial analysis used to determine the average lives of grouped industrial property.

<sup>12</sup> See Appendix B for a more detailed discussion of the Iowa curves.

1 **Q. Describe how you developed PUD’s proposed depreciation rates.**

2 A. There are two primary components that must be estimated to calculate depreciation rates  
3 under the remaining life technique: 1) average remaining life; and 2) net salvage.  
4 Average remaining life refers to the expected future years of service of a group of  
5 property at a given age. Net salvage refers to the amount of gross salvage received from  
6 the sale or reuse of property when it is retired less the cost to remove the property from  
7 service. To calculate the average remaining life for each account, I obtained the  
8 Company’s aged property data by installation and transaction year, including additions,  
9 retirements, gross salvage and removal cost data. I used this data to develop an observed  
10 life table for each account. I fitted the observed retirement pattern with a smooth,  
11 complete Iowa curve using both mathematical and visual curve fitting techniques.<sup>13</sup> I  
12 obtained the average remaining lives for each account based on the Iowa curves I  
13 selected.<sup>14</sup> Further detail regarding the actuarial methods used to develop the average  
14 remaining lives of grouped industrial property is presented in the appendices attached  
15 hereto. To estimate net salvage for each account, I considered historical net salvage  
16 percentages, including three-year rolling averages. I conclude that the Company’s  
17 proposed net salvage percentages for each account are reasonable.

18 **Q. Describe calculated accumulated depreciation.**

19 A. Calculated Accumulated Depreciation (“CAD”, formerly “Theoretical Reserve”) is the  
20 calculated balance that would be in the accumulated depreciation account at a point in  
21 time using current depreciation parameters, such as average service life and net salvage.

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<sup>13</sup> See Exhibit DG-D-8.

<sup>14</sup> Exhibit DG-D-7; see also DG-D-4.

1 In other words, the CAD is what would be in the accumulated depreciation account had  
2 the current depreciation parameters been in place all along. There is almost always an  
3 imbalance between the actual accumulated depreciation amount and the CAD. If the  
4 whole life application technique is used, this imbalance should be amortized in order to  
5 bring the actual accumulated depreciation balance closer to the CAD. If the remaining  
6 life application technique is used, however, any imbalance between the actual  
7 accumulated depreciation amount and the CAD is “automatically” amortized over the  
8 remaining life of the account. That is, no manual adjustment to accumulated depreciation  
9 is necessary if the remaining life application technique is employed, as it is here.

10 **Q. Describe the imbalance between the actual accumulated depreciation balance and**  
11 **the CAD in this case.**

12 A. In this case, the actual accumulated depreciation balance is \$684,570,975.<sup>15</sup> Based on  
13 PUD’s proposed depreciation parameters, the CAD is \$543,457,541.<sup>16</sup> This means that  
14 the actual accumulated depreciation balance is overaccrued by \$141,113,435, which  
15 indicates that ONG’s current depreciation rates are too high given the current  
16 statistically-derived parameters.<sup>17</sup> As discussed above, because PUD employed the  
17 remaining life application technique in this case, the discrepancy between the actual  
18 accumulated depreciation balance and the CAD will be gradually reduced over the  
19 aggregate remaining life of plant. Thus, no additional adjustment is required.

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<sup>15</sup> ONG Depreciation Study.

<sup>16</sup> Exhibit DG-D-5.

<sup>17</sup> *Id.*

1 **Q. Discuss your analysis of net salvage.**

2 A. Net salvage is the amount of any gross salvage received by the Company when it retires  
3 an asset, less any costs to remove the asset. To analyze net salvage, I used the  
4 Company's historical aged data, which tracks retirements, gross salvage, and removal  
5 cost by vintage and activity year. My analysis revealed that ONG's net salvage estimates  
6 were generally reasonable. In fact, for several accounts the average net salvage was less  
7 than what was proposed by the Company. For these reasons, PUD did not make any  
8 adjustments to ONG's proposed net salvage percentages.

### **SPECIFIC RESPONSE TO ONG'S TESTIMONY**

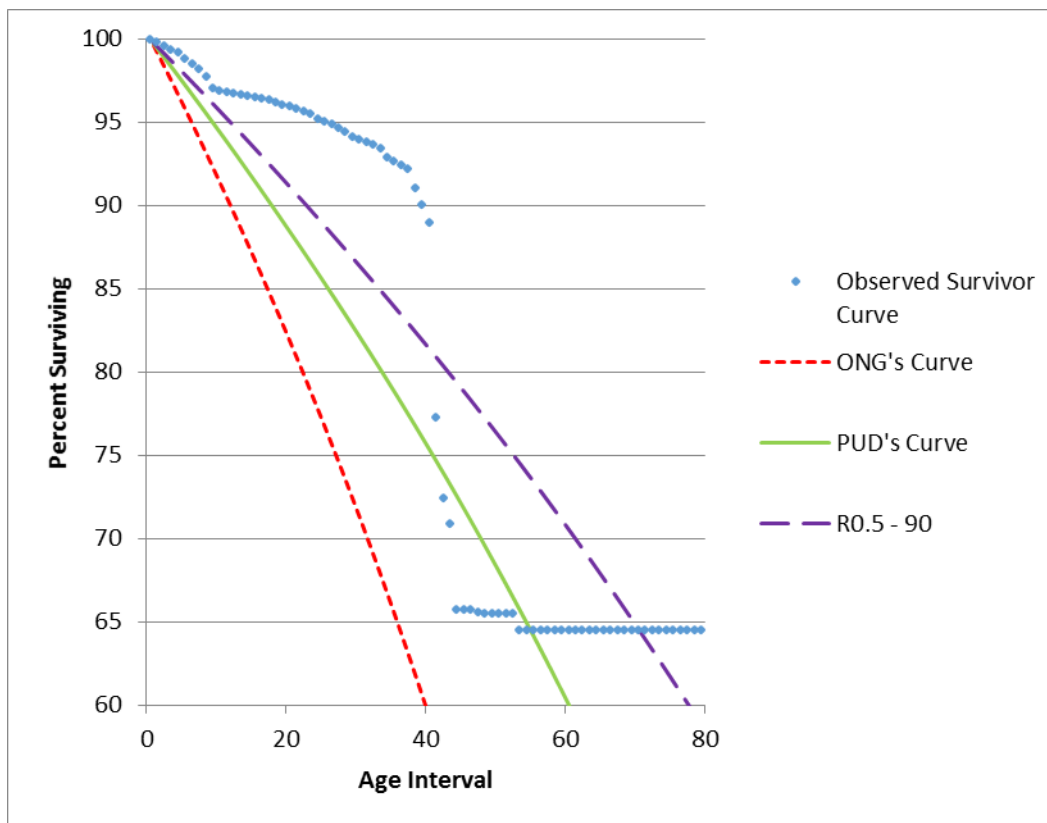
9 **Q. Describe the primary factor contributing to the difference between PUD's and**  
10 **ONG's proposed depreciation rates.**

11 A. The difference in PUD's and ONG's proposed rates arise primarily from the estimated  
12 remaining life in one large account: Account 380.00: Services – Plastic. While both  
13 PUD and ONG employed reasonable depreciation systems in this case, the discrepancy  
14 between remaining life estimates for Account 380.00 is the primary driver for PUD's  
15 adjustment.

16 **Q. Describe the difference between PUD's and ONG's Iowa curves selected to**  
17 **represent the life characteristics of Account 380.00.**

18 A. ONG selected Iowa curve R0.5 – 46 to describe life characteristics for Account 380.00,  
19 while PUD chose Iowa curve R0.5 – 70. Both PUD's and ONG's selected curves are  
20 R0.5 curves, but there is a very large discrepancy in average service life: 46 years vs. 70  
21 years. Figure 2 below shows the observed survivor curve for Account 380.00, and also  
22 shows both PUD's and ONG's Iowa curves.

**Figure 2:  
Account 380.00 Comparison**



1 As clearly shown in the graph, ONG's R0.5 – 46 curve does not provide a good fit to the  
 2 observed data points. This is because an average service life of 46 years is far too short  
 3 for this account. PUD's chosen Iowa curve, on the other hand, provides a much better fit  
 4 to the observed survivor curve. In the earlier age intervals, PUD's curve is closer to the  
 5 observed survivor curve than ONG's curve. In the later age intervals, PUD's curve  
 6 passes through the observed survivor curve while ONG's does not. In fact, it could be  
 7 argued that an even longer curve would provide a better fit than PUD's curve. The figure  
 8 above shows that R0.5 – 90 is even closer to the observed survivor curve than PUD's  
 9 curve. If PUD had chosen the R0.5 – 90 curve, it would have resulted in a larger  
 10 reduction depreciation expense.



1 **Q. PUD's curve is mathematically a better fit than ONG's curve for Account 380.00.**

2 A. Yes. While a quick visual observation reveals that PUD's curve is a better fit than  
3 ONG's curve, this result can also be confirmed mathematically. The mathematical curve  
4 fitting process basically involves measuring the distance between the chosen Iowa curve  
5 and the observed data points. The differences between the observed curve and the  
6 selected Iowa curve are squared, then summed. The curve with the smallest sum of  
7 squared differences provides the best mathematical fit. The sum of squared differences is  
8 108,107 for ONG's curve, and only 16,134 for PUD's curve.<sup>18</sup> Thus, PUD's curve  
9 provides a much better mathematical fit.

10 **Q. Describe the impact in depreciation expense resulting from the different average life**  
11 **estimates for Account 380.00.**

12 A. All else held constant, a longer survivor curve with a longer average life will result in a  
13 lower depreciation expense. This is because the utility's original cost will be recovered  
14 over a longer period of time. Thus, PUD's curve with a 70-year average life results in a  
15 lower depreciation expense than that which would result from ONG's curve with a 46-  
16 year average life. This difference is magnified due to the fact that Account 380.00 has  
17 over half a million dollars of original cost to allocate. Specifically, the difference  
18 between average lives for this single account results in a difference in depreciation  
19 expense of \$7,474,025, as shown in Figure 3 below.

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<sup>18</sup> Exhibit DG-D-6.

**Figure 3:  
Account 380.00 Impact on Depreciation Expense**

	Original Cost	Net Salvage	Depreciable Base	Book Reserve	Future Accruals	Remaining Life	Accrual Amount
PUD	514,588,598	-75.0%	900,530,047	179,062,754	721,467,292	<b>62.78</b>	11,491,993
ONG	514,588,598	-75.0%	900,530,047	179,062,754	721,467,292	<b>38.04</b>	18,966,017
<b>Difference between PUD and ONG</b>							<b>-7,474,025</b>

1           The different Iowa curves chosen by PUD and ONG result in much different remaining  
2           lives. Based on PUD’s R0.5 – 70 Iowa curve, the remaining life for Account 380.00 is  
3           62.78 years.<sup>19</sup> ONG’s remaining life estimate for this account, however, is only 38.04  
4           years.<sup>20</sup> This large discrepancy in remaining life estimates results in a difference of  
5           approximately \$7.5 million in depreciation expense. Thus, about 85 percent of PUD’s  
6           adjustment in ONG’s proposed depreciation rates is due to Account 380.00, and as  
7           illustrated above, PUD’s average remaining life estimate for this account is more  
8           reasonable than ONG’s estimate.

**CONCLUSION AND RECOMMENDATION**

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

10   A. I employed a well-established depreciation system and used actuarial analysis to  
11   statistically analyze the Company’s depreciable assets in order to develop reasonable  
12   depreciation rates in this case. The difference between the Company’s proposed rates  
13   and PUD’s proposed rates stems primarily from different average service life estimates  
14   for several accounts, especially Account 380.00. For several accounts, the Iowa curves I

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<sup>19</sup> Exhibit DG-D-4.

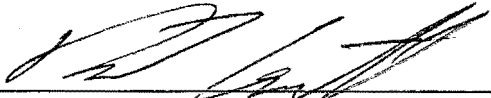
<sup>20</sup> ONG Depreciation Study, Statement E (p. 22).

1 chose to calculate the average remaining life resulted in a higher depreciation rate than  
2 that proposed by the Company.<sup>21</sup> In fact, out of the 37 accounts studied, PUD  
3 recommended higher depreciation rates for more than half of the accounts.<sup>22</sup> The net  
4 result, however, is a reduction in ONG's proposed depreciation rates.

5 **Q. State PUD's recommendation to the Commission.**

6 A. PUD recommends an adjustment of \$8,792,654 to reduce the Company's proposed  
7 depreciation expense. PUD's adjustment is fair and reasonable to the Company and to  
8 ratepayers.

I state under penalty of perjury under the laws of Oklahoma that the foregoing is true and correct to the best of my knowledge.



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<sup>21</sup> See e.g. Accounts 366.20, 374.20, and 376 in Exhibit DG-D-3.

<sup>22</sup> See Exhibit DG-D-3 (Column 6 shows that 19 out of the 37 accounts reviewed resulted in depreciation rates that were higher than those proposed by ONG).

## 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.<sup>23</sup> 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.<sup>24</sup> The figure below illustrates the basic concept of a depreciation system and includes some of the available parameters.<sup>25</sup>

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.

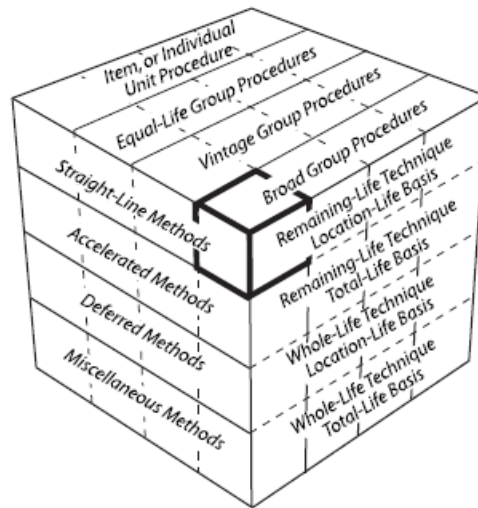
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<sup>23</sup> Wolf *supra* n. 6, at 69-70.

<sup>24</sup> See Wolf *supra* n. 6, at 70, 139-40.

<sup>25</sup> 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 the some of the available parameters of a depreciation system.

**Figure 4:  
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.<sup>26</sup> 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.<sup>27</sup> The basic formula for the straight-line method is as follows:<sup>28</sup>

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<sup>26</sup> NARUC *supra* n. 7, at 56.

<sup>27</sup> *Id.*

<sup>28</sup> *Id.*

**Equation 1:  
Straight-Line Accrual**

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

Gross plant is a known figure from the utility's records, while both net salvage and service life must be estimated in order 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.<sup>29</sup> In practice, the annual accrual is expressed as a rate which is applied to the original cost of plant in order to determine the annual accrual in dollars. The formula for determining the straight-line rate is as follows:<sup>30</sup>

**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.<sup>31</sup> 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 excessively conducting calculations for each unit. Whereas an individual unit of

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<sup>29</sup> *Id.* at 57.

<sup>30</sup> *Id.* at 56.

<sup>31</sup> Wolf *supra* n. 6, at 74-75.

property has a single life, a group of property displays a dispersion of lives and the life characteristics of the group must be described statistically.<sup>32</sup> 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.<sup>33</sup>

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 depreciation, 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.<sup>34</sup> 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.<sup>35</sup> Under the equal life procedure the property is divided into subgroups that each has a common life.<sup>36</sup>

### 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 group, while

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<sup>32</sup> *Id.* at 74.

<sup>33</sup> NARUC *supra* n. 7, at 61-62.

<sup>34</sup> *See* Wolf *supra* n. 6, at 74-75.

<sup>35</sup> *Id.* at 75.

<sup>36</sup> *Id.*

the remaining life technique seeks to recover undepreciated costs over the remaining life of the plant.<sup>37</sup>

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.<sup>38</sup> 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 herein 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.<sup>39</sup> 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

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<sup>37</sup> NARUC *supra* n. 7, at 63-64.

<sup>38</sup> Wolf *supra* n. 6, at 83.

<sup>39</sup> NARUC *supra* n. 7, at 325.



in the annual accrual.<sup>40</sup> 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:<sup>41</sup>

**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.<sup>42</sup>

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.<sup>43</sup> 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

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<sup>40</sup> NARUC *supra* n. 7, 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.”).

<sup>41</sup> *Id.* at 64.

<sup>42</sup> Wolf *supra* n. 6, at 178.

<sup>43</sup> See Wolf *supra* n. 6, at 139 (I added the term “model” to distinguish this fourth depreciation system parameter from the other three parameters).

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 has the same life and salvage characteristics. Thus, a single survivor curve and 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.<sup>44</sup> 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.<sup>45</sup> 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.<sup>46</sup> They generalized the 65 curves

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<sup>44</sup> Wolf *supra* n. 6, at 276.

<sup>45</sup> *Id.* at 23.

<sup>46</sup> *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.<sup>47</sup> 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.”<sup>48</sup> 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.<sup>49</sup> Rather than using the original formulas, analysts typically rely on the published tables containing the percents 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.

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<sup>47</sup> *Id.*

<sup>48</sup> Robley Winfrey, *Bulletin 125: Statistical Analyses of Industrial Property Retirements* 85, Vol. XXXIV, No. 23 (Iowa State College of Agriculture and Mechanic Arts 1935).

<sup>49</sup> 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. 6, at 305-38 (publishing the percent surviving for each Iowa curve, including “O” type curve, at one percent intervals).

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 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:<sup>50</sup>

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.<sup>51</sup>

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,

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<sup>50</sup> See Wolf *supra* n. 6, at 37.

<sup>51</sup> *Id.*

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.

## 2. Classification

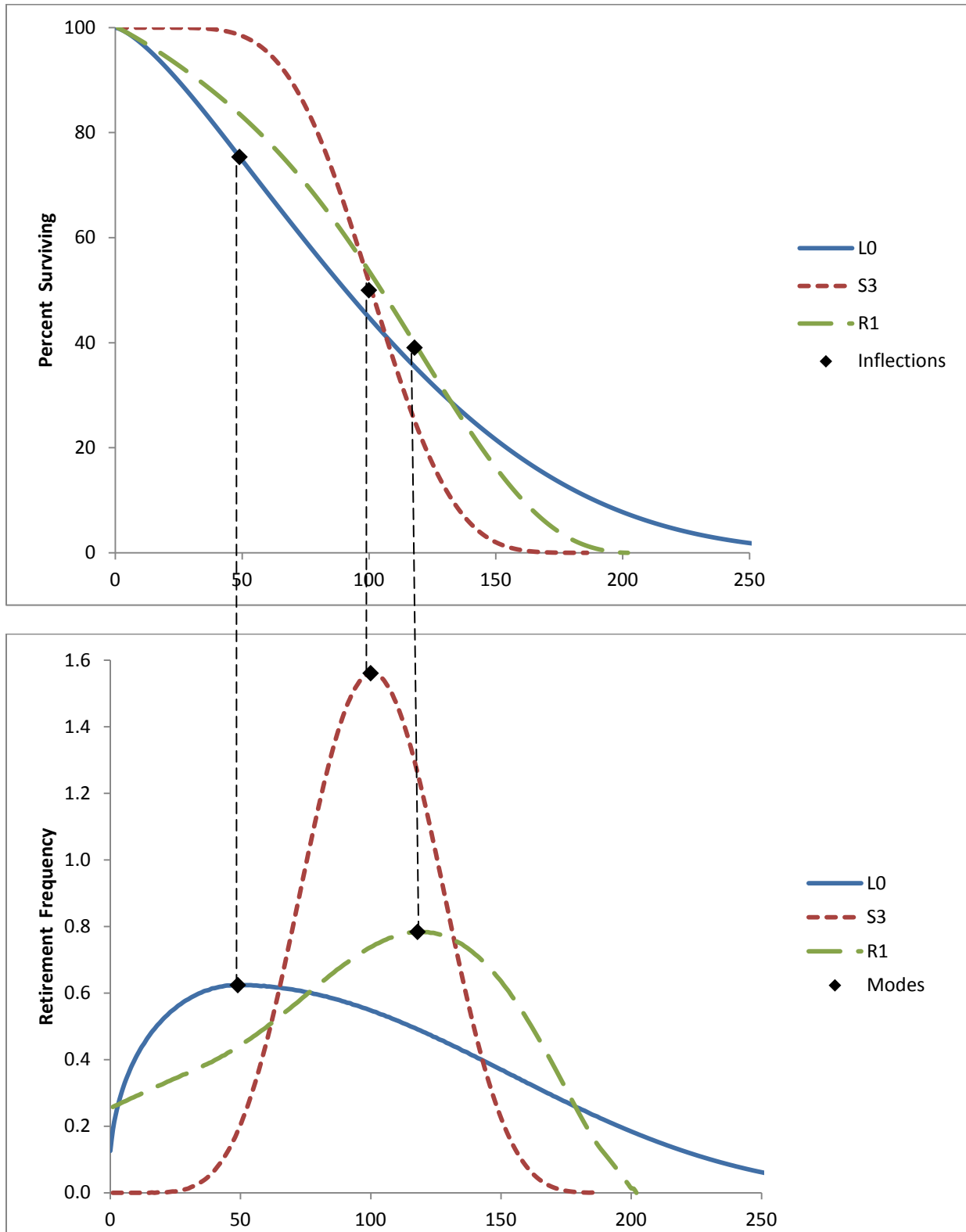
The Iowa curves are classified by three variables: modal location, average life, and variation of life. First, the mode is the percent life that results in the highest point of the frequency curve and the “inflection point” on the survivor curve. The modal age is the age at which the greatest rate of retirement occurs. As illustrated in Figure 5 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).<sup>52</sup> In Figure 5 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.

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<sup>52</sup> 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. 7, at 68).

**Figure 5:  
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 in order 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.”<sup>53</sup>

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.

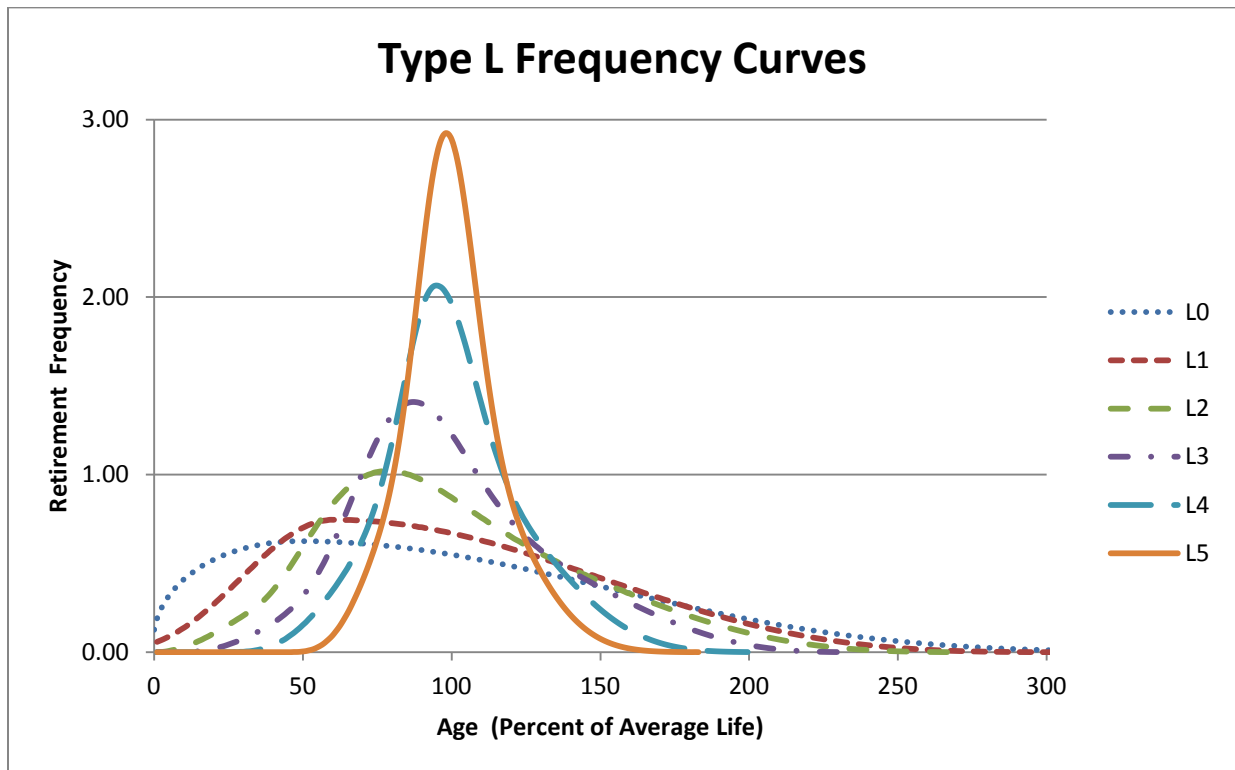
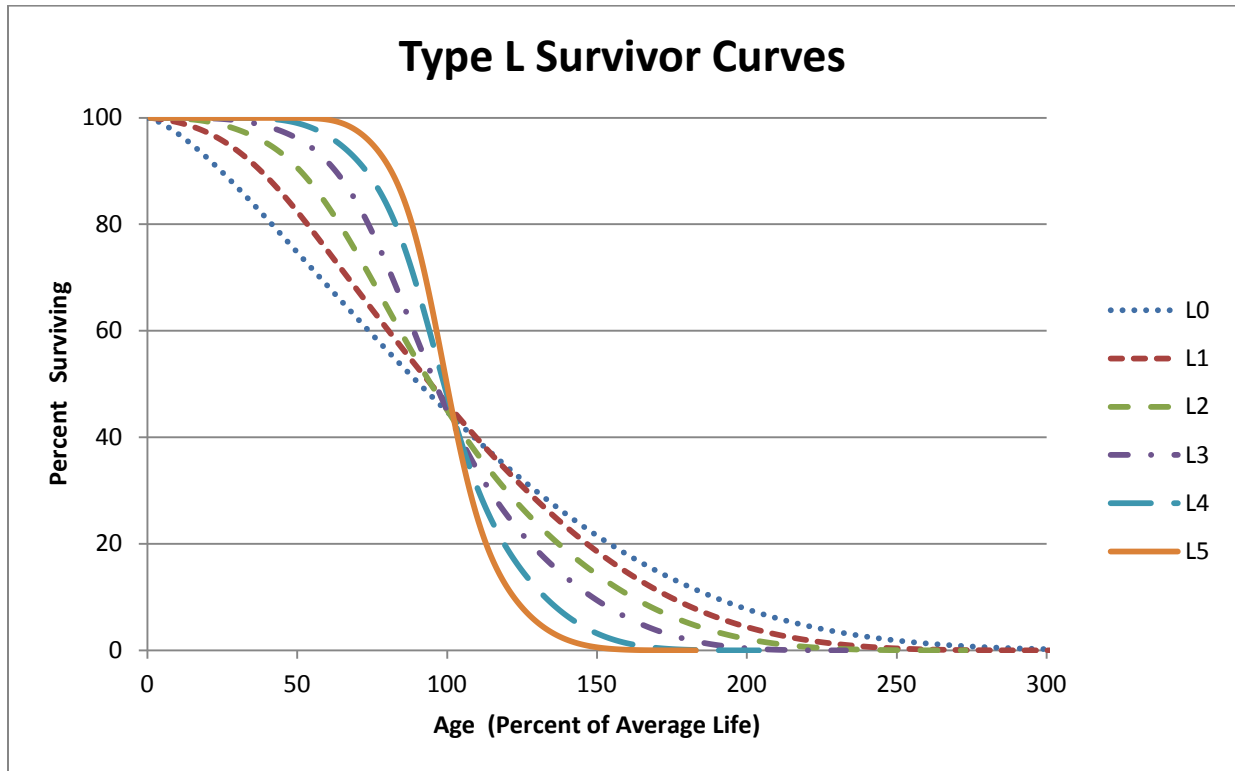
The third variable, variation of life, is represented by the numbers next to each letter. A lower number (e.g., L1) indicates a relatively low mode, large variation, and large maximum life; a higher number (e.g., L5) indicates a relatively high mode, small variation, and small maximum life. All three 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.

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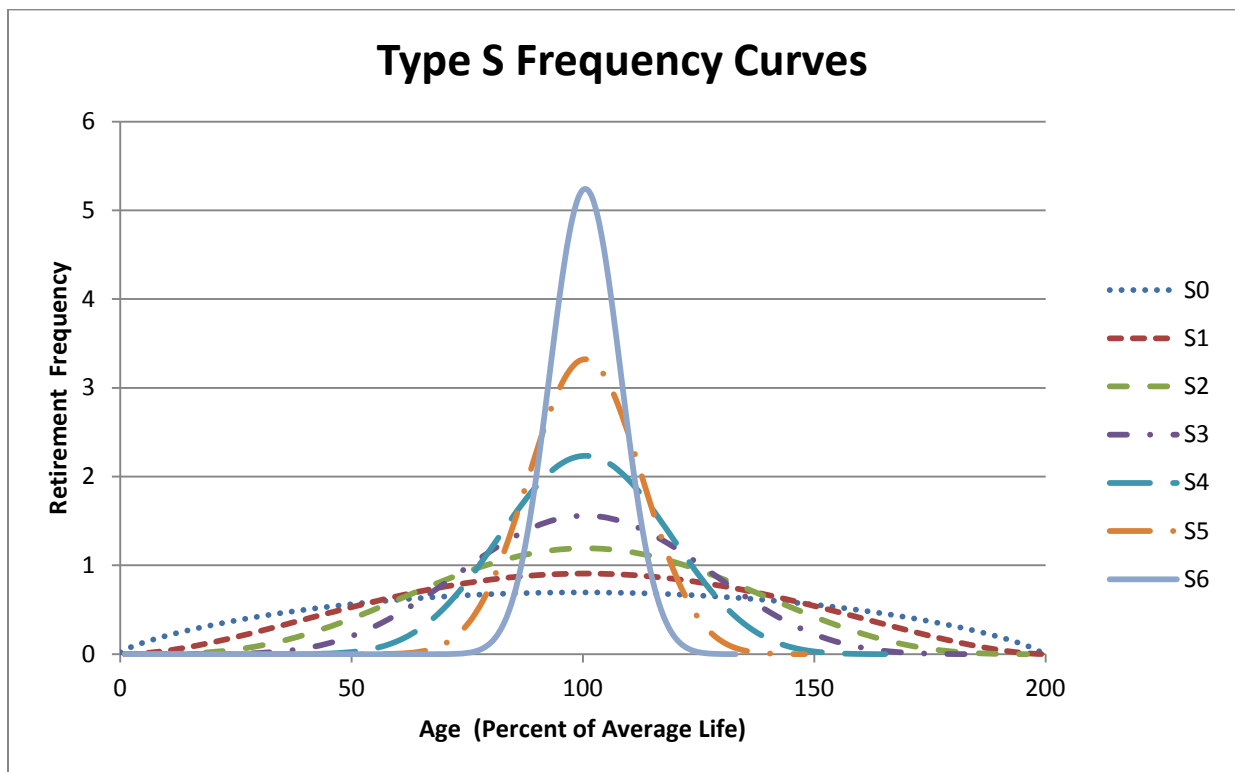
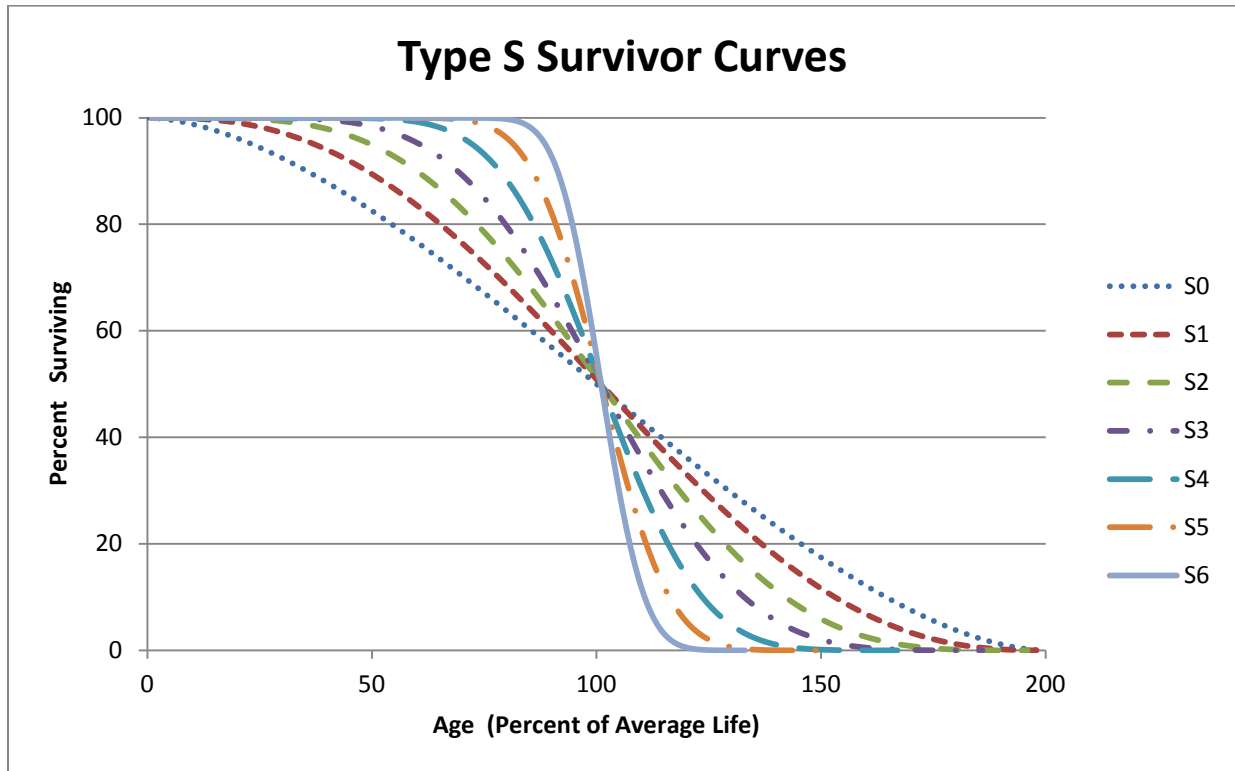
<sup>53</sup> Winfrey *supra* n. 75, at 60.



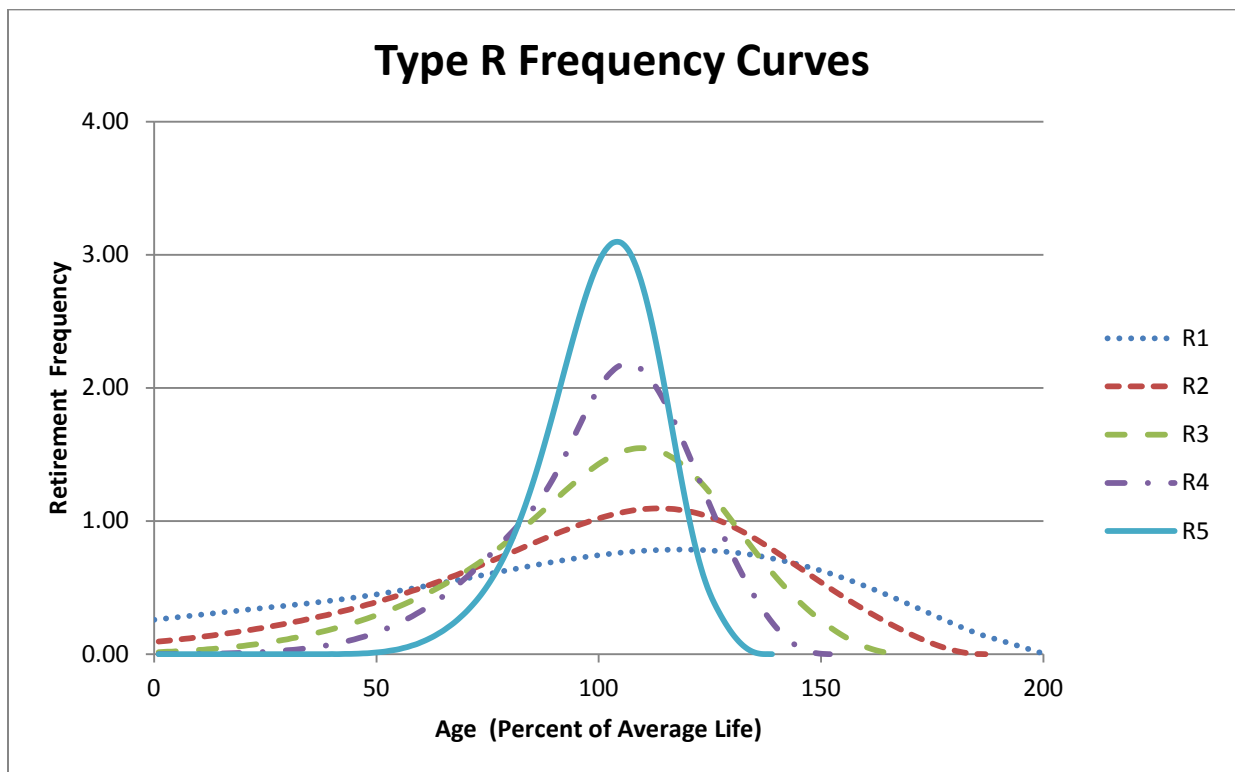
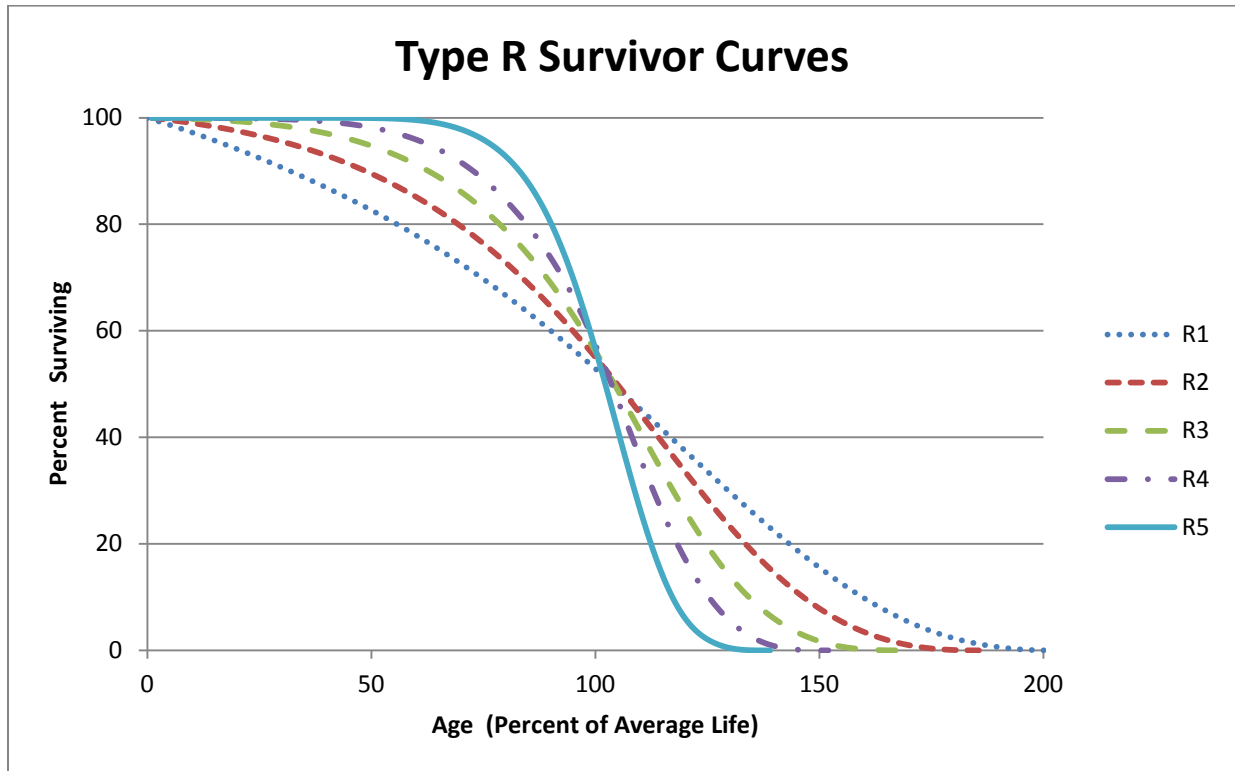
**Figure 6:**  
**Type L Survivor and Frequency Curves**



**Figure 7:**  
**Type S Survivor and Frequency Curves**



**Figure 8:**  
**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. Figure 9 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.<sup>54</sup>

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 percent to convert it from percent-years to years. The formula for average life is as follows:<sup>55</sup>

**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”

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<sup>54</sup> 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.

<sup>55</sup> See NARUC *supra* n. 7, at 71.

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).

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.<sup>56</sup> 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.<sup>57</sup> 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**

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

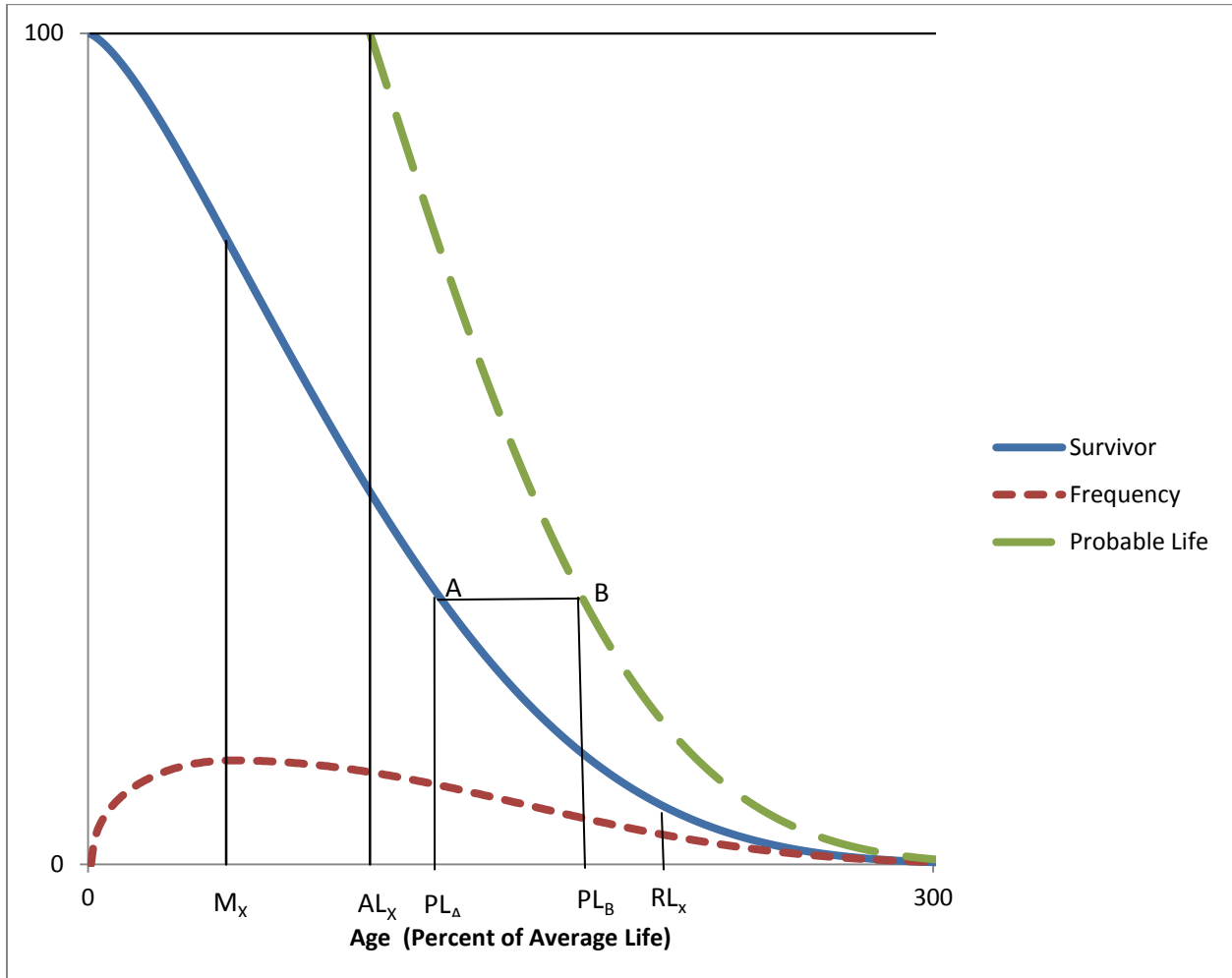
It is necessary to determine average remaining life in order to calculate the annual accrual under the remaining life technique.

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<sup>56</sup> *Id.* at 73.

<sup>57</sup> *Id.* at 74.

**Figure 9:  
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.<sup>58</sup> The probable life is illustrated in Figure 9 above. 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”

<sup>58</sup> Wolf *supra* n. 6, at 28.

on 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 will live today. Insurance companies rely of 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.<sup>59</sup>

**Figure 10:  
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

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<sup>59</sup> NARUC *supra* n. 7, at 14-15.



Continuing Property Records (“CPR”). Generally, a CPR should contain 1) an inventory of property record 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.<sup>60</sup> 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 in order to calculating observed survivor curves for property groups. Of these methods, the retirement rate method is superior, and is widely employed by depreciation analysts.<sup>61</sup> 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 in order 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 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.

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<sup>60</sup> *Id.* at 112-13.

<sup>61</sup> Anson Marston, Robley Winfrey & Jean C. Hempstead, *Engineering Valuation and Depreciation* 154 (2nd ed., McGraw-Hill Book Company, Inc. 1953).

The first matrix is the exposure matrix, which shows the exposures at the beginning of each year.<sup>62</sup> 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 2009 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 was retired during 2012.

**Figure 11:  
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	<b>192</b>	173	152	131	131	11.5 - 12.5
2004	267	252	236	220	202	<b>184</b>	165	145	297	10.5 - 11.5
2005	304	291	277	263	248	232	<b>216</b>	198	536	9.5 - 10.5
2006	345	334	322	310	298	284	270	<b>255</b>	<b>847</b>	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	

<sup>62</sup> 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 account period is called an “exposure” rather than an addition.

**Figure 12:  
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	<b>19</b>	20	21	23	23	11.5 - 12.5
2004	15	16	17	17	18	<b>19</b>	20	21	43	10.5 - 11.5
2005	13	14	14	15	16	17	<b>17</b>	18	59	9.5 - 10.5
2006	11	12	12	13	13	14	15	<b>15</b>	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.<sup>63</sup> 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

<sup>63</sup> Wolf *supra* n. 6, at 22.

amounts retired during the year 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 in 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 Figure 13 below. This figure 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 13:  
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	<b>100.00</b>
0.5	2,998	100	0.033	0.967	<b>96.43</b>
1.5	2,866	93	0.032	0.968	<b>93.21</b>
2.5	2,722	91	0.033	0.967	<b>90.19</b>
3.5	2,559	93	0.037	0.963	<b>87.19</b>
4.5	2,404	100	0.042	0.958	<b>84.01</b>
5.5	1,986	95	0.048	0.952	<b>80.50</b>
6.5	1,581	91	0.058	0.942	<b>76.67</b>
7.5	1,201	82	0.068	0.932	<b>72.26</b>
8.5	847	71	0.084	0.916	<b>67.31</b>
9.5	536	59	0.110	0.890	<b>61.63</b>
10.5	297	43	0.143	0.857	<b>54.87</b>
11.5	131	23	0.172	0.828	<b>47.01</b>
Total	23,268	1,052			<b>38.91</b>

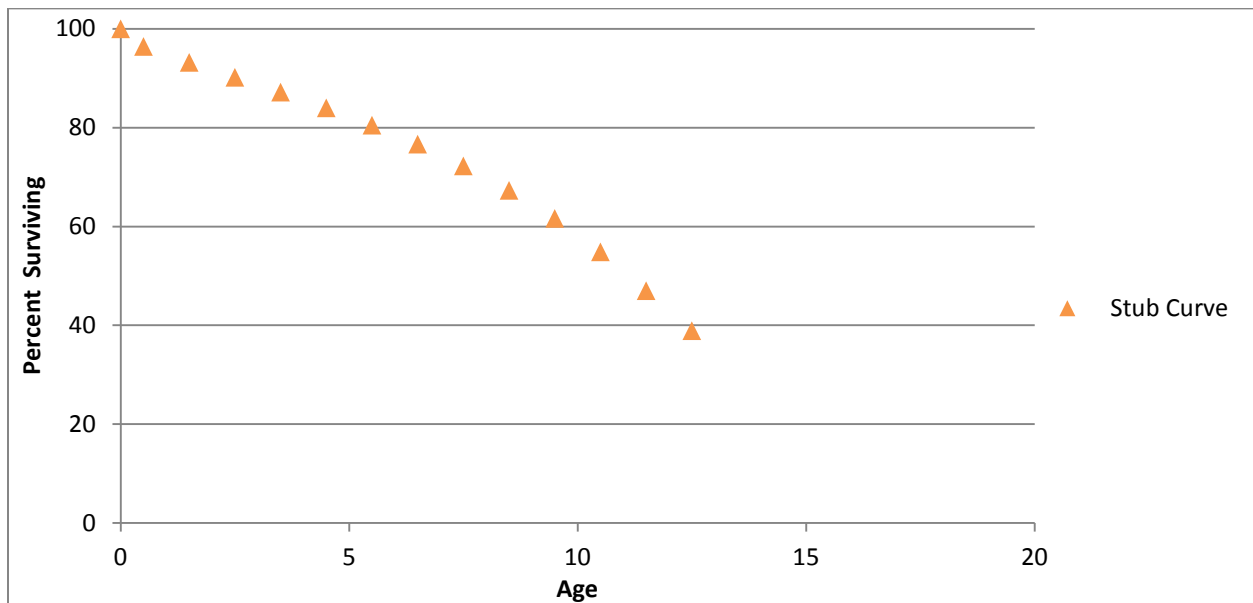
Column F on the right shows the percents surviving at the beginning of each age interval. This column starts at 100 percent surviving. Each consecutive number below is calculated by multiplying the percent surviving from the previous age interval by the corresponding survivor ratio for that age interval. For example, the percent surviving at the start of age interval 1.5 is 93.21 percent, 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)<sup>64</sup>.

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

<sup>64</sup> Multiplying 96.43 by 0.967 does not equal 93.21 exactly due to rounding.

surviving. An observed survivor curve such as this that does not reach zero percent surviving is called a “stub” curve. Figure 14 below illustrates the stub survivor curve derived from the OLT table above.

**Figure 14:  
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.<sup>65</sup> There are three primary benefits of using bands in depreciation analysis:

1. Increasing the sample size. In statistical analyses, the larger the sample size in relation to the body of total data, the greater the reliability of the result;
2. Smooth the observed data. Generally, the data obtained from a single activity or vintage year will not produce an observed life table that can be easily fit; and
3. Identify trends. By looking at successive bands, the analyst may identify broad trends in the data that may be useful in projecting the future life characteristics of the property.<sup>66</sup>

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. Figure 15 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.

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<sup>65</sup> NARUC *supra* n. 7, at 113.

<sup>66</sup> *Id.*

**Figure 15:  
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.<sup>67</sup> 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 with a special chemical treatment that extended the service lives of the poles, an analyst could use placement bands to isolate and analyze the effect of that change in the property group’s physical characteristics.

<sup>67</sup> Wolf *supra* n. 6, at 182.



While placement bands are very useful in depreciation analysis, they also possess an intrinsic dilemma. 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.<sup>68</sup>

Analysts also use “experience bands.” Experience bands show the composite retirement history for all vintages during a select set of activity years. Figure 16 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 16:  
Experience 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	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		

<sup>68</sup> NARUC *supra* n. 7, at 114.

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 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.<sup>69</sup> 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 affect 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.

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<sup>69</sup> *Id.*

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 studied. An analyst could confine the analysis to older, fully retired vintage groups in order to get complete survivor curves, but such analysis would ignore some 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

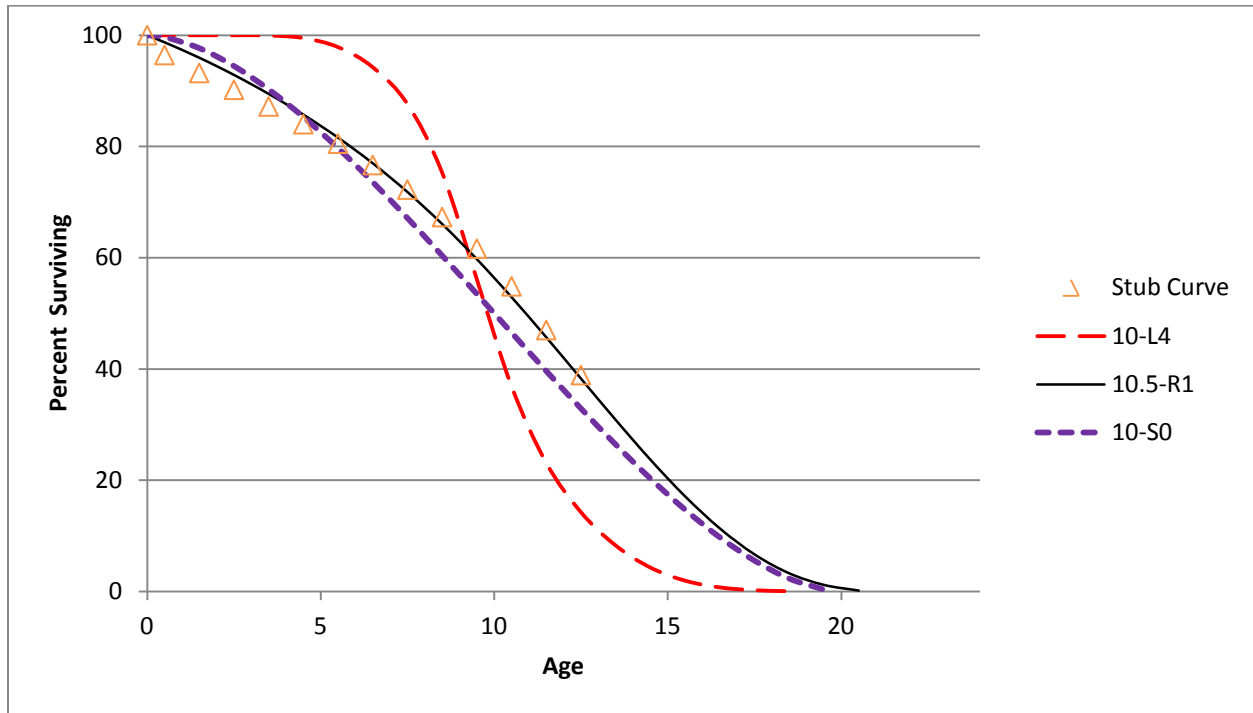
Depreciation analysts typically use the survivor curve rather than the frequency curve to fit the observed stub curves. The most commonly used generalized survivor curves used in the curve fitting process are the Iowa curves discussed above. As Wolf notes, if “the Iowa curves are adopted as a model, an underlying assumption is that the process describing the retirement pattern is one of the 22 [or more] processes described by the Iowa curves.”<sup>70</sup>

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. Figure 17 below illustrates the stub survivor curve from Figure 14 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.

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<sup>70</sup> Wolf *supra* n. 6, at 46 (22 curves includes Winfrey’s 18 original curves plus Cowles’s four “O” type curves).

**Figure 17:  
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.<sup>71</sup>

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.”<sup>72</sup>

In Figure 17 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 Figure 18 below, the percents surviving from the OLT that formed the original stub curve are shown in the left column, while the corresponding percents surviving for each age interval are shown for the three Iowa curves. The right portion of the figure 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 of the other two curves. Curve 10-L4 is the worst fit, which was also confirmed visually.

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<sup>71</sup> Wolf *supra* n. 6, at 47.

<sup>72</sup> *Id.* at 48.

**Figure 18:  
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
<b>SUM</b>					<b>3004.2</b>	<b>371.0</b>	<b>41.0</b>

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## **EDUCATION**

University of Oklahoma <b>Master of Business Administration</b> Areas of Concentration: Finance, Energy	Norman, OK 2014
University of Oklahoma College of Law <b>Juris Doctor</b> Member, American Indian Law Review	Norman, OK 2007
University of Oklahoma <b>Bachelor of Business Administration</b> 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**

Oklahoma Corporation Commission <b><u>Public Utility Regulatory Analyst</u></b> <b><u>Assistant General Counsel</u></b>	Oklahoma City, OK 02/2012 – Present 02/2011 – 01/2012
Perebus Counsel, PLLC <b><u>Managing Member</u></b> Represented clients in the areas of family law, estate planning, debt negotiations, business organization, and utility regulation.	Oklahoma City, OK 09/2009 – 01/2011
Moricoli & Schovanec, P.C. <b><u>Associate Attorney</u></b> Represented clients in the areas of contracts, oil and gas, business structures and estate administration.	Oklahoma City, OK 08/2007 – 08/2009

**TEACHING EXPERIENCE****University of Oklahoma**

Norman, OK

Adjunct Instructor – “Conflict Resolution”

2014

Adjunct Instructor – “Ethics in Leadership”

**Rose State College**

Midwest City, OK

Adjunct Instructor – “Legal Research”

2013 – 2014

Adjunct Instructor – “Oil &amp; Gas Law”

**PUBLICATIONS****American Indian Law Review**

Norman, OK

“Vine of the Dead: Reviving Equal Protection Rites for Religious Drug Use”

2006

(31 Am. Indian L. Rev. 143)

**VOLUNTEER EXPERIENCE****Calm Waters**

Oklahoma City, OK

Board Member

2015 – Present

Participate in management of operations, attend meetings, review performance, compensation, and financial records. Assist in fundraising events.

Group Facilitator & Fundraiser

2014 – Present

Facilitate group meetings designed to help children and families cope with divorce and tragic events. Assist in fundraising events.

**St. Jude Children’s Research Hospital**

Oklahoma City, OK

Oklahoma Fundraising Committee

2008 – 2010

Raised money for charity by organizing local fundraising events.

**PROFESSIONAL ASSOCIATIONS****Oklahoma Bar Association**

2007 – Present

**Society of Depreciation Professionals**

2014 – Present

Board Member – Vice President

2015 – 2016

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

**Society of Utility Regulatory Financial Analysts**

2014 – Present



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## **CONTINUING PROFESSIONAL EDUCATION**

Society of Depreciation Professionals <b>“Introduction to Depreciation” and “Extended Training”</b> Week-long training seminar with extensive instruction on utility depreciation, including average lives and net salvage.	New Orleans, LA 2014
Society of Utility and Regulatory Financial Analysts <b>46th Financial Forum. “The Regulatory Compact: Is it Still Relevant?”</b> Forum discussions on current issues.	Indianapolis, IN 2014
Energy Management Institute <b>“Fundamentals of Power Trading”</b> Instruction and practical examples on the power market complex, as well as comprehensive training on power trading.	Houston, TX 2013
New Mexico State University, Center for Public Utilities <b>Current Issues 2012, “The Santa Fe Conference”</b> Forum discussions on various current issues in utility regulation.	Santa Fe, NM 2012
Energy Management Institute <b>“Introduction to Energy Trading and Hedging”</b> Instruction in energy trading and hedging, including examination of various trading instruments and techniques.	Houston, TX 2012
Michigan State University, Institute of Public Utilities <b>“39th Eastern NARUC Utility Rate School”</b> One-week, hands-on training emphasizing the fundamentals of the utility ratemaking process.	Clearwater, FL 2011
New Mexico State University, Center for Public Utilities <b>“The Basics: Practical Regulatory Training for the Changing Electric Industries”</b> One-week, hands-on training designed to provide a solid foundation in core areas of utility ratemaking.	Albuquerque, NM 2010
The Mediation Institute <b>“Civil / Commercial &amp; Employment Mediation Training”</b> Extensive instruction and mock mediations designed to build foundations in conducting mediations in civil matters.	Oklahoma City, OK 2009

## **EXPERIENCE IN REGULATORY PROCEEDINGS**

1. **Oak Hills Water System, Inc.** (Cause No. PUD 15-123) – Testified on cost of capital, capital structure, and depreciation.
2. **CenterPoint Energy Oklahoma Gas, 2014** (Cause No. PUD 14-227) – Testified on prudence of fuel-related costs and process in annual fuel audit and prudence review.

- 
3. **Public Service Company of Oklahoma, 2014** (Cause No. PUD 14-233) – Testified on PSO’s application for a certificate of authority to issue new debt securities.
  4. **Empire District Electric Company, 2014** (Cause No. PUD 14-226) – Testified on prudence of fuel-related costs and process in annual fuel audit and prudence review.
  5. **Fort Cobb Fuel Authority, 2014** (Cause No. PUD 14-219) – Testified on prudence of fuel-related costs and process in annual fuel audit and prudence review.
  6. **Fort Cobb Fuel Authority, 2014** (Cause No. PUD 14-140) – Testified in FCFA’s application for a rate increase on outside services, legislative advocacy, miscellaneous taxes, payroll expense and taxes, employee insurance expense, and insurance expense.
  7. **Public Service Company of Oklahoma, 2013** (Cause No. PUD 13-217) – Lead auditor of PSO’s application for a rate increase. Provided additional research support for cost of capital issue. Assisted in coordination of PUD staff analysts and issues.
  8. **Public Service Company of Oklahoma, 2013** (Cause No. PUD 13-201) – Testified in PSO’s application for authorization of a standby and supplemental service tariff.
  9. **Fort Cobb Fuel Authority, 2013** (Cause No. PUD 13-134) – Testified on prudence of fuel-related costs and process in annual fuel audit and prudence review.
  10. **Empire District Electric Company, 2013** (Cause No. PUD 13-131) – Testified on prudence of fuel-related costs and process in annual fuel audit and prudence review.
  11. **CenterPoint Energy Oklahoma Gas, 2013** (Cause No. PUD 13-127) – Testified on prudence of fuel-related costs and process in annual fuel audit and prudence review.
  12. **Oklahoma Gas & Electric Company, 2012** (Cause No. PUD 12-185) – Testified in OG&E’s application for extension of a gas transportation contract.
  13. **Empire District Electric Company, 2012** (Cause No. PUD 12-170) – Testified on prudence of fuel-related costs and process in annual fuel audit and prudence review.
  14. **Oklahoma Gas & Electric Company, 2012** (Cause No. PUD 12-169) – Testified on prudence of fuel-related costs and process in annual fuel audit and prudence review.

## Summary Rate and Accrual Comparison

### Difference Between PUD's Proposed Rates and Existing Rates

Plant Function	Original Cost	Existing Parameters		PUD's Proposal		Difference	
		Rate	Accrual	Rate	Accrual	Rate	Accrual
Transmission	\$ 133,457,557	1.16%	\$ 1,548,056	1.09%	\$ 1,459,403	-0.07%	(88,653)
Distribution	1,718,887,566	2.83%	48,680,879	2.50%	42,952,810	-0.33%	(5,728,069)
General	102,692,936	7.51%	7,710,983	7.76%	7,968,717	0.25%	257,734
<b>Total Depreciable Plant</b>	<b>\$ 1,955,038,059</b>	<b>2.96%</b>	<b>\$ 57,939,918</b>	<b>2.68%</b>	<b>\$ 52,380,930</b>	<b>-0.28%</b>	<b>\$ (5,558,988)</b>

### Difference Between PUD's Proposed Rates and ONG's Proposed Rates

Plant Function	Original Cost	ONG's Proposal		PUD's Proposal		PUD Adjustment	
		Rate	Accrual	Rate	Accrual	Rate	Accrual
Transmission	\$ 133,457,557	1.47%	\$ 1,956,943	1.09%	\$ 1,459,403	-0.37%	(497,540)
Distribution	1,718,887,566	3.05%	52,341,036	2.50%	42,952,810	-0.55%	(9,388,226)
General	102,692,936	6.70%	6,875,605	7.76%	7,968,717	1.06%	1,093,112
<b>Total Depreciable Plant</b>	<b>\$ 1,955,038,059</b>	<b>3.13%</b>	<b>\$ 61,173,584</b>	<b>2.68%</b>	<b>\$ 52,380,930</b>	<b>-0.45%</b>	<b>\$ (8,792,654)</b>

See DG-D-3 for detailed calculations by account

# Detailed Rate Comparison

Account No.	Description	[1]	[2]		[3]		[4]		[5]		[6]	
		Original Cost	Present Rates		ONG Proposed Rates		PUD Proposed Rates		PUD less Present Rates		PUD Adjustment to ONG	
			Rate	Annual Accrual	Rate	Annual Accrual	Rate	Annual Accrual	Rate	Annual Accrual	Rate	Annual Accrual
<b>Transmission Plant</b>												
365.20	Rights of Way	2,984,421	0.71%	21,189	0.84%	25,069	0.32%	9,516	-0.39%	-11,673	-0.52%	-15,553
366.20	Meas. And Reg. Stat. Structures	161,914	-1.70%	-2,753	1.61%	2,607	2.94%	4,756	4.64%	7,509	1.33%	2,150
367.00	Mains	124,865,397	1.15%	1,435,952	1.45%	1,810,548	1.09%	1,358,155	-0.06%	-77,797	-0.36%	-452,393
369.00	Meas. And Reg. Stat. Equipment	5,445,825	1.72%	93,668	2.18%	118,719	1.60%	86,975	-0.12%	-6,693	-0.58%	-31,744
	<b>Total Transmission Plant</b>	<b>133,457,557</b>	<b>1.16%</b>	<b>1,548,056</b>	<b>1.47%</b>	<b>1,956,943</b>	<b>1.09%</b>	<b>1,459,403</b>	<b>-0.07%</b>	<b>-88,653</b>	<b>-0.37%</b>	<b>-497,540</b>
<b>Distribution Plant</b>												
374.20	Rights of Way	168,642	5.00%	8,432	1.81%	3,052	4.65%	7,833	-0.35%	-599	2.84%	4,781
375.10	District Regulator Structures	319,862	2.90%	9,276	2.77%	8,860	2.08%	6,653	-0.82%	-2,623	-0.69%	-2,207
375.20	Other District Structures	45,347,440	2.44%	1,106,478	2.12%	961,366	2.25%	1,022,271	-0.19%	-84,207	0.13%	60,905
376.00	Mains - Plastic	487,648,876	2.01%	9,777,360	2.24%	10,923,335	2.28%	11,135,773	0.28%	1,358,413	0.04%	212,438
376.50	Mains - Metallic	310,581,945	2.01%	6,227,168	2.03%	6,304,813	2.05%	6,362,131	0.04%	134,963	0.02%	57,317
376.90	Mains - Cathodic Protection	12,480,147	2.01%	250,227	6.40%	798,942	8.55%	1,067,506	6.55%	817,279	2.15%	268,564
378.00	Meas. and Reg. Station Equip. - General	39,276,132	2.85%	1,119,370	2.60%	1,021,179	2.23%	875,760	-0.62%	-243,610	-0.37%	-145,420
379.00	Meas. and Reg. Station Equip. - City Gate	2,155,241	2.22%	47,846	2.21%	47,631	0.92%	19,912	-1.30%	-27,934	-1.29%	-27,719
380.00	Services - Plastic	514,588,598	3.40%	17,496,012	3.79%	19,502,908	2.23%	11,491,993	-1.17%	-6,004,020	-1.56%	-8,010,915
380.30	CNG Fill Station Customers	3,789,975	6.39%	242,179	4.72%	178,887	0.55%	20,895	-5.84%	-221,284	-4.17%	-157,991
380.50	Services - Metallic	46,913,452	3.40%	1,595,057	3.63%	1,702,958	4.04%	1,893,253	0.64%	298,196	0.41%	190,295
381.00	Meters	147,199,747	3.45%	5,078,391	3.57%	5,255,031	3.52%	5,180,482	0.07%	102,091	-0.05%	-74,548
381.10	Meter Communication Devices	10,961,102	6.58%	721,241	6.35%	696,030	2.29%	251,012	-4.29%	-470,229	-4.06%	-445,018
381.50	AMR Communication Devices	62,069,317	6.67%	4,140,023	6.67%	4,137,954	4.96%	3,080,577	-1.71%	-1,059,446	-1.70%	-1,057,377
383.00	House Regulators	24,547,727	2.27%	557,233	2.24%	549,869	1.81%	444,735	-0.46%	-112,499	-0.43%	-105,134
385.00	Industrial Meas. and Reg. Equipment	10,839,363	2.81%	304,586	2.29%	248,221	0.85%	92,025	-1.96%	-212,561	-1.44%	-156,197
387.00	Other Equipment											
	<b>Total Distribution Plant</b>	<b>1,718,887,566</b>	<b>2.83%</b>	<b>48,680,879</b>	<b>3.05%</b>	<b>52,341,036</b>	<b>2.50%</b>	<b>42,952,810</b>	<b>-0.33%</b>	<b>-5,728,069</b>	<b>-0.55%</b>	<b>-9,388,226</b>
<b>General Plant</b>												
<b>Depreciable</b>												
390.10	Structures and Improvements	1,261,839	2.01%	25,363	1.83%	23,092	1.38%	17,429	-0.63%	-7,934	-0.45%	-5,663
392.02	Trucks and Vans	29,758,079	10.36%	3,082,937	8.15%	2,425,283	6.49%	1,930,269	-3.87%	-1,152,668	-1.66%	-495,015
392.10	Autos	89,007	0.00%	0	11.19%	9,960	17.08%	15,203	17.08%	15,203	5.89%	5,243
392.50	Trailers	1,148,045	4.62%	53,040	3.35%	38,460	4.09%	46,995	-0.53%	-6,044	0.74%	8,536
396.00	Power Operated Equipment	7,118,043	6.15%	437,760	3.75%	266,927	1.54%	109,426	-4.61%	-328,333	-2.21%	-157,500
	<b>Total Depreciable</b>	<b>39,375,013</b>	<b>9.14%</b>	<b>3,599,100</b>	<b>7.02%</b>	<b>2,763,722</b>	<b>5.38%</b>	<b>2,119,322</b>			<b>-1.64%</b>	<b>-644,400</b>
<b>Amortizable</b>												
391.10	Office Furniture and Fixtures	3,635,883	5.88%	213,875	5.88%	213,875	6.54%	237,799	0.66%	23,923	0.66%	23,923
391.20	Data Processing Equipment	235,100	9.99%	23,477	9.99%	23,477	16.88%	39,679	6.89%	16,202	6.89%	16,202
391.30	Office Machines	329,023	5.00%	16,451	5.00%	16,451	4.51%	14,826	-0.49%	-1,625	-0.49%	-1,625
391.60	Purchased Software	21,879,665	9.94%	2,174,102	9.94%	2,174,102	11.89%	2,602,256	1.96%	428,153	1.96%	428,153

# Detailed Rate Comparison

Account No.	Description	[1]	[2]		[3]		[4]		[5]		[6]	
		Original Cost	Present Rates		ONG Proposed Rates		PUD Proposed Rates		PUD less Present Rates		PUD Adjustment to ONG	
			Rate	Annual Accrual	Rate	Annual Accrual	Rate	Annual Accrual	Rate	Annual Accrual	Rate	Annual Accrual
391.80	Micro Computer Equipment	4,907,118	10.00%	490,712	10.00%	490,712	12.05%	591,250	2.05%	100,539	2.05%	100,539
392.70	Vehicle Electronics	634,662	10.00%	63,466	10.00%	63,466	11.67%	74,054	1.67%	10,587	1.67%	10,587
393.00	Stores Equipment	294,440	4.00%	11,778	4.00%	11,778	4.34%	12,791	0.34%	1,013	0.34%	1,013
394.00	Tools, Shop and Garage Equipment	20,616,973	4.98%	1,027,659	4.98%	1,027,659	5.14%	1,059,097	0.15%	31,438	0.15%	31,438
397.00	Communication Equipment	3,560,135	2.36%	83,998	2.36%	83,998	4.66%	165,778	2.30%	81,780	2.30%	81,780
397.30	Radio Equipment - Stationary	23,581	5.00%	1,179	5.00%	1,179	8.89%	2,097	3.89%	918	3.89%	918
397.60	Communication Equipment - Towers	7,021,045	0.00%	0	0.00%	0	14.97%	1,050,903	14.97%	1,050,903	14.97%	1,050,903
398.00	Miscellaneous Equipment	180,298	2.88%	5,186	2.88%	5,186	-0.63%	-1,134	-3.51%	-6,320	-3.51%	-6,320
	<b>Total Amortizable</b>	<b>63,317,923</b>	<b>6.49%</b>	<b>4,111,883</b>	<b>6.49%</b>	<b>4,111,883</b>	<b>9.24%</b>	<b>5,849,395</b>	<b>2.74%</b>	<b>1,737,512</b>	<b>2.74%</b>	<b>1,737,512</b>
	<b>Total General Plant</b>	<b>102,692,936</b>	<b>7.51%</b>	<b>7,710,983</b>	<b>6.70%</b>	<b>6,875,605</b>	<b>7.76%</b>	<b>7,968,717</b>	<b>0.25%</b>	<b>257,734</b>	<b>1.06%</b>	<b>1,093,112</b>
	<b>TOTAL GAS OPERATIONS</b>	<b>1,955,038,059</b>	<b>2.96%</b>	<b>57,939,918</b>	<b>3.13%</b>	<b>61,173,584</b>	<b>2.68%</b>	<b>52,380,930</b>	<b>-0.28%</b>	<b>-5,558,988</b>	<b>-0.45%</b>	<b>-8,792,654</b>

[1] - [3] ONG Depreciation Study

[4] DG-D-4

[5] = [4] - [2]

[6] = [4] - [3]

**PUD Proposed Depreciation Rate Development  
(SL-AL-RL-BG System)**

Account No.	Description	[1] Original Cost	[2] Net Salvage	[3] Depreciable Base	[4] Book Reserve	[5] Future Accruals	[6] Remaining Life	[7] Accrual Amount	[8] Accrual Rate
<b>Transmission Plant</b>									
365.20	Rights of Way	2,984,421	0.0%	3,432,084	2,470,877	961,208	101.01	9,516	0.32%
366.20	Meas. And Reg. Stat. Structures	161,914	-15.0%	194,297	44,611	149,686	31.47	4,756	2.94%
367.00	Mains	124,865,397	-20.0%	137,351,937	56,229,336	81,122,600	59.73	1,358,155	1.09%
369.00	Meas. And Reg. Stat. Equipment	5,445,825	-10.0%	5,445,825	2,591,294	2,854,531	32.82	86,975	1.60%
	<b>Total Transmission Plant</b>	<b>133,457,557</b>		<b>146,424,143</b>	<b>61,336,118</b>	<b>85,088,025</b>	<b>58.30</b>	<b>1,459,403</b>	<b>1.09%</b>
<b>Distribution Plant</b>									
374.20	Rights of Way	168,642	0.0%	168,642	7,978	160,664	20.51	7,833	4.65%
375.10	District Regulator Structures	319,862	-20.0%	383,834	85,576	298,259	44.83	6,653	2.08%
375.20	Other District Structures	45,347,440	-5.0%	47,614,812	10,731,281	36,883,531	36.08	1,022,271	2.25%
376.00	Mains - Plastic	487,648,876	-25.0%	609,561,095	118,362,141	491,198,954	44.11	11,135,773	2.28%
376.50	Mains - Metallic	310,581,945	-25.0%	388,227,431	121,272,429	266,955,002	41.96	6,362,131	2.05%
376.90	Mains - Cathodic Protection	12,480,147	0.0%	12,480,147	1,185,939	11,294,208	10.58	1,067,506	8.55%
378.00	Meas. and Reg. Station Equip. - General	39,276,132	-20.0%	47,131,358	14,780,802	32,350,556	36.94	875,760	2.23%
379.00	Meas. and Reg. Station Equip. - City Gate	2,155,241	0.0%	2,155,241	353,186	1,802,055	90.50	19,912	0.92%
380.00	Services - Plastic	514,588,598	-75.0%	900,530,047	179,062,754	721,467,292	62.78	11,491,993	2.23%
380.30	CNG Fill Station Customers	3,789,975	-5.0%	3,979,474	3,697,385	282,089	13.50	20,895	0.55%
380.50	Services - Metallic	46,913,452	-75.0%	82,098,541	30,337,002	51,761,539	27.34	1,893,253	4.04%
381.00	Meters	147,199,747	-5.0%	154,559,734	61,207,440	93,352,294	18.02	5,180,482	3.52%
381.10	Meter Communication Devices	10,961,102	0.0%	10,961,102	4,437,308	6,523,794	25.99	251,012	2.29%
381.50	AMR Communication Devices	62,069,317	0.0%	62,069,317	15,860,662	46,208,655	15.00	3,080,577	4.96%
383.00	House Regulators	24,547,727	-5.0%	25,775,113	9,497,819	16,277,295	36.60	444,735	1.81%
385.00	Industrial Meas. and Reg. Equipment	10,839,363	0.0%	10,839,363	3,160,826	7,678,537	83.44	92,025	0.85%
387.00	Other Equipment				83,370	-83,370			
	<b>Total Distribution Plant</b>	<b>1,718,887,566</b>		<b>2,358,535,252</b>	<b>574,123,898</b>	<b>1,784,411,354</b>	<b>41.54</b>	<b>42,952,810</b>	<b>2.50%</b>
<b>General Plant</b>									
Depreciable									
390.10	Structures and Improvements	1,261,839	-15.0%	1,451,115	561,371	889,743	51.05	17,429	1.38%
392.02	Trucks and Vans	29,758,079	15.0%	25,294,367	14,465,560	10,828,807	5.61	1,930,269	6.49%
392.10	Autos	89,007	20.0%	71,206	6,593	64,613	4.25	15,203	17.08%
392.50	Trailers	1,148,045	30.0%	803,632	196,923	606,709	12.91	46,995	4.09%
396.00	Power Operated Equipment	7,118,043	15.0%	6,050,337	4,865,251	1,185,086	10.83	109,426	1.54%
	<b>Total Depreciable</b>	<b>39,375,013</b>		<b>33,670,656</b>	<b>20,095,697</b>	<b>13,574,958</b>	<b>6.41</b>	<b>2,119,322</b>	<b>5.38%</b>
Amortizable									

**PUD Proposed Depreciation Rate Development  
(SL-AL-RL-BG System)**

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
<b>Account No.</b>	<b>Description</b>	<b>Original Cost</b>	<b>Net Salvage</b>	<b>Depreciable Base</b>	<b>Book Reserve</b>	<b>Future Accruals</b>	<b>Remaining Life</b>	<b>Accrual Amount</b>	<b>Accrual Rate</b>
391.10	Office Furniture and Fixtures	3,635,883	0.0%	3,635,883	1,864,282	1,771,601	7.45	237,799	6.54%
391.20	Data Processing Equipment	235,100	0.0%	235,100	17,261	217,839	5.49	39,679	16.88%
391.30	Office Machines	329,023	0.0%	329,023	132,731	196,292	13.24	14,826	4.51%
391.60	Purchased Software	21,879,665	0.0%	21,879,665	10,794,056	11,085,609	4.26	2,602,256	11.89%
391.80	Micro Computer Equipment	4,907,118	0.0%	4,907,118	608,728	4,298,390	7.27	591,250	12.05%
392.70	Vehicle Electronics	634,662	0.0%	634,662	188,119	446,543	6.03	74,054	11.67%
393.00	Stores Equipment	294,440	0.0%	294,440	78,277	216,163	16.90	12,791	4.34%
394.00	Tools, Shop and Garage Equipment	20,616,973	0.0%	20,616,973	6,541,573	14,075,400	13.29	1,059,097	5.14%
397.00	Communication Equipment	3,560,135	0.0%	3,560,135	2,631,778	928,357	5.60	165,778	4.66%
397.30	Radio Equipment - Stationary	23,581	0.0%	23,581	-824	24,405	11.64	2,097	8.89%
397.60	Communication Equipment - Towers	7,021,045	0.0%	7,021,045	5,970,142	1,050,903	1.00	1,050,903	14.97%
398.00	Miscellaneous Equipment	180,298	0.0%	180,298	189,140	-8,842	7.80	-1,134	-0.63%
	Total Amortizable	<u>63,317,923</u>		<u>63,317,923</u>	<u>29,015,262</u>	<u>34,302,661</u>	<u>5.86</u>	<u>5,849,395</u>	<u>9.24%</u>
	Total General Plant	<u>102,692,936</u>		<u>96,988,579</u>	<u>49,110,959</u>	<u>47,877,619</u>	<u>6.01</u>	<u>7,968,717</u>	<u>7.76%</u>
	<b>TOTAL GAS OPERATIONS</b>	<b><u>1,955,038,059</u></b>		<b><u>2,601,947,973</u></b>	<b><u>684,570,975</u></b>	<b><u>1,917,376,998</u></b>	<b><u>36.60</u></b>	<b><u>52,380,930</u></b>	<b><u>2.68%</u></b>

# Calculated Accumulated Depreciation

Account No.	Description	[1] Original Cost	[2] Average Life	[3] Iowa Curve	[4] Remaining Life	[5] Net Salvage	[6] Calc. Accum. Depreciation	[7] Book Reserve	[8] Difference
<b>Transmission Plant</b>									
365.20	Rights of Way	2,984,421	132 - R2.5		101.01	0.0%	700,661	2,470,877	1,770,216
366.20	Meas. And Reg. Stat. Structures	161,914	43 - R1		31.47	-15.0%	49,928	44,611	-5,317
367.00	Mains	124,865,397	77 - R2		59.73	-20.0%	33,606,630	56,229,336	22,622,707
369.00	Meas. And Reg. Stat. Equipment	5,445,825	42 - R1		32.82	-10.0%	1,309,332	2,591,294	1,281,962
	<b>Total Transmission Plant</b>	<b>133,457,557</b>						<b>61,336,118</b>	<b>25,669,568</b>
<b>Distribution Plant</b>									
374.20	Rights of Way	168,642	24 - L4		20.51	0.0%	24,523	7,978	-16,545
375.10	District Regulator Structures	319,862	45 - O4		44.83	-20.0%	1,450	85,576	84,126
375.20	Other District Structures	45,347,440	47 - SC		36.08	-5.0%	11,062,846	10,731,281	-331,565
376.00	Mains - Plastic	487,648,876	55 - R2		44.11	-25.0%	120,693,097	118,362,141	-2,330,956
376.50	Mains - Metallic	310,581,945	61 - R2		41.96	-25.0%	121,177,874	121,272,429	94,555
376.90	Mains - Cathodic Protection	12,480,147	15 - SQ		10.58	0.0%	3,677,483	1,185,939	-2,491,545
378.00	Meas. and Reg. Station Equip. - General	39,276,132	45 - R0.5		36.94	-20.0%	8,441,750	14,780,802	6,339,052
379.00	Meas. and Reg. Station Equip. - City Gate	2,155,241	98 - R3		90.50	0.0%	164,942	353,186	188,245
380.00	Services - Plastic	514,588,598	70 - R0.5		62.78	-75.0%	92,883,242	179,062,754	86,179,512
380.30	CNG Fill Station Customers	3,789,975	24 - R1.5		13.50	-5.0%	1,741,020	3,697,385	1,956,365
380.50	Services - Metallic	46,913,452	45 - R1		27.34	-75.0%	32,219,116	30,337,002	-1,882,114
381.00	Meters	147,199,747	30 - S4		18.02	-5.0%	61,720,854	61,207,440	-513,414
381.10	Meter Communication Devices	10,961,102	34 - R3		25.99	0.0%	2,582,307	4,437,308	1,855,002
381.50	AMR Communication Devices	62,069,317	15 - SQ		15.00	0.0%	0	15,860,662	15,860,662
383.00	House Regulators	24,547,727	48 - S1		36.60	-5.0%	6,121,589	9,497,819	3,376,229
385.00	Industrial Meas. and Reg. Equipment	10,839,363	94 - S4		83.44	0.0%	1,217,699	3,160,826	1,943,127
387.00	Other Equipment							83,370	83,370
	<b>Total Distribution Plant</b>	<b>1,718,887,566</b>						<b>574,123,898</b>	<b>110,394,106</b>
<b>General Plant</b>									
Depreciable									
390.10	Structures and Improvements	1,261,839	64 - R5		51.05	-15.0%	293,624	561,371	267,747
392.02	Trucks and Vans	29,758,079	9 - L1.5		5.61	15.0%	9,527,545	14,465,560	4,938,015
392.10	Autos	89,007	6 - R1		4.25	20.0%	20,768	6,593	-14,176
392.50	Trailers	1,148,045	18 - L0		12.91	30.0%	227,249	196,923	-30,326
396.00	Power Operated Equipment	7,118,043	19 - L1		10.83	15.0%	2,601,645	4,865,251	2,263,606
	<b>Total Depreciable</b>	<b>39,375,013</b>						<b>20,095,697</b>	<b>7,424,866</b>
Amortizable									
391.10	Office Furniture and Fixtures	3,635,883	17 - SQ		7.45	0.0%	2,042,511	1,864,282	-178,229



## Calculated Accumulated Depreciation

Account No.	Description	[1] Original Cost	[2] Average Life	[3] Iowa Curve	[4] Remaining Life	[5] Net Salvage	[6] Calc. Accum. Depreciation	[7] Book Reserve	[8] Difference
391.20	Data Processing Equipment	235,100	10	- SQ	5.49	0.0%	106,030	17,261	-88,769
391.30	Office Machines	329,023	20	- SQ	13.24	0.0%	111,210	132,731	21,521
391.60	Purchased Software	21,879,665	10	- SQ	4.26	0.0%	12,558,928	10,794,056	-1,764,872
391.80	Micro Computer Equipment	4,907,118	10	- SQ	7.27	0.0%	1,339,643	608,728	-730,915
392.70	Vehicle Electronics	634,662	10	- SQ	6.03	0.0%	251,961	188,119	-63,842
393.00	Stores Equipment	294,440	25	- SQ	16.90	0.0%	95,399	78,277	-17,121
394.00	Tools, Shop and Garage Equipment	20,616,973	20	- SQ	13.29	0.0%	6,916,994	6,541,573	-375,422
397.00	Communication Equipment	3,560,135	15	- SQ	5.60	0.0%	2,231,018	2,631,778	400,760
397.30	Radio Equipment - Stationary	23,581	20	- SQ	11.64	0.0%	9,857	-824	-10,681
397.60	Communication Equipment - Towers	7,021,045	5	- SQ	1.00	0.0%	5,616,836	5,970,142	353,306
398.00	Miscellaneous Equipment	180,298	20	- SQ	7.80	0.0%	109,982	189,140	79,158
	Total Amortizable	<u>63,317,923</u>						<u>29,015,262</u>	<u>-2,375,106</u>
	Total General Plant	<u>102,692,936</u>						<u>49,110,959</u>	<u>5,049,760</u>
	<b>TOTAL GAS OPERATIONS</b>	<u><u>1,955,038,059</u></u>					<u><u>543,457,541</u></u>	<u><u>684,570,975</u></u>	<u><u>141,113,435</u></u>

[1] ONG Depreciation Study

[2], [3] Average life and Iowa curve selected from a combination of mathematical best fit, visual best fit, and professional judgement; see DG-D-7 for detailed calculations

[4], [5] DG-D-4

[6] Calculated Accumulated Depreciation (CAD) = [1]\*(1-[4]/[2])\*(1-[5])

[7] ONG Depreciation Study

[8] = [7] - [6]

# Account 380.00 Contrast

[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
Age Interval	Survivors at Beginning	Retired During Interval	Retirement Ratio	Percent Surviving	ONG's Curve R0.5 - 46	PUD's Curve R0.5 - 70	ONG Math. Fit	PUD Math. Fit
0 - 0.5	\$ 338,308,998	\$ 602,967	0.0018	100.00	99.59	99.73	0	0
0.5 - 1.5	311,124,490	679,568	0.0022	99.82	98.76	99.19	1	0
1.5 - 2.5	288,270,295	594,325	0.0021	99.60	97.92	98.64	3	1
2.5 - 3.5	268,282,514	514,464	0.0019	99.40	97.07	98.09	5	2
3.5 - 4.5	252,759,108	964,932	0.0038	99.21	96.21	97.53	9	3
4.5 - 5.5	242,517,981	694,321	0.0029	98.83	95.35	96.97	12	3
5.5 - 6.5	233,843,767	716,224	0.0031	98.55	94.48	96.41	17	5
6.5 - 7.5	217,494,586	1,062,766	0.0049	98.24	93.59	95.84	22	6
7.5 - 8.5	196,833,743	1,449,338	0.0074	97.76	92.70	95.27	26	6
8.5 - 9.5	186,357,412	266,618	0.0014	97.04	91.80	94.70	27	5
9.5 - 10.5	174,527,309	122,834	0.0007	96.91	90.90	94.12	36	8
10.5 - 11.5	164,839,438	91,442	0.0006	96.84	89.98	93.54	47	11
11.5 - 12.5	138,368,915	151,615	0.0011	96.78	89.06	92.96	60	15
12.5 - 13.5	135,850,919	128,128	0.0009	96.68	88.13	92.37	73	19
13.5 - 14.5	122,697,632	84,413	0.0007	96.59	87.19	91.78	88	23
14.5 - 15.5	112,089,481	115,379	0.0010	96.52	86.24	91.18	106	28
15.5 - 16.5	106,163,216	78,368	0.0007	96.42	85.28	90.58	124	34
16.5 - 17.5	103,534,068	168,220	0.0016	96.35	84.32	89.98	145	41
17.5 - 18.5	99,948,057	146,703	0.0015	96.19	83.34	89.38	165	46
18.5 - 19.5	95,234,771	73,742	0.0008	96.05	82.36	88.77	187	53
19.5 - 20.5	90,029,724	142,886	0.0016	95.98	81.37	88.15	214	61
20.5 - 21.5	83,411,034	151,718	0.0018	95.82	80.36	87.54	239	69
21.5 - 22.5	78,147,177	125,870	0.0016	95.65	79.34	86.92	266	76
22.5 - 23.5	72,669,435	222,204	0.0031	95.50	78.32	86.29	295	85
23.5 - 24.5	67,955,339	103,899	0.0015	95.20	77.28	85.67	321	91
24.5 - 25.5	64,093,593	108,788	0.0017	95.06	76.22	85.04	355	100
25.5 - 26.5	61,542,629	134,123	0.0022	94.90	75.16	84.40	390	110
26.5 - 27.5	58,570,606	159,098	0.0027	94.69	74.08	83.76	425	119
27.5 - 28.5	54,187,897	149,981	0.0028	94.43	72.98	83.12	460	128
28.5 - 29.5	48,827,002	111,631	0.0023	94.17	71.87	82.47	497	137
29.5 - 30.5	42,244,828	50,951	0.0012	93.96	70.75	81.82	539	147
30.5 - 31.5	35,469,957	66,901	0.0019	93.84	69.61	81.17	587	161
31.5 - 32.5	29,366,996	78,131	0.0027	93.67	68.46	80.51	636	173
32.5 - 33.5	23,229,760	135,145	0.0058	93.42	67.29	79.84	683	184
33.5 - 34.5	18,251,484	37,116	0.0020	92.87	66.11	79.17	716	188
34.5 - 35.5	14,525,468	32,500	0.0022	92.69	64.91	78.49	772	202
35.5 - 36.5	10,815,155	26,785	0.0025	92.48	63.69	77.81	829	215
36.5 - 37.5	8,034,448	106,903	0.0133	92.25	62.46	77.13	887	229
37.5 - 38.5	5,530,334	58,126	0.0105	91.02	61.22	76.44	888	213
38.5 - 39.5	3,793,209	45,925	0.0121	90.06	59.96	75.74	906	205
39.5 - 40.5	2,550,339	334,938	0.1313	88.97	58.69	75.03	917	194
40.5 - 41.5	1,767,859	111,799	0.0632	77.29	57.40	74.33	396	9
41.5 - 42.5	1,141,547	23,603	0.0207	72.40	56.10	73.61	266	1
42.5 - 43.5	461,475	33,769	0.0732	70.90	54.78	72.89	260	4
43.5 - 44.5	185,642	-	0.0000	65.72	53.46	72.16	150	41
44.5 - 45.5	172,662	39	0.0002	65.72	52.12	71.43	185	33
45.5 - 46.5	154,677	231	0.0015	65.70	50.77	70.69	223	25
46.5 - 47.5	167,337	178	0.0011	65.60	49.41	69.94	262	19
47.5 - 48.5	268,244	-	0.0000	65.53	48.05	69.19	306	13
48.5 - 49.5	255,485	-	0.0000	65.53	46.67	68.43	356	8
49.5 - 50.5	251,844	-	0.0000	65.53	45.29	67.66	410	5
50.5 - 51.5	257,917	17	0.0001	65.53	43.91	66.89	468	2
51.5 - 52.5	260,607	4,159	0.0160	65.53	42.52	66.11	530	0
52.5 - 53.5	223,210	-	0.0000	64.48	41.12	65.32	546	1
53.5 - 54.5	216,814	-	0.0000	64.48	39.73	64.53	613	0
54.5 - 55.5	197,313	-	0.0000	64.48	38.33	63.73	684	1
55.5 - 56.5	185,028	-	0.0000	64.48	36.94	62.92	759	2
56.5 - 57.5	183,604	-	0.0000	64.48	35.55	62.11	837	6
57.5 - 58.5	179,713	-	0.0000	64.48	34.16	61.29	919	10
58.5 - 59.5	157,042	40	0.0003	64.48	32.78	60.47	1005	16
59.5 - 60.5	44,447	-	0.0000	64.47	31.41	59.63	1093	23
60.5 - 61.5	39,768	-	0.0000	64.47	30.04	58.80	1185	32

# Account 380.00 Contrast

[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
Age Interval	Survivors at Beginning	Retired During Interval	Retirement Ratio	Percent Surviving	ONG's Curve R0.5 - 46	PUD's Curve R0.5 - 70	ONG Math. Fit	PUD Math. Fit
61.5 - 62.5	36,595	-	0.0000	64.47	28.69	57.95	1280	42
62.5 - 63.5	24,452	-	0.0000	64.47	27.35	57.10	1378	54
63.5 - 64.5	16,029	-	0.0000	64.47	26.02	56.25	1478	68
64.5 - 65.5	14,001	-	0.0000	64.47	24.71	55.39	1581	83
65.5 - 66.5	12,164	-	0.0000	64.47	23.42	54.52	1685	99
66.5 - 67.5	9,130	-	0.0000	64.47	22.15	53.65	1791	117
67.5 - 68.5	8,553	-	0.0000	64.47	20.90	52.77	1899	137
68.5 - 69.5	8,228	-	0.0000	64.47	19.67	51.89	2007	158
69.5 - 70.5	8,101	-	0.0000	64.47	18.46	51.00	2117	181
70.5 - 71.5	7,517	-	0.0000	64.47	17.28	50.11	2227	206
71.5 - 72.5	1,981	-	0.0000	64.47	16.13	49.22	2336	233
72.5 - 73.5	1,437	-	0.0000	64.47	15.01	48.32	2446	261
73.5 - 74.5	976	-	0.0000	64.47	13.92	47.42	2555	291
74.5 - 75.5	817	-	0.0000	64.47	12.86	46.52	2664	322
75.5 - 76.5	662	-	0.0000	64.47	11.83	45.61	2771	356
76.5 - 77.5	713	-	0.0000	64.47	10.83	44.70	2877	391
77.5 - 78.5	771	-	0.0000	64.47	9.87	43.79	2981	428
78.5 - 79.5	778	-	0.0000	64.47	8.95	42.87	3083	466
79.5 - 80.5	589	-	0.0000	64.47	8.05	41.96	3183	507
80.5 - 81.5	529	-	0.0000	64.47	7.20	41.04	3280	549
81.5 - 82.5	1,310	-	0.0000	64.47	6.38	40.13	3375	593
82.5 - 83.5	2,041	-	0.0000	64.47	5.59	39.21	3467	638
83.5 - 84.5	2,769	-	0.0000	64.47	4.83	38.29	3557	685
84.5 - 85.5	3,473	-	0.0000	64.47	4.11	37.38	3644	734
85.5 - 86.5	3,575	-	0.0000	64.47	3.41	36.46	3728	785
86.5 - 87.5	3,985	378	0.0950	64.47	2.74	35.55	3811	837
87.5 - 88.5	5,944	-	0.0000	58.35	2.09	34.64	3165	562
88.5 - 89.5	5,930	-	0.0000	58.35	1.46	33.73	3236	606
89.5 - 90.5	5,923	-	0.0000	58.35	0.86	32.82	3305	652
90.5 - 91.5	5,951	-	0.0000	58.35	0.28	31.91	3372	699
91.5 - 92.5	5,951	-	0.0000	58.35	0.00	31.02	3405	747
<b>Sum of Squared Differences</b>						[10]	<b>108,107</b>	<b>16,134</b>

[1] Age interval based on half-year convention

[2] Dollars surviving at the beginning of each age interval

[3] Dollars retired during each age interval

[4] = [3] / [2]

[5] = (1 - [4]) \* [5]

[6] Iowa curve R0.5 - 46

[7] Iowa curve R0.5 - 70

[8] = ([5] - [6])<sup>2</sup>

[9] = ([5] - [7])<sup>2</sup>

[10] = sum of columns [8] and [9]; a smaller sum of squared differences indicates a superior mathematical fit

**ONG**  
**Electric Division**  
**365.20 Rights of Way**

**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 132                      Survivor Curve: R2.5*

<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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1926	31,878.62	132.00	241.50	57.20	13,814.16
1927	8,542.91	132.00	64.72	57.91	3,747.56
1928	1,168.95	132.00	8.86	58.61	519.02
1933	12.53	132.00	0.09	62.21	5.91
1942	1,512.33	132.00	11.46	68.94	789.90
1943	5,073.75	132.00	38.44	69.71	2,679.57
1944	702.75	132.00	5.32	70.48	375.24
1947	4,460.67	132.00	33.79	72.81	2,460.61
1949	200.46	132.00	1.52	74.38	112.96
1950	14,124.45	132.00	107.00	75.18	8,044.13
1951	102.61	132.00	0.78	75.97	59.06
1952	49,754.01	132.00	376.92	76.77	28,936.71
1953	42,571.44	132.00	322.51	77.57	25,016.69
1954	11,033.86	132.00	83.59	78.37	6,551.34
1955	7,797.06	132.00	59.07	79.18	4,677.29
1956	4,552.73	132.00	34.49	80.00	2,759.08
1957	11,642.71	132.00	88.20	80.81	7,127.34
1959	2,895.82	132.00	21.94	82.45	1,808.75
1961	1.62	132.00	0.01	84.10	1.03
1962	107,796.88	132.00	816.64	84.93	69,355.85
1963	13,982.83	132.00	105.93	85.76	9,084.85
1964	29,567.11	132.00	223.99	86.60	19,397.65
1965	11,307.79	132.00	85.67	87.44	7,490.44
1966	3,452.42	132.00	26.15	88.28	2,308.90
1967	4,322.58	132.00	32.75	89.13	2,918.56
1968	15,510.76	132.00	117.51	89.97	10,572.43
1969	49,255.84	132.00	373.15	90.82	33,891.32

**ONG**  
**Electric Division**  
**365.20 Rights of Way**

**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 132                      Survivor Curve: R2.5*

<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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1970	64,080.76	132.00	485.46	91.68	44,505.26
1971	97,505.88	132.00	738.68	92.53	68,353.15
1972	19,808.15	132.00	150.06	93.39	14,014.87
1973	141,332.46	132.00	1,070.70	94.26	100,920.30
1974	37,831.60	132.00	286.60	95.12	27,261.35
1975	18,279.14	132.00	138.48	95.99	13,292.17
1976	54,225.24	132.00	410.80	96.86	39,789.03
1977	119,832.63	132.00	907.82	97.73	88,722.44
1978	252,420.40	132.00	1,912.27	98.60	188,558.02
1979	62,043.75	132.00	470.03	99.48	46,759.74
1980	27,764.70	132.00	210.34	100.36	21,110.36
1981	81,572.31	132.00	617.97	101.25	62,567.62
1982	69,706.09	132.00	528.08	102.13	53,932.23
1983	152,118.42	132.00	1,152.41	103.02	118,719.36
1984	99,644.23	132.00	754.88	103.91	78,438.62
1985	46,620.61	132.00	353.19	104.80	37,014.35
1986	69,206.84	132.00	524.29	105.69	55,414.46
1987	98,152.13	132.00	743.58	106.59	79,258.70
1988	69,077.91	132.00	523.32	107.49	56,251.79
1989	95,402.62	132.00	722.75	108.39	78,340.14
1990	93,537.16	132.00	708.61	109.29	77,446.84
1991	87,027.90	132.00	659.30	110.20	72,654.88
1992	47,091.60	132.00	356.75	111.11	39,638.19
1993	178,143.32	132.00	1,349.57	112.02	151,175.58
1994	329,735.00	132.00	2,497.99	112.93	282,090.57
1995	61,720.84	132.00	467.58	113.84	53,230.17
1996	11,390.22	132.00	86.29	114.76	9,902.36

**ONG**  
**Electric Division**  
**365.20 Rights of Way**

**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 132                      Survivor Curve: R2.5*

<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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1997	4,683.38	132.00	35.48	115.68	4,104.17
1998	2,301.45	132.00	17.44	116.59	2,032.81
2002	57,917.12	132.00	438.77	120.29	52,778.60
2013	1,022.12	132.00	7.74	130.58	1,011.15
<b>Total</b>	2,984,421.47	132.00	22,609.24	101.01	2,283,795.61

**Composite Average Remaining Life ... 101. Years**

**ONG**  
**Electric Division**  
**366.20 Meas. And Reg. Stat. Structures**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 43                      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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1949	1,788.79	43.00	41.60	6.65	276.62
1951	3,927.12	43.00	91.33	7.33	669.81
1953	5,131.41	43.00	119.33	8.04	959.32
1959	1,288.12	43.00	29.96	10.30	308.55
1968	412.13	43.00	9.58	14.14	135.52
1977	2,821.80	43.00	65.62	18.59	1,219.73
1978	9,999.12	43.00	232.53	19.12	4,446.31
1980	907.69	43.00	21.11	20.21	426.70
1982	3,194.64	43.00	74.29	21.34	1,585.32
1985	8,014.79	43.00	186.39	23.09	4,302.99
1990	1,019.47	43.00	23.71	26.15	619.93
1991	21,125.13	43.00	491.27	26.78	13,156.83
1993	3,875.95	43.00	90.14	28.07	2,529.76
1994	4,710.87	43.00	109.55	28.72	3,145.96
2002	13,732.07	43.00	319.34	34.09	10,885.98
2010	79,964.64	43.00	1,859.60	39.71	73,842.06
<b>Total</b>	161,913.74	43.00	3,765.35	31.47	118,511.40

**Composite Average Remaining Life ... 31.4 Years**

**ONG**  
**Electric Division**  
**367.00 Mains**

**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 77                      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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1926	429,376.67	77.00	5,576.31	16.33	91,075.78
1927	176.11	77.00	2.29	16.73	38.26
1928	711.86	77.00	9.24	17.13	158.34
1930	6,266.98	77.00	81.39	17.95	1,460.89
1940	1,377.32	77.00	17.89	22.51	402.71
1943	66,896.89	77.00	868.79	24.03	20,880.59
1944	53,981.96	77.00	701.06	24.56	17,214.62
1946	1,490.95	77.00	19.36	25.62	496.15
1947	212,310.90	77.00	2,757.28	26.17	72,151.53
1948	58,532.99	77.00	760.17	26.72	20,313.30
1949	252,982.82	77.00	3,285.49	27.28	89,633.92
1950	139,774.72	77.00	1,815.25	27.85	50,551.94
1951	91,164.83	77.00	1,183.96	28.42	33,653.97
1952	3,021,448.97	77.00	39,239.54	29.01	1,138,223.74
1953	1,402,373.95	77.00	18,212.62	29.60	539,019.49
1954	686,128.01	77.00	8,910.74	30.19	269,029.03
1955	760,041.34	77.00	9,870.65	30.80	303,996.75
1956	180,319.31	77.00	2,341.81	31.41	73,552.81
1957	269,531.54	77.00	3,500.40	32.03	112,102.79
1958	200,764.98	77.00	2,607.33	32.65	85,136.77
1959	313,846.08	77.00	4,075.92	33.28	135,664.43
1960	169,037.99	77.00	2,195.30	33.92	74,469.44
1961	126,165.61	77.00	1,638.51	34.57	56,642.38
1962	3,051,038.23	77.00	39,623.82	35.22	1,395,604.48
1963	732,791.09	77.00	9,516.75	35.88	341,455.35
1964	970,824.57	77.00	12,608.09	36.54	460,743.33
1965	465,027.27	77.00	6,039.31	37.22	224,767.67



**ONG**  
**Electric Division**  
**367.00 Mains**

**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 77                      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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1966	288,166.14	77.00	3,742.41	37.89	141,818.50
1967	420,914.20	77.00	5,466.41	38.58	210,884.44
1968	491,399.53	77.00	6,381.80	39.27	250,616.94
1969	1,323,835.79	77.00	17,192.65	39.97	687,134.78
1970	662,983.86	77.00	8,610.17	40.67	350,163.28
1971	643,532.35	77.00	8,357.55	41.38	345,823.49
1972	633,639.26	77.00	8,229.07	42.09	346,384.98
1973	2,870,374.74	77.00	37,277.54	42.81	1,595,944.68
1974	2,400,878.74	77.00	31,180.20	43.54	1,357,506.76
1975	520,667.29	77.00	6,761.90	44.27	299,357.61
1976	907,457.93	77.00	11,785.15	45.01	530,426.57
1977	1,365,391.99	77.00	17,732.34	45.75	811,254.27
1978	2,596,239.31	77.00	33,717.35	46.50	1,567,852.35
1979	1,042,360.88	77.00	13,537.14	47.25	639,673.69
1980	1,288,729.43	77.00	16,736.72	48.01	803,556.12
1981	2,221,836.01	77.00	28,854.97	48.77	1,407,393.75
1982	1,265,201.88	77.00	16,431.17	49.55	814,104.78
1983	2,023,041.03	77.00	26,273.22	50.32	1,322,079.57
1984	1,518,183.01	77.00	19,716.64	51.10	1,007,503.82
1985	384,603.10	77.00	4,994.84	51.89	259,160.02
1986	663,789.39	77.00	8,620.63	52.67	454,089.83
1987	986,847.64	77.00	12,816.19	53.47	685,262.61
1988	689,431.97	77.00	8,953.65	54.27	485,907.15
1989	1,365,854.17	77.00	17,738.34	55.07	976,903.50
1990	2,776,936.44	77.00	36,064.06	55.88	2,015,301.64
1991	2,455,153.07	77.00	31,885.06	56.69	1,807,680.15
1992	1,388,848.14	77.00	18,036.96	57.51	1,037,367.66

**ONG**  
**Electric Division**  
**367.00 Mains**

**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 77                      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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1993	2,099,019.12	77.00	27,259.95	58.34	1,590,222.20
1994	3,096,940.93	77.00	40,219.96	59.16	2,379,479.84
1995	2,504,566.34	77.00	32,526.79	59.99	1,951,427.24
1996	266,851.93	77.00	3,465.60	60.83	210,812.19
1997	1,082,196.93	77.00	14,054.49	61.67	866,728.91
1998	478,472.22	77.00	6,213.92	62.51	388,459.84
1999	1,455,696.12	77.00	18,905.12	63.36	1,197,878.64
2000	3,507,368.37	77.00	45,550.18	64.21	2,924,988.00
2001	2,037,824.05	77.00	26,465.21	65.07	1,722,101.96
2002	875,774.48	77.00	11,373.68	65.93	749,893.55
2003	1,982,124.43	77.00	25,741.84	66.80	1,719,462.94
2004	3,662,448.79	77.00	47,564.20	67.66	3,218,388.38
2005	1,609,671.97	77.00	20,904.80	68.54	1,432,759.31
2006	4,277,333.47	77.00	55,549.71	69.41	3,855,867.01
2007	1,462,615.47	77.00	18,994.98	70.29	1,335,193.48
2008	14,690,658.16	77.00	190,787.50	71.18	13,579,474.94
2009	1,991,851.07	77.00	25,868.16	72.06	1,864,123.13
2010	5,470,270.86	77.00	71,042.38	72.95	5,182,701.46
2011	6,824,197.68	77.00	88,625.82	73.85	6,544,597.95
2012	6,835,162.55	77.00	88,768.22	74.74	6,634,842.37
2013	4,501,565.43	77.00	58,461.81	75.64	4,422,253.84
2014	5,292,105.75	77.00	68,728.55	76.55	5,260,931.62
<b>Total</b>	124,865,397.35	77.00	1,621,626.29	59.73	96,852,182.19

**Composite Average Remaining Life ... 59.7 Years**

**ONG**  
**Electric Division**  
**369.00 Meas. And Reg. Stat. Equipments**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 42                      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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1940	126.28	42.00	3.01	3.23	9.71
1942	270.76	42.00	6.45	3.82	24.65
1946	1,290.67	42.00	30.73	5.03	154.67
1949	3,554.11	42.00	84.62	5.99	507.05
1950	3,833.63	42.00	91.27	6.32	577.18
1952	10,413.47	42.00	247.93	7.00	1,735.41
1954	17,812.02	42.00	424.08	7.70	3,265.13
1955	724.54	42.00	17.25	8.06	139.02
1956	2,248.23	42.00	53.53	8.42	450.87
1958	6,978.40	42.00	166.15	9.17	1,524.05
1959	1,067.83	42.00	25.42	9.56	242.95
1960	3,643.92	42.00	86.76	9.95	862.96
1961	2,537.50	42.00	60.42	10.34	624.91
1962	8,317.80	42.00	198.04	10.75	2,128.43
1963	2,293.18	42.00	54.60	11.16	609.23
1964	4,871.91	42.00	115.99	11.58	1,342.76
1965	18,706.29	42.00	445.38	12.00	5,344.93
1966	2,457.19	42.00	58.50	12.43	727.37
1967	3,409.27	42.00	81.17	12.87	1,044.87
1968	1,789.77	42.00	42.61	13.32	567.57
1969	3,892.72	42.00	92.68	13.77	1,276.60
1970	21,525.14	42.00	512.49	14.24	7,295.90
1971	1,023.58	42.00	24.37	14.71	358.39
1972	5,703.27	42.00	135.79	15.18	2,061.86
1973	54.29	42.00	1.29	15.67	20.25
1974	12,681.40	42.00	301.93	16.16	4,880.56
1975	14,154.38	42.00	337.00	16.67	5,616.67

**ONG**  
**Electric Division**  
**369.00 Meas. And Reg. Stat. Equipments**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 42                      Survivor Curve: RI*

<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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1976	11,893.68	42.00	283.18	17.18	4,864.04
1977	77,008.54	42.00	1,833.49	17.70	32,445.52
1978	1,320.74	42.00	31.45	18.22	573.02
1979	69,644.56	42.00	1,658.16	18.76	31,103.39
1980	62,778.72	42.00	1,494.69	19.30	28,850.96
1981	77,688.16	42.00	1,849.67	19.85	36,723.24
1982	16,473.35	42.00	392.21	20.41	8,006.93
1983	1,780.07	42.00	42.38	20.98	889.30
1984	45,396.48	42.00	1,080.84	21.56	23,302.16
1985	19,105.68	42.00	454.89	22.14	10,073.31
1986	97,592.37	42.00	2,323.57	22.74	52,830.93
1988	50,155.84	42.00	1,194.16	23.95	28,594.65
1989	2,798.48	42.00	66.63	24.56	1,636.42
1990	227,381.37	42.00	5,413.70	25.18	136,334.66
1991	615,836.26	42.00	14,662.39	25.81	378,468.83
1992	81,791.86	42.00	1,947.37	26.45	51,503.25
1993	208,902.18	42.00	4,973.73	27.09	134,739.77
1994	72,298.60	42.00	1,721.35	27.74	47,746.73
1995	41,365.89	42.00	984.88	28.39	27,962.57
1996	21,213.33	42.00	505.07	29.05	14,672.51
1997	42,739.84	42.00	1,017.59	29.71	30,236.73
1998	13,618.38	42.00	324.24	30.38	9,851.33
1999	132,443.36	42.00	3,153.33	31.06	97,927.99
2000	5,791.06	42.00	137.88	31.73	4,375.12
2001	92,808.72	42.00	2,209.67	32.41	71,621.28
2002	119,395.07	42.00	2,842.67	33.10	94,081.77
2003	296,384.83	42.00	7,056.60	33.78	238,401.15

**ONG**  
**Electric Division**  
**369.00 Meas. And Reg. Stat. Equipments**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 42                      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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
2004	100,863.57	42.00	2,401.45	34.48	82,790.35
2005	23,294.41	42.00	554.61	35.17	19,505.66
2006	9,166.18	42.00	218.24	35.87	7,827.99
2007	25,855.97	42.00	615.60	36.57	22,514.01
2008	336,608.99	42.00	8,014.29	37.28	298,775.57
2009	139,415.77	42.00	3,319.34	37.99	126,110.21
2010	216,959.22	42.00	5,165.56	38.71	199,956.03
2011	94,799.21	42.00	2,257.07	39.43	89,000.68
2012	1,264,398.93	42.00	30,103.95	40.16	1,208,949.31
2013	573,473.55	42.00	13,653.78	40.89	558,321.65
<b>Total</b>	<b>5,445,824.77</b>	<b>42.00</b>	<b>129,659.11</b>	<b>32.82</b>	<b>4,254,963.04</b>

**Composite Average Remaining Life ... 32.8 Years**

**ONG**  
**Electric Division**  
**374.20 Rights of Way**

**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 24                      Survivor Curve: L4*

<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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
2007	54,803.09	24.00	2,283.46	16.50	37,681.01
2011	9,896.44	24.00	412.35	20.50	8,453.21
2012	42,127.24	24.00	1,755.30	21.50	37,738.98
2013	6,713.03	24.00	279.71	22.50	6,293.47
2014	55,101.95	24.00	2,295.92	23.50	53,953.99
<b>Total</b>	168,641.75	24.00	7,026.75	20.51	144,120.66

**Composite Average Remaining Life ... 20.5 Years**

**ONG**  
**Electric Division**  
**375.10 District Regulator Structures**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 45                      Survivor Curve: 04*

<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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1926	8,857.54	41.26	214.66	42.43	9,107.68
1927	721.52	41.26	17.49	42.81	748.63
1928	1,987.97	41.26	48.18	43.20	2,081.02
1929	7,443.49	41.26	180.39	43.57	7,859.92
1930	2,575.06	41.26	62.40	43.94	2,742.38
1937	1,998.02	41.26	48.42	46.41	2,247.35
1938	848.63	41.26	20.57	46.74	961.33
1939	807.17	41.26	19.56	47.07	920.72
1940	823.57	41.26	19.96	47.39	945.79
1941	775.17	41.26	18.79	47.70	896.04
1942	2,968.52	41.26	71.94	48.00	3,453.31
1943	163.37	41.26	3.96	48.30	191.23
1944	56.33	41.26	1.37	48.59	66.33
1945	2,142.94	41.26	51.93	48.87	2,538.12
1946	835.48	41.26	20.25	49.15	995.12
1947	2,657.67	41.26	64.41	49.42	3,182.69
1948	2,604.80	41.26	63.13	49.67	3,135.71
1949	1,275.68	41.26	30.92	49.92	1,543.43
1950	6,793.34	41.26	164.63	50.16	8,258.56
1951	1,515.46	41.26	36.73	50.40	1,850.83
1952	5,844.06	41.26	141.63	50.62	7,168.79
1961	7,063.78	41.26	171.19	52.12	8,922.29
1962	9,033.15	41.26	218.91	52.23	11,433.07
1964	342.64	41.26	8.30	52.39	435.06
1965	2,787.08	41.26	67.54	52.46	3,543.13
1966	199.64	41.26	4.84	52.51	254.03
1975	150.00	41.26	3.64	52.20	189.75

**ONG**  
**Electric Division**  
**375.10 District Regulator Structures**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 45                      Survivor Curve: 04*

<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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1979	378.72	41.26	9.18	51.60	473.56
1981	3,128.76	41.26	75.82	51.18	3,880.87
1982	537.06	41.26	13.02	50.95	663.12
1986	1,359.85	41.26	32.96	49.84	1,642.37
1987	1,408.26	41.26	34.13	49.52	1,689.97
1990	6,036.42	41.26	146.29	48.48	7,091.57
1991	26,862.46	41.26	650.99	48.11	31,317.18
1992	2,364.13	41.26	57.29	47.73	2,734.51
1993	2,867.04	41.26	69.48	47.34	3,289.45
1994	1,987.87	41.26	48.17	46.95	2,261.97
1995	3,600.36	41.26	87.25	46.55	4,061.92
1998	7,043.45	41.26	170.69	45.38	7,745.54
2000	35,281.16	41.26	855.02	44.62	38,146.67
2003	37,542.16	41.26	909.81	43.57	39,639.61
2008	682.47	41.26	16.54	42.19	697.73
2009	2,798.00	41.26	67.81	41.98	2,846.44
2011	98,730.76	41.26	2,392.67	41.63	99,616.74
2012	13,980.91	41.26	338.82	41.50	14,060.48
<b>Total</b>	<b>319,861.92</b>	<b>41.26</b>	<b>7,751.64</b>	<b>44.83</b>	<b>347,532.02</b>

**Composite Average Remaining Life ... 44.8 Years**



**ONG**  
**Electric Division**  
**375.20 Other District Structures**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 47                      Survivor Curve: SC*

<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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1923	2,502.30	47.00	53.24	1.30	69.21
1926	450.75	47.00	9.59	2.77	26.59
1929	1,195.07	47.00	25.43	4.26	108.44
1930	1,210.28	47.00	25.75	4.76	122.65
1949	31,464.19	47.00	669.43	14.25	9,542.34
1950	1,797.51	47.00	38.24	14.75	564.26
1951	876,023.09	47.00	18,638.26	15.25	284,309.90
1952	53,881.55	47.00	1,146.38	15.75	18,060.09
1954	1,269,679.46	47.00	27,013.69	16.75	452,580.18
1955	27,295.37	47.00	580.74	17.25	10,019.81
1956	25,521.15	47.00	542.99	17.75	9,639.95
1957	187,848.38	47.00	3,996.66	18.25	72,952.75
1958	14,031.87	47.00	298.54	18.75	5,598.66
1959	1,174.48	47.00	24.99	19.25	481.10
1960	31,152.41	47.00	662.80	19.75	13,092.37
1961	24,373.80	47.00	518.58	20.25	10,502.78
1962	2,481.30	47.00	52.79	20.75	1,095.60
1963	18,078.35	47.00	384.63	21.25	8,174.62
1964	1,603.33	47.00	34.11	21.75	742.04
1965	331,154.91	47.00	7,045.65	22.25	156,785.51
1966	7,145.42	47.00	152.03	22.75	3,459.01
1967	15,896.23	47.00	338.21	23.25	7,864.25
1968	7,575.81	47.00	161.18	23.75	3,828.52
1969	13,258.87	47.00	282.10	24.25	6,841.55
1970	914.61	47.00	19.46	24.75	481.67
1971	16,969.55	47.00	361.04	25.25	9,117.26
1972	8,028.33	47.00	170.81	25.75	4,398.79

**ONG**  
**Electric Division**  
**375.20 Other District Structures**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 47                      Survivor Curve: SC*

<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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1973	62,188.38	47.00	1,323.12	26.25	34,735.05
1974	118,524.63	47.00	2,521.73	26.75	67,462.17
1975	422,919.47	47.00	8,998.03	27.25	245,217.05
1976	20,851.77	47.00	443.64	27.75	12,312.07
1977	115,765.62	47.00	2,463.03	28.25	69,586.02
1978	1,595,203.95	47.00	33,939.55	28.75	975,836.00
1979	967,989.68	47.00	20,594.94	29.25	602,446.19
1980	1,863,129.45	47.00	39,639.93	29.75	1,179,371.23
1981	366,381.33	47.00	7,795.13	30.25	235,818.70
1982	1,027,041.19	47.00	21,851.32	30.75	671,972.60
1983	336,050.53	47.00	7,149.81	31.25	223,445.82
1984	2,318,623.52	47.00	49,331.02	31.75	1,566,356.97
1985	566,697.42	47.00	12,057.05	32.25	388,863.32
1986	1,969,057.83	47.00	41,893.67	32.75	1,372,097.64
1987	63,449.31	47.00	1,349.95	33.25	44,888.28
1988	260,505.60	47.00	5,542.52	33.75	187,070.19
1989	227,624.30	47.00	4,842.93	34.25	165,879.32
1990	188,004.59	47.00	3,999.98	34.75	139,006.68
1991	2,351,163.13	47.00	50,023.34	35.25	1,763,411.15
1992	337,109.98	47.00	7,172.35	35.75	256,424.05
1993	560,947.94	47.00	11,934.73	36.25	432,654.37
1994	181,856.63	47.00	3,869.18	36.75	142,198.97
1995	167,929.51	47.00	3,572.87	37.25	133,095.30
1996	1,620,759.16	47.00	34,483.26	37.75	1,301,800.34
1997	1,823,398.55	47.00	38,794.62	38.25	1,483,957.68
1998	696,421.77	47.00	14,817.07	38.75	574,185.23
1999	990,973.39	47.00	21,083.95	39.25	827,578.44

**ONG**  
**Electric Division**

**375.20 Other District Structures**

**Original Cost Of Utility Plant In Service  
And Development Of Composite Remaining Life as of December 31, 2014  
Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 47 Survivor Curve: SC*

<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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
2000	562,671.85	47.00	11,971.40	39.75	475,882.13
2001	8,243,025.08	47.00	175,378.56	40.25	7,059,259.81
2002	5,019,583.81	47.00	106,796.64	40.75	4,352,127.18
2003	818,815.63	47.00	17,421.12	41.25	718,647.44
2004	631,949.62	47.00	13,445.36	41.75	561,363.76
2005	1,619,591.43	47.00	34,458.42	42.25	1,455,919.14
2006	625,952.37	47.00	13,317.76	42.75	569,353.64
2007	884,425.13	47.00	18,817.02	43.25	813,863.45
2008	447,180.95	47.00	9,514.22	43.75	416,260.74
2009	971,637.45	47.00	20,672.55	44.25	914,789.76
2010	190,587.04	47.00	4,054.93	44.75	181,463.73
2011	484,873.99	47.00	10,316.18	45.25	466,821.25
2012	464,934.33	47.00	9,891.94	45.75	452,569.81
2013	13,133.35	47.00	279.43	46.25	12,923.79
2014	175,801.35	47.00	3,740.35	46.75	174,866.31
<b>Total</b>	<b>45,347,440.38</b>	<b>47.00</b>	<b>964,811.93</b>	<b>36.08</b>	<b>34,814,242.65</b>

**Composite Average Remaining Life ... 36.0 Years**

**ONG**  
**Electric Division**  
**376.00 Mains - Plastic**

**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 55                      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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1951	2,789.06	55.00	50.71	11.56	586.06
1952	5,560.84	55.00	101.11	11.95	1,208.16
1953	6,068.00	55.00	110.33	12.35	1,362.68
1956	21,527.44	55.00	391.41	13.62	5,330.36
1959	16,998.85	55.00	309.07	14.98	4,629.92
1960	2,834.16	55.00	51.53	15.46	796.45
1961	744.60	55.00	13.54	15.94	215.83
1962	303,222.21	55.00	5,513.11	16.44	90,635.05
1963	389.34	55.00	7.08	16.95	119.96
1965	3,179.32	55.00	57.81	18.00	1,040.29
1968	158,846.59	55.00	2,888.11	19.65	56,745.52
1969	1,147,562.99	55.00	20,864.71	20.22	421,898.60
1970	232,051.77	55.00	4,219.11	20.80	87,772.47
1971	362,070.60	55.00	6,583.08	21.40	140,854.82
1972	298,112.61	55.00	5,420.21	22.00	119,241.16
1973	354,719.43	55.00	6,449.42	22.61	145,834.49
1974	1,005,253.45	55.00	18,277.28	23.23	424,633.40
1975	1,519,009.32	55.00	27,618.26	23.87	659,124.05
1976	1,172,996.82	55.00	21,327.14	24.51	522,675.36
1977	1,645,243.60	55.00	29,913.42	25.16	752,583.39
1978	2,077,440.45	55.00	37,771.52	25.82	975,222.00
1979	2,408,278.01	55.00	43,786.73	26.49	1,159,750.92
1980	3,719,196.21	55.00	67,621.53	27.17	1,836,945.85
1981	4,705,739.61	55.00	85,558.62	27.85	2,383,015.83
1982	7,396,056.24	55.00	134,473.31	28.55	3,838,970.91
1983	7,155,108.74	55.00	130,092.46	29.25	3,805,500.18
1984	4,176,319.30	55.00	75,932.83	29.96	2,275,290.33

**ONG**  
**Electric Division**  
**376.00 Mains - Plastic**

**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 55                      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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1985	4,580,428.61	55.00	83,280.24	30.68	2,555,327.90
1986	7,435,901.24	55.00	135,197.76	31.41	4,246,882.40
1987	4,439,018.40	55.00	80,709.16	32.15	2,594,718.63
1988	6,282,487.78	55.00	114,226.67	32.89	3,757,283.16
1989	5,004,899.86	55.00	90,997.88	33.64	3,061,616.45
1990	9,817,686.37	55.00	178,502.80	34.40	6,140,938.92
1991	14,296,950.63	55.00	259,943.70	35.17	9,142,073.84
1992	10,852,163.76	55.00	197,311.42	35.94	7,092,057.74
1993	12,093,568.66	55.00	219,882.34	36.72	8,075,062.85
1994	14,515,288.56	55.00	263,913.46	37.51	9,900,005.87
1995	12,482,096.81	55.00	226,946.46	38.31	8,693,616.78
1996	8,346,010.93	55.00	151,745.15	39.11	5,934,306.15
1997	8,976,930.13	55.00	163,216.37	39.92	6,514,840.82
1998	10,032,537.22	55.00	182,409.16	40.73	7,429,530.97
1999	9,509,283.61	55.00	172,895.49	41.55	7,183,974.29
2000	15,003,243.53	55.00	272,785.34	42.38	11,560,111.65
2001	14,110,465.29	55.00	256,553.07	43.21	11,085,662.07
2002	16,039,098.98	55.00	291,619.02	44.05	12,845,705.44
2003	15,828,143.93	55.00	287,783.48	44.90	12,920,044.51
2004	11,266,664.74	55.00	204,847.77	45.75	9,370,986.15
2005	11,559,137.60	55.00	210,165.44	46.60	9,794,292.21
2006	17,112,493.32	55.00	311,135.21	47.46	14,768,006.36
2007	17,108,388.91	55.00	311,060.59	48.33	15,034,063.64
2008	25,875,967.94	55.00	470,470.59	49.20	23,149,421.99
2009	14,044,905.99	55.00	255,361.08	50.08	12,789,281.95
2010	18,264,303.24	55.00	332,077.14	50.97	16,924,787.31
2011	24,147,802.20	55.00	439,049.50	51.85	22,766,748.26

**ONG**  
**Electric Division**  
**376.00 Mains - Plastic**

**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 55                      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>
2012	35,574,139.45	55.00	646,800.40	52.75	34,116,607.50
2013	38,839,820.77	55.00	706,176.22	53.64	37,882,641.20
2014	34,311,728.20	55.00	623,847.54	54.55	34,029,177.63
<b>Total</b>	487,648,876.22	55.00	8,866,313.89	44.11	391,071,758.73

*Composite Average Remaining Life ... 44.1 Years*

**ONG**  
**Electric Division**  
**376.50 Mains - Metallic**

**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 61                      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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1907	110.51	61.00	1.81	1.51	2.73
1915	77.11	61.00	1.26	3.70	4.68
1923	1,398.50	61.00	22.93	6.01	137.74
1924	213.43	61.00	3.50	6.30	22.03
1925	229.69	61.00	3.77	6.59	24.83
1927	11,716.66	61.00	192.08	7.18	1,378.25
1929	1,537.02	61.00	25.20	7.77	195.76
1930	1,182.46	61.00	19.38	8.07	156.50
1931	6,759.35	61.00	110.81	8.37	927.76
1932	46.17	61.00	0.76	8.68	6.57
1935	3,274.10	61.00	53.67	9.62	516.39
1936	68.76	61.00	1.13	9.95	11.21
1937	39,275.82	61.00	643.86	10.28	6,616.93
1938	68.97	61.00	1.13	10.61	12.00
1939	1,557.09	61.00	25.53	10.96	279.72
1940	569.24	61.00	9.33	11.31	105.53
1941	5,276.09	61.00	86.49	11.67	1,009.05
1942	313.45	61.00	5.14	12.03	61.83
1943	925.66	61.00	15.17	12.41	188.26
1944	41,231.56	61.00	675.93	12.79	8,644.60
1945	48,299.79	61.00	791.80	13.18	10,435.89
1946	5,050.67	61.00	82.80	13.58	1,124.38
1947	210,078.40	61.00	3,443.90	13.99	48,175.35
1948	4,855.15	61.00	79.59	14.41	1,146.67
1949	10,775.46	61.00	176.65	14.83	2,620.45
1950	28,240.90	61.00	462.96	15.27	7,069.85
1951	29,246.67	61.00	479.45	15.72	7,535.89

**ONG**  
**Electric Division**  
**376.50 Mains - Metallic**

**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 61                      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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1952	464,441.19	61.00	7,613.77	16.17	123,145.25
1953	109,561.54	61.00	1,796.09	16.64	29,885.45
1954	95,351.98	61.00	1,563.14	17.12	26,753.70
1955	76,930.59	61.00	1,261.15	17.60	22,195.48
1956	179,675.41	61.00	2,945.49	18.10	53,299.98
1957	153,960.42	61.00	2,523.93	18.60	46,947.56
1958	54,698.24	61.00	896.69	19.11	17,139.58
1959	91,604.84	61.00	1,501.71	19.64	29,493.24
1960	9,041,268.42	61.00	148,217.12	20.17	2,990,180.89
1961	629,954.23	61.00	10,327.09	20.72	213,944.14
1962	4,655,901.68	61.00	76,326.05	21.27	1,623,537.50
1963	5,037,359.24	61.00	82,579.44	21.83	1,803,063.03
1964	1,330,056.11	61.00	21,804.14	22.41	488,529.69
1965	5,726,672.55	61.00	93,879.63	22.99	2,158,083.68
1966	2,189,133.77	61.00	35,887.34	23.58	846,100.39
1967	1,972,438.95	61.00	32,334.98	24.18	781,789.25
1968	2,057,991.69	61.00	33,737.48	24.79	836,265.52
1969	1,738,313.81	61.00	28,496.87	25.40	723,919.12
1970	5,053,431.11	61.00	82,842.91	26.03	2,156,503.42
1971	2,854,072.00	61.00	46,787.94	26.67	1,247,694.95
1972	2,214,522.58	61.00	36,303.55	27.31	991,423.22
1973	2,557,791.32	61.00	41,930.89	27.96	1,172,491.79
1974	2,203,255.70	61.00	36,118.85	28.62	1,033,842.52
1975	6,666,002.23	61.00	109,278.44	29.29	3,200,843.90
1976	3,654,259.15	61.00	59,905.73	29.97	1,795,270.71
1977	3,592,053.99	61.00	58,885.97	30.65	1,805,038.60
1978	3,464,612.19	61.00	56,796.77	31.34	1,780,266.40



**ONG**  
**Electric Division**  
**376.50 Mains - Metallic**

**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 61                      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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1979	3,635,201.49	61.00	59,593.31	32.05	1,909,683.09
1980	10,445,920.17	61.00	171,244.14	32.75	5,608,448.13
1981	10,054,079.94	61.00	164,820.55	33.47	5,516,108.98
1982	12,756,229.60	61.00	209,117.96	34.19	7,149,799.53
1983	6,038,052.04	61.00	98,984.20	34.92	3,456,371.25
1984	5,355,040.32	61.00	87,787.31	35.66	3,130,147.56
1985	2,003,543.75	61.00	32,844.89	36.40	1,195,556.38
1986	4,584,405.49	61.00	75,153.99	37.15	2,791,927.13
1987	1,867,405.69	61.00	30,613.13	37.91	1,160,466.45
1988	5,724,470.09	61.00	93,843.52	38.67	3,629,085.35
1989	7,737,923.46	61.00	126,850.87	39.44	5,003,155.14
1990	4,551,464.91	61.00	74,613.98	40.22	3,000,884.56
1991	4,166,243.55	61.00	68,298.89	41.00	2,800,294.53
1992	2,196,829.52	61.00	36,013.50	41.79	1,505,043.90
1993	4,473,679.28	61.00	73,338.81	42.59	3,123,299.66
1994	8,106,983.38	61.00	132,901.01	43.39	5,766,277.34
1995	5,337,712.41	61.00	87,503.25	44.20	3,867,317.91
1996	5,632,874.17	61.00	92,341.95	45.01	4,156,328.51
1997	4,133,636.88	61.00	67,764.36	45.83	3,105,539.04
1998	6,610,238.05	61.00	108,364.27	46.65	5,055,644.17
1999	4,426,450.46	61.00	72,564.57	47.48	3,445,726.55
2000	8,456,202.69	61.00	138,625.91	48.32	6,698,436.23
2001	11,454,398.94	61.00	187,776.53	49.16	9,231,508.20
2002	6,239,095.82	61.00	102,279.99	50.01	5,114,928.51
2003	4,046,504.61	61.00	66,335.97	50.86	3,373,874.36
2004	7,470,330.78	61.00	122,464.11	51.72	6,333,582.56
2005	7,717,538.81	61.00	126,516.69	52.58	6,652,106.16

**ONG**  
**Electric Division**  
**376.50 Mains - Metallic**

**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 61                      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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
2006	7,219,210.10	61.00	118,347.39	53.45	6,325,255.88
2007	8,304,426.45	61.00	136,137.78	54.32	7,394,813.29
2008	10,562,102.47	61.00	173,148.76	55.19	9,556,820.03
2009	7,291,143.71	61.00	119,526.63	56.08	6,702,567.19
2010	11,569,194.48	61.00	189,658.42	56.96	10,803,282.25
2011	10,668,509.56	61.00	174,893.14	57.85	10,117,778.35
2012	11,174,628.70	61.00	183,190.15	58.75	10,761,696.01
2013	5,644,422.18	61.00	92,531.27	59.64	5,519,008.96
2014	4,608,157.89	61.00	75,543.37	60.55	4,573,929.61
<b>Total</b>	310,581,945.45	61.00	5,091,493.81	41.96	213,632,752.60

**Composite Average Remaining Life ... 41.9 Years**

**ONG**  
**Electric Division**  
**376.90 Mains - Cathodic Protection**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 15                      Survivor Curve: SQ*

<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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1991	28,041.79	0.00	0.00	0.00	0.00
1992	31,153.05	0.00	0.00	0.00	0.00
1993	171,186.45	0.00	0.00	0.00	0.00
1994	132,522.51	0.00	0.00	0.00	0.00
1996	29,641.41	0.00	0.00	0.00	0.00
1997	13,340.59	0.00	0.00	0.00	0.00
1998	15,880.39	0.00	0.00	0.00	0.00
1999	61,556.64	0.00	0.00	0.00	0.00
2000	25,400.34	15.00	1,693.36	0.50	846.68
2001	351,293.61	15.00	23,419.57	1.50	35,129.36
2002	1,047,674.89	15.00	69,844.99	2.50	174,612.48
2003	852,171.73	15.00	56,811.45	3.50	198,840.07
2004	288,494.79	15.00	19,232.99	4.50	86,548.44
2005	462,408.13	15.00	30,827.21	5.50	169,549.65
2006	258,917.96	15.00	17,261.20	6.50	112,197.78
2007	145,525.49	15.00	9,701.70	7.50	72,762.75
2008	167,186.61	15.00	11,145.77	8.50	94,739.08
2009	326,768.73	15.00	21,784.58	9.50	206,953.53
2010	154,137.03	15.00	10,275.80	10.50	107,895.92
2011	410,129.43	15.00	27,341.96	11.50	314,432.56
2012	1,443,074.68	15.00	96,204.98	12.50	1,202,562.23
2013	2,597,600.87	15.00	173,173.39	13.50	2,337,840.78
2014	3,466,040.33	15.00	231,069.36	14.50	3,350,505.65
<b>Total</b>	<b>12,480,147.45</b>	<b>9.78</b>	<b>799,788.31</b>	<b>10.58</b>	<b>8,465,416.96</b>

**Composite Average Remaining Life ... 10.5 Years**

**ONG**  
**Electric Division**  
**378.00 Meas. And Reg. Stat. Equipment - General**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 45                      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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1900	28,933.23	0.00	0.00	0.00	0.00
1923	265.93	0.00	0.00	0.00	0.00
1924	25.00	0.00	0.00	0.00	0.00
1927	196.52	45.00	4.37	1.28	5.58
1929	472.60	45.00	10.50	2.21	23.22
1930	103.48	45.00	2.30	2.68	6.15
1931	180.65	45.00	4.01	3.14	12.59
1937	1,171.88	45.00	26.04	5.74	149.50
1941	60.00	45.00	1.33	7.36	9.82
1942	56.11	45.00	1.25	7.76	9.68
1946	149.23	45.00	3.32	9.35	31.00
1947	237.72	45.00	5.28	9.74	51.47
1949	10,150.02	45.00	225.55	10.54	2,377.26
1950	327.99	45.00	7.29	10.94	79.73
1951	2,362.97	45.00	52.51	11.34	595.53
1952	4,100.17	45.00	91.11	11.75	1,070.22
1953	4,690.58	45.00	104.23	12.15	1,266.79
1954	2,235.85	45.00	49.68	12.56	624.19
1955	11,877.43	45.00	263.94	12.98	3,424.96
1956	1,813.88	45.00	40.31	13.39	539.84
1957	1,683.70	45.00	37.41	13.81	516.83
1958	3,644.07	45.00	80.98	14.24	1,152.92
1959	384,183.48	45.00	8,537.17	14.67	125,200.50
1960	57,174.83	45.00	1,270.52	15.10	19,181.53
1961	16,163.38	45.00	359.18	15.53	5,579.36
1962	116,326.45	45.00	2,584.96	15.97	41,293.41
1963	122,060.18	45.00	2,712.37	16.42	44,536.61

**ONG**  
**Electric Division**  
**378.00 Meas. And Reg. Stat. Equipment - General**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 45                      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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1964	29,640.03	45.00	658.65	16.87	11,111.21
1965	23,247.17	45.00	516.59	17.32	8,949.56
1966	12,416.97	45.00	275.93	17.78	4,906.98
1967	105,620.44	45.00	2,347.06	18.25	42,829.17
1968	52,272.23	45.00	1,161.57	18.72	21,741.98
1969	63,888.60	45.00	1,419.71	19.19	27,247.17
1970	56,573.72	45.00	1,257.16	19.67	24,730.26
1971	58,181.17	45.00	1,292.88	20.16	26,059.36
1972	71,880.12	45.00	1,597.29	20.65	32,978.02
1973	103,893.23	45.00	2,308.67	21.14	48,808.05
1974	60,820.37	45.00	1,351.53	21.64	29,248.68
1975	69,144.52	45.00	1,536.50	22.15	34,027.98
1976	169,346.14	45.00	3,763.14	22.66	85,260.17
1977	218,846.80	45.00	4,863.13	23.17	112,691.80
1978	133,182.68	45.00	2,959.53	23.69	70,120.92
1979	197,490.28	45.00	4,388.55	24.22	106,285.05
1980	237,020.43	45.00	5,266.98	24.75	130,352.60
1981	413,832.39	45.00	9,196.02	25.28	232,519.87
1982	300,067.80	45.00	6,667.99	25.82	172,200.00
1983	349,884.61	45.00	7,775.00	26.37	205,022.69
1984	187,893.29	45.00	4,175.29	26.92	112,392.70
1985	499,097.10	45.00	11,090.74	27.47	304,683.54
1986	688,623.99	45.00	15,302.33	28.03	428,927.20
1987	403,152.47	45.00	8,958.70	28.59	256,146.33
1988	589,362.11	45.00	13,096.57	29.16	381,862.95
1989	444,594.51	45.00	9,879.60	29.73	293,687.62
1990	1,111,826.82	45.00	24,706.58	30.30	748,606.82

**ONG**  
**Electric Division**  
**378.00 Meas. And Reg. Stat. Equipment - General**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 45                      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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1991	661,860.80	45.00	14,707.61	30.88	454,112.03
1992	397,938.27	45.00	8,842.83	31.46	278,152.18
1993	629,229.27	45.00	13,982.49	32.04	447,958.00
1994	1,035,625.78	45.00	23,013.27	32.62	750,730.86
1995	363,511.33	45.00	8,077.81	33.21	268,257.90
1996	691,127.73	45.00	15,357.97	33.80	519,078.18
1997	1,529,385.54	45.00	33,985.41	34.39	1,168,757.66
1998	612,045.85	45.00	13,600.64	34.98	475,793.82
1999	1,109,653.61	45.00	24,658.29	35.58	877,303.77
2000	312,464.49	45.00	6,943.46	36.17	251,179.57
2001	815,157.46	45.00	18,114.11	36.77	666,108.15
2002	2,404,655.42	45.00	53,435.31	37.37	1,996,992.81
2003	1,552,112.60	45.00	34,490.44	37.97	1,309,697.81
2004	1,446,277.60	45.00	32,138.61	38.58	1,239,757.00
2005	690,306.80	45.00	15,339.73	39.18	600,995.30
2006	936,633.09	45.00	20,813.49	39.78	828,049.44
2007	1,061,603.52	45.00	23,590.54	40.39	952,848.04
2008	1,627,118.13	45.00	36,157.18	41.00	1,482,447.26
2009	1,486,246.09	45.00	33,026.78	41.61	1,374,260.58
2010	2,407,542.08	45.00	53,499.46	42.22	2,258,890.50
2011	2,372,937.02	45.00	52,730.48	42.84	2,258,798.04
2012	2,653,264.67	45.00	58,959.81	43.45	2,561,952.11
2013	1,799,631.67	45.00	39,990.71	44.07	1,762,422.15
2014	3,257,356.18	45.00	72,383.69	44.69	3,234,871.25

**ONG**  
**Electric Division**  
**378.00 Meas. And Reg. Stat. Equipment - General**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 45                      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>
<b>Total</b>	39,276,132.32	43.27	872,129.40	36.94	32,220,551.77

**Composite Average Remaining Life ... 36.9 Years**

**ONG**  
**Electric Division**  
**379.00 Meas. And Reg. Stat. Equipment - City Gate**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 98                      Survivor Curve: R3*

<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	49.00	98.00	0.50	23.57	11.78
1951	132.62	98.00	1.35	41.24	55.81
1953	3,359.09	98.00	34.28	42.75	1,465.44
1957	241.98	98.00	2.47	45.85	113.21
1961	556.03	98.00	5.67	49.03	278.19
1962	2,655.39	98.00	27.10	49.84	1,350.48
1963	1,827.03	98.00	18.64	50.66	944.37
1964	381.84	98.00	3.90	51.47	200.56
1966	61.93	98.00	0.63	53.13	33.58
1967	1,004.36	98.00	10.25	53.97	553.09
1968	5,079.82	98.00	51.83	54.81	2,840.93
1969	312.87	98.00	3.19	55.65	177.67
1970	9,798.74	98.00	99.99	56.50	5,649.40
1971	7,037.64	98.00	71.81	57.36	4,118.84
1972	1,929.17	98.00	19.69	58.21	1,145.97
1973	667.58	98.00	6.81	59.08	402.44
1975	3,094.35	98.00	31.57	60.82	1,920.34
1976	3,710.55	98.00	37.86	61.70	2,335.96
1977	6,437.89	98.00	65.69	62.58	4,110.85
1978	4,382.67	98.00	44.72	63.46	2,838.12
1979	5,380.31	98.00	54.90	64.35	3,533.03
1982	119.81	98.00	1.22	67.05	81.97
1983	2,199.86	98.00	22.45	67.95	1,525.38
1984	7,975.55	98.00	81.38	68.86	5,604.30
1986	3,449.47	98.00	35.20	70.69	2,488.34
1988	29,517.57	98.00	301.20	72.54	21,848.90
1989	51,993.63	98.00	530.55	73.47	38,977.96



**ONG**  
**Electric Division**  
**379.00 Meas. And Reg. Stat. Equipment - City Gate**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 98                      Survivor Curve: R3*

<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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1990	4,555.92	98.00	46.49	74.40	3,458.72
1991	16,688.18	98.00	170.29	75.33	12,828.28
1994	26,075.86	98.00	266.08	78.15	20,795.44
1995	13,839.14	98.00	141.22	79.10	11,170.33
1996	70,935.81	98.00	723.83	80.05	57,943.23
1999	4,855.42	98.00	49.55	82.91	4,107.96
2000	82,200.96	98.00	838.78	83.87	70,351.38
2003	2,041.56	98.00	20.83	86.76	1,807.50
2008	396,794.64	98.00	4,048.92	91.62	370,976.19
2009	23,532.54	98.00	240.13	92.60	22,235.94
2010	1,045,833.68	98.00	10,671.75	93.58	998,652.99
2011	10,650.38	98.00	108.68	94.56	10,276.41
2012	11,127.99	98.00	113.55	95.54	10,848.69
2013	97,188.94	98.00	991.72	96.52	95,724.24
2014	195,563.32	98.00	1,995.54	97.51	194,579.66
<b>Total</b>	<b>2,155,241.09</b>	<b>98.00</b>	<b>21,992.22</b>	<b>90.50</b>	<b>1,990,363.88</b>

**Composite Average Remaining Life ... 90.5 Years**

**ONG**  
**Electric Division**  
**380.00 Services - Plastic**

**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 70*                      *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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1939	18.53	70.00	0.26	27.64	7.32
1941	38.09	70.00	0.54	28.57	15.54
1949	94.88	70.00	1.36	32.41	43.94
1956	665.54	70.00	9.51	35.96	341.87
1964	153.54	70.00	2.19	40.20	88.18
1971	199,522.36	70.00	2,850.28	44.07	125,606.95
1972	416,593.28	70.00	5,951.24	44.63	265,610.77
1973	489,635.98	70.00	6,994.69	45.20	316,141.77
1974	556,186.00	70.00	7,945.39	45.77	363,622.05
1975	1,133,867.94	70.00	16,197.86	46.34	750,542.84
1976	1,615,221.10	70.00	23,074.23	46.91	1,082,373.74
1977	2,381,816.61	70.00	34,025.42	47.48	1,615,615.90
1978	2,659,867.63	70.00	37,997.52	48.06	1,826,163.50
1979	3,412,706.84	70.00	48,752.20	48.64	2,371,233.86
1980	3,498,706.18	70.00	49,980.74	49.22	2,460,034.93
1981	4,714,207.11	70.00	67,344.77	49.80	3,353,896.42
1982	5,826,769.19	70.00	83,238.26	50.39	4,194,076.71
1983	6,095,625.59	70.00	87,079.01	50.97	4,438,596.60
1984	6,960,542.00	70.00	99,434.77	51.56	5,126,756.89
1985	6,510,636.99	70.00	93,007.65	52.15	4,850,196.07
1986	5,416,375.22	70.00	77,375.58	52.74	4,080,651.42
1987	4,535,192.54	70.00	64,787.46	53.33	3,455,120.41
1988	3,772,925.12	70.00	53,898.09	53.92	2,906,322.62
1989	3,892,184.42	70.00	55,601.77	54.52	3,031,221.11
1990	6,093,911.37	70.00	87,054.52	55.11	4,797,695.00
1991	7,436,638.30	70.00	106,236.04	55.71	5,918,084.52
1992	9,090,894.20	70.00	129,867.90	56.30	7,312,114.34

**ONG**  
**Electric Division**  
**380.00 Services - Plastic**

**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 70                      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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1993	7,914,826.14	70.00	113,067.19	56.90	6,433,722.46
1994	11,271,260.10	70.00	161,015.50	57.50	9,258,516.32
1995	10,925,885.71	70.00	156,081.65	58.10	9,068,367.35
1996	10,313,538.14	70.00	147,333.97	58.70	8,648,626.90
1997	9,825,708.84	70.00	140,365.09	59.30	8,323,941.59
1998	9,227,723.41	70.00	131,822.57	59.90	7,896,707.10
1999	10,560,584.33	70.00	150,863.14	60.51	9,128,395.86
2000	14,814,980.25	70.00	211,639.28	61.11	12,933,664.20
2001	15,250,760.63	70.00	217,864.62	61.72	13,446,060.65
2002	5,904,576.32	70.00	84,349.78	62.32	5,256,988.53
2003	32,444,636.45	70.00	463,487.59	62.93	29,167,921.66
2004	16,448,400.27	70.00	234,973.49	63.54	14,930,175.73
2005	21,716,241.14	70.00	310,227.19	64.15	19,900,814.73
2006	17,063,130.12	70.00	243,755.21	64.76	15,785,696.53
2007	31,598,386.01	70.00	451,398.49	65.37	29,508,894.03
2008	27,442,822.61	70.00	392,034.22	65.99	25,868,648.50
2009	19,308,941.61	70.00	275,837.73	66.60	18,370,745.92
2010	19,319,649.06	70.00	275,990.69	67.22	18,550,903.25
2011	25,114,083.07	70.00	358,767.03	67.83	24,336,009.85
2012	30,261,988.56	70.00	432,307.40	68.45	29,591,453.97
2013	39,213,945.78	70.00	560,190.51	69.07	38,692,252.39
2014	41,935,533.11	70.00	599,069.72	69.69	41,749,224.21
<b>Total</b>	514,588,598.21	70.00	7,351,151.30	62.78	461,489,906.97

**Composite Average Remaining Life ... 62.7 Years**

**ONG**  
**Electric Division**  
**380.30 CNG Fill Station Customers**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 24                      Survivor Curve: R1.5*

<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>
1992	291,936.11	24.00	12,163.60	8.45	102,762.89
1994	420,691.98	24.00	17,528.25	9.50	166,446.59
1995	395,954.39	24.00	16,497.55	10.05	165,820.26
1996	201,631.14	24.00	8,401.02	10.63	89,277.20
1997	298,825.33	24.00	12,450.64	11.22	139,727.08
1998	273,270.30	24.00	11,385.89	11.84	134,775.43
1999	84,740.80	24.00	3,530.75	12.47	44,028.11
2000	253,975.79	24.00	10,581.97	13.12	138,845.82
2001	451,859.44	24.00	18,826.85	13.79	259,582.81
2002	45,838.86	24.00	1,909.89	14.47	27,636.88
2003	209,889.94	24.00	8,745.12	15.17	132,642.13
2004	234,606.01	24.00	9,774.93	15.88	155,209.92
2007	27,902.97	24.00	1,162.59	18.08	21,024.56
2009	32,711.63	24.00	1,362.94	19.61	26,724.31
2010	40,263.86	24.00	1,677.61	20.38	34,197.16
2011	126,604.90	24.00	5,275.03	21.17	111,677.67
2012	138,753.61	24.00	5,781.21	21.97	127,000.14
2013	31,757.79	24.00	1,323.20	22.77	30,134.20
2014	228,759.83	24.00	9,531.34	23.59	224,838.66
<b>Total</b>	<b>3,789,974.68</b>	<b>24.00</b>	<b>157,910.38</b>	<b>13.50</b>	<b>2,132,351.83</b>

**Composite Average Remaining Life ... 13.5 Years**

**ONG**  
**Electric Division**  
**380.50 Services - Metallic**

**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 45                      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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1915	437.77	0.00	0.00	0.00	0.00
1925	433.52	45.00	9.63	0.50	4.82
1935	2,695.00	45.00	59.89	3.56	213.03
1945	3,474.00	45.00	77.20	6.64	512.68
1951	13.27	45.00	0.29	8.72	2.57
1952	145.92	45.00	3.24	9.09	29.48
1953	401.29	45.00	8.92	9.46	84.38
1954	419.53	45.00	9.32	9.84	91.73
1955	141.61	45.00	3.15	10.22	32.17
1956	1,221.68	45.00	27.15	10.61	288.15
1957	660.99	45.00	14.69	11.01	161.73
1958	72.20	45.00	1.60	11.41	18.31
1961	938.77	45.00	20.86	12.66	264.09
1962	1,092.78	45.00	24.28	13.09	317.82
1963	38,474.51	45.00	854.97	13.52	11,562.33
1964	37,130.20	45.00	825.10	13.97	11,523.40
1965	7,144.01	45.00	158.75	14.42	2,288.50
1966	12,445.69	45.00	276.56	14.87	4,113.08
1967	9,003.29	45.00	200.07	15.34	3,068.19
1968	7,933.01	45.00	176.28	15.81	2,786.59
1969	21,458.86	45.00	476.85	16.29	7,765.89
1970	8,835,407.66	45.00	196,337.59	16.77	3,292,899.70
1971	1,037,291.31	45.00	23,050.35	17.26	397,963.20
1972	1,045,819.83	45.00	23,239.87	17.77	412,895.02
1973	1,131,955.03	45.00	25,153.94	18.28	459,699.79
1974	634,728.36	45.00	14,104.73	18.79	265,054.24
1975	837,832.37	45.00	18,618.04	19.32	359,625.18

**ONG**  
**Electric Division**  
**380.50 Services - Metallic**

**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 45                      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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1976	1,624,169.37	45.00	36,091.77	19.85	716,338.73
1977	792,279.74	45.00	17,605.79	20.39	358,954.00
1978	791,328.06	45.00	17,584.64	20.94	368,150.63
1979	704,653.26	45.00	15,658.58	21.49	336,519.92
1980	565,105.89	45.00	12,557.60	22.05	276,943.67
1981	865,314.22	45.00	19,228.73	22.63	435,056.58
1982	926,529.86	45.00	20,589.05	23.20	477,739.38
1983	815,242.14	45.00	18,116.05	23.79	430,965.80
1984	907,328.61	45.00	20,162.36	24.38	491,599.44
1985	846,005.75	45.00	18,799.67	24.98	469,653.93
1986	820,651.75	45.00	18,236.26	25.59	466,672.67
1987	699,488.08	45.00	15,543.80	26.20	407,318.13
1988	674,928.82	45.00	14,998.05	26.83	402,327.06
1989	523,891.34	45.00	11,641.74	27.45	319,593.99
1990	596,994.43	45.00	13,266.22	28.09	372,604.81
1991	515,934.16	45.00	11,464.92	28.73	329,344.28
1992	637,138.41	45.00	14,158.28	29.37	415,848.18
1993	538,233.95	45.00	11,960.46	30.02	359,074.52
1994	913,283.73	45.00	20,294.70	30.68	622,585.96
1995	828,689.73	45.00	18,414.88	31.34	577,095.81
1996	934,728.85	45.00	20,771.24	32.00	664,752.96
1997	797,418.51	45.00	17,719.98	32.67	578,958.14
1998	554,148.37	45.00	12,314.11	33.35	410,621.35
1999	441,266.43	45.00	9,805.68	34.02	333,618.76
2000	2,926,489.67	45.00	65,031.51	34.70	2,256,810.79
2001	2,994,743.51	45.00	66,548.23	35.39	2,354,939.76
2002	353,889.19	45.00	7,864.01	36.07	283,684.89

**ONG**  
**Electric Division**  
**380.50 Services - Metallic**

**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 45                      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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
2003	320,248.49	45.00	7,116.46	36.76	261,629.21
2004	2,494,035.08	45.00	55,421.65	37.46	2,076,011.54
2005	260,246.05	45.00	5,783.10	38.16	220,660.53
2006	669,330.64	45.00	14,873.65	38.86	577,952.52
2007	349,927.26	45.00	7,775.97	39.56	307,639.81
2008	545,256.54	45.00	12,116.52	40.27	487,971.67
2009	859,881.72	45.00	19,108.01	40.99	783,189.34
2010	842,822.30	45.00	18,728.93	41.71	781,111.70
2011	139,241.30	45.00	3,094.18	42.43	131,284.23
2012	202,050.22	45.00	4,489.89	43.16	193,772.90
2013	1,330,855.92	45.00	29,573.85	43.89	1,298,043.84
2014	640,907.75	45.00	14,242.05	44.63	635,622.22
<b>Total</b>	46,913,451.56	44.32	1,042,485.90	27.34	28,505,929.75

**Composite Average Remaining Life ... 27.3 Years**

**ONG**  
**Electric Division**  
**381.00 Meters**

**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 30                      Survivor Curve: S4*

<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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1907	24.95	0.00	0.00	0.00	0.00
1913	186.71	0.00	0.00	0.00	0.00
1917	137.40	0.00	0.00	0.00	0.00
1919	24.50	0.00	0.00	0.00	0.00
1920	207.48	0.00	0.00	0.00	0.00
1922	46.32	0.00	0.00	0.00	0.00
1923	18.85	0.00	0.00	0.00	0.00
1924	82.71	0.00	0.00	0.00	0.00
1926	37.70	0.00	0.00	0.00	0.00
1927	60.35	0.00	0.00	0.00	0.00
1928	18.85	0.00	0.00	0.00	0.00
1929	33.87	0.00	0.00	0.00	0.00
1931	28,968.36	0.00	0.00	0.00	0.00
1932	51.85	0.00	0.00	0.00	0.00
1937	13.65	0.00	0.00	0.00	0.00
1938	21.31	0.00	0.00	0.00	0.00
1939	71.39	0.00	0.00	0.00	0.00
1940	271.58	0.00	0.00	0.00	0.00
1941	5,254.90	0.00	0.00	0.00	0.00
1943	65.63	0.00	0.00	0.00	0.00
1944	10.21	0.00	0.00	0.00	0.00
1945	1,695.64	0.00	0.00	0.00	0.00
1946	2,015.97	0.00	0.00	0.00	0.00
1947	2,446.44	0.00	0.00	0.00	0.00
1948	1,943.26	0.00	0.00	0.00	0.00
1949	11,884.56	0.00	0.00	0.00	0.00
1950	13,202.43	0.00	0.00	0.00	0.00



**ONG**  
**Electric Division**  
**381.00 Meters**

**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 30                      Survivor Curve: S4*

<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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1951	15,516.17	0.00	0.00	0.00	0.00
1952	15,447.85	0.00	0.00	0.00	0.00
1953	125,710.53	0.00	0.00	0.00	0.00
1954	21,383.52	0.00	0.00	0.00	0.00
1955	6,041.08	0.00	0.00	0.00	0.00
1956	38,086.38	0.00	0.00	0.00	0.00
1957	11,840.68	0.00	0.00	0.00	0.00
1958	65,647.84	0.00	0.00	0.00	0.00
1959	50,929.17	0.00	0.00	0.00	0.00
1960	48,903.65	0.00	0.00	0.00	0.00
1961	46,085.03	0.00	0.00	0.00	0.00
1962	27,661.80	0.00	0.00	0.00	0.00
1963	46,050.00	30.00	1,535.00	0.50	767.50
1964	46,417.55	30.00	1,547.25	0.65	1,009.08
1965	74,358.97	30.00	2,478.63	0.74	1,823.17
1966	54,281.73	30.00	1,809.39	0.82	1,476.95
1967	44,068.65	30.00	1,468.96	0.88	1,297.44
1968	41,057.85	30.00	1,368.60	0.99	1,353.45
1969	70,502.93	30.00	2,350.10	1.10	2,574.28
1970	316,814.86	30.00	10,560.50	1.19	12,533.87
1971	86,097.14	30.00	2,869.90	1.31	3,761.61
1972	103,425.11	30.00	3,447.50	1.44	4,964.24
1973	138,337.79	30.00	4,611.26	1.56	7,196.43
1974	108,460.62	30.00	3,615.35	1.71	6,177.43
1975	130,538.35	30.00	4,351.28	1.87	8,121.79
1976	179,701.78	30.00	5,990.06	2.02	12,124.11
1977	422,351.28	30.00	14,078.38	2.21	31,069.98

**ONG**  
**Electric Division**  
**381.00 Meters**

**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 30                      Survivor Curve: S4*

<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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1978	292,674.69	30.00	9,755.82	2.40	23,460.56
1979	579,582.97	30.00	19,319.43	2.61	50,461.58
1980	514,347.35	30.00	17,144.91	2.85	48,789.68
1981	1,497,055.63	30.00	49,901.86	3.10	154,759.99
1982	1,193,253.69	30.00	39,775.13	3.38	134,354.65
1983	1,393,911.64	30.00	46,463.72	3.69	171,250.77
1984	1,569,893.51	30.00	52,329.79	4.02	210,607.69
1985	1,245,498.76	30.00	41,516.63	4.40	182,604.36
1986	1,571,018.90	30.00	52,367.30	4.81	251,956.54
1987	1,003,471.74	30.00	33,449.06	5.27	176,168.36
1988	1,693,738.57	30.00	56,457.96	5.77	325,828.23
1989	1,861,516.35	30.00	62,050.55	6.32	392,398.15
1990	2,776,249.60	30.00	92,541.66	6.93	641,200.52
1991	4,835,782.31	30.00	161,192.75	7.59	1,223,716.99
1992	4,186,888.93	30.00	139,562.97	8.31	1,159,261.80
1993	3,548,622.74	30.00	118,287.43	9.07	1,073,327.47
1994	4,234,957.95	30.00	141,165.27	9.89	1,396,763.20
1995	4,492,955.53	30.00	149,765.19	10.76	1,611,117.75
1996	3,890,925.44	30.00	129,697.52	11.66	1,512,161.23
1997	4,869,451.92	30.00	162,315.07	12.59	2,044,168.25
1998	3,423,398.64	30.00	114,113.29	13.55	1,546,363.14
1999	4,680,143.12	30.00	156,004.78	14.53	2,266,060.66
2000	4,157,747.00	30.00	138,591.57	15.51	2,149,837.46
2001	2,201,412.40	30.00	73,380.42	16.50	1,211,142.19
2002	11,598,748.27	30.00	386,624.96	17.50	6,766,626.92
2003	505,128.62	30.00	16,837.62	18.50	311,505.91
2004	3,642,838.07	30.00	121,427.94	19.50	2,367,863.42

**ONG**  
**Electric Division**  
**381.00 Meters**

**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 30                      Survivor Curve: S4*

<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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
2005	4,272,240.48	30.00	142,408.02	20.50	2,919,368.47
2006	2,845,369.76	30.00	94,845.66	21.50	2,039,182.17
2007	2,793,643.99	30.00	93,121.47	22.50	2,095,233.21
2008	5,160,789.16	30.00	172,026.31	23.50	4,042,618.12
2009	4,005,402.39	30.00	133,513.42	24.50	3,271,078.58
2010	11,361,565.70	30.00	378,718.88	25.50	9,657,330.76
2011	8,374,150.03	30.00	279,138.35	26.50	7,397,165.81
2012	7,808,052.83	30.00	260,268.44	27.50	7,157,381.73
2013	10,579,138.21	30.00	352,637.96	28.50	10,050,181.27
2014	10,133,665.18	30.00	337,788.86	29.50	9,964,770.75
<b>Total</b>	147,199,747.25	17.14	4,888,590.15	18.02	88,094,319.65

**Composite Average Remaining Life ... 18.0 Years**

**ONG**  
**Electric Division**  
**381.10 Meter Communication Devices**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 34                      Survivor Curve: R3*

<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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1991	10,709.18	34.00	314.98	13.23	4,166.09
1992	4,215.83	34.00	123.99	13.96	1,730.95
1998	12,371.44	34.00	363.87	18.71	6,806.37
1999	56,425.54	34.00	1,659.57	19.55	32,444.45
2000	220,262.71	34.00	6,478.30	20.41	132,207.83
2001	1,251,462.37	34.00	36,807.66	21.28	783,226.61
2002	112,452.73	34.00	3,307.43	22.16	73,301.52
2003	582,750.50	34.00	17,139.69	23.06	395,216.71
2004	1,366,710.85	34.00	40,197.31	23.97	963,363.53
2005	1,704,859.67	34.00	50,142.85	24.88	1,247,751.01
2006	1,314,057.18	34.00	38,648.68	25.81	997,600.41
2007	1,029,588.27	34.00	30,281.96	26.75	810,024.32
2008	739,861.70	34.00	21,760.60	27.70	602,666.81
2009	447,224.35	34.00	13,153.64	28.65	376,838.48
2010	470,762.72	34.00	13,845.94	29.61	409,973.88
2011	460,981.96	34.00	13,558.27	30.58	414,566.14
2012	404,456.21	34.00	11,895.75	31.55	375,300.27
2013	288,720.57	34.00	8,491.77	32.53	276,206.87
2014	483,228.22	34.00	14,212.57	33.51	476,234.22
<b>Total</b>	10,961,102.00	34.00	322,384.82	25.99	8,379,626.47

**Composite Average Remaining Life ... 25.9 Years**

**ONG**  
**Electric Division**  
**381.50 AMR Communication Devices**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 21                      Survivor Curve: L5*

<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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
2002	2,424.16	21.00	115.43	8.53	984.97
2003	5,460.37	21.00	260.01	9.51	2,472.23
2004	3,397,786.41	21.00	161,797.51	10.50	1,699,053.16
2005	2,181,692.69	21.00	103,888.95	11.50	1,194,749.16
2006	420,671.03	21.00	20,031.73	12.50	250,401.36
2007	634,019.06	21.00	30,191.04	13.50	407,586.25
2008	627,163.28	21.00	29,864.58	14.50	433,043.52
2009	1,535,803.27	21.00	73,132.66	15.50	1,133,573.65
2010	34,972,308.28	21.00	1,665,329.10	16.50	27,478,327.35
2011	11,103,916.54	21.00	528,751.92	17.50	9,253,284.81
2012	4,708,064.06	21.00	224,190.98	18.50	4,147,586.61
2013	1,177,234.09	21.00	56,058.13	19.50	1,093,146.90
2014	1,302,773.80	21.00	62,036.14	20.50	1,271,755.73
<b>Total</b>	62,069,317.04	21.00	2,955,648.19	16.36	48,365,965.68

**Composite Average Remaining Life ... 16.3 Years**

**ONG**  
**Electric Division**  
**383.00 House Regulators**

**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 48                      Survivor Curve: S1*

<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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1932	100.23	48.00	2.09	3.70	7.72
1934	40.00	48.00	0.83	4.27	3.56
1935	111.78	48.00	2.33	4.56	10.63
1939	68.25	48.00	1.42	5.75	8.17
1946	163.86	48.00	3.41	7.94	27.09
1948	31.09	48.00	0.65	8.59	5.56
1949	108.10	48.00	2.25	8.92	20.08
1950	1,768.66	48.00	36.85	9.25	340.93
1951	1,746.26	48.00	36.38	9.59	348.94
1952	1,301.99	48.00	27.12	9.93	269.46
1953	2,698.69	48.00	56.22	10.28	578.01
1954	5,317.02	48.00	110.77	10.63	1,177.64
1955	5,694.11	48.00	118.63	10.99	1,303.25
1956	7,750.44	48.00	161.47	11.35	1,831.87
1957	6,617.66	48.00	137.87	11.71	1,614.24
1958	6,812.88	48.00	141.94	12.08	1,714.10
1959	8,032.59	48.00	167.35	12.45	2,083.36
1960	8,229.74	48.00	171.45	12.83	2,199.25
1961	9,153.12	48.00	190.69	13.21	2,518.85
1962	9,144.07	48.00	190.50	13.60	2,590.28
1963	13,341.16	48.00	277.94	13.99	3,888.54
1964	12,242.55	48.00	255.05	14.39	3,670.09
1965	12,469.66	48.00	259.78	14.79	3,843.33
1966	17,146.43	48.00	357.22	15.20	5,431.49
1967	62,335.44	48.00	1,298.66	15.62	20,287.43
1968	68,483.52	48.00	1,426.74	16.05	22,892.24
1969	52,014.69	48.00	1,083.64	16.47	17,852.94

**ONG**  
**Electric Division**  
**383.00 House Regulators**

**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 48                      Survivor Curve: S1*

<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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1970	179,536.88	48.00	3,740.35	16.91	63,255.49
1971	102,559.86	48.00	2,136.66	17.36	37,082.59
1972	108,233.58	48.00	2,254.87	17.81	40,151.02
1973	126,573.61	48.00	2,636.95	18.27	48,165.53
1974	124,666.46	48.00	2,597.22	18.73	48,651.56
1975	77,253.62	48.00	1,609.45	19.21	30,912.47
1976	435,723.55	48.00	9,077.58	19.69	178,736.54
1977	153,664.30	48.00	3,201.34	20.18	64,608.27
1978	262,336.27	48.00	5,465.34	20.68	113,036.05
1979	314,460.42	48.00	6,551.26	21.19	138,836.62
1980	273,919.46	48.00	5,706.66	21.71	123,902.79
1981	430,631.76	48.00	8,971.50	22.24	199,539.95
1982	319,836.91	48.00	6,663.27	22.78	151,798.65
1983	278,312.92	48.00	5,798.19	23.33	135,282.80
1984	384,854.38	48.00	8,017.80	23.89	191,572.75
1985	229,605.32	48.00	4,783.45	24.47	117,041.68
1986	253,815.43	48.00	5,287.82	25.05	132,475.92
1987	91,188.55	48.00	1,899.76	25.65	48,729.13
1988	244,678.47	48.00	5,097.47	26.26	133,858.43
1989	232,589.19	48.00	4,845.61	26.88	130,261.59
1990	241,734.41	48.00	5,036.13	27.52	138,586.24
1991	329,935.23	48.00	6,873.65	28.17	193,617.92
1992	466,162.23	48.00	9,711.72	28.83	280,008.74
1993	402,240.06	48.00	8,380.00	29.51	247,298.70
1994	491,367.92	48.00	10,236.83	30.20	309,194.12
1995	517,057.83	48.00	10,772.04	30.91	332,995.75
1996	391,429.63	48.00	8,154.79	31.64	257,998.01

**ONG**  
**Electric Division**  
**383.00 House Regulators**

**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 48                      Survivor Curve: S1*

<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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1997	397,485.94	48.00	8,280.96	32.38	268,144.83
1998	329,299.00	48.00	6,860.40	33.14	227,343.00
1999	346,686.69	48.00	7,222.64	33.91	244,939.91
2000	556,234.51	48.00	11,588.22	34.70	402,159.16
2001	246,777.09	48.00	5,141.19	35.51	182,577.59
2002	160,420.82	48.00	3,342.10	36.34	121,447.48
2003	617,000.12	48.00	12,854.17	37.18	477,944.75
2004	49,121.89	48.00	1,023.37	38.04	38,932.10
2005	571,788.38	48.00	11,912.26	38.92	463,638.59
2006	3,104,677.71	48.00	64,680.80	39.82	2,575,356.62
2007	366,903.35	48.00	7,643.82	40.73	311,320.38
2008	733,857.58	48.00	15,288.70	41.66	636,873.28
2009	1,234,246.58	48.00	25,713.48	42.60	1,095,441.32
2010	1,489,881.64	48.00	31,039.21	43.56	1,352,056.02
2011	1,415,761.64	48.00	29,495.04	44.53	1,313,422.50
2012	1,138,413.02	48.00	23,716.94	45.51	1,079,408.34
2013	1,432,549.92	48.00	29,844.80	46.50	1,387,872.03
2014	2,579,328.63	48.00	53,736.03	47.50	2,552,468.65
<b>Total</b>	24,547,726.75	48.00	511,411.09	36.60	18,715,464.90

**Composite Average Remaining Life ... 36.6 Years**



**ONG**  
**Electric Division**  
**385.00 Industrial Meas. And Reg. Equipment**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 94                      Survivor Curve: S4*

<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>
1941	3,645.24	94.00	38.78	23.87	925.61
1957	1,326.14	94.00	14.11	36.96	521.48
1962	14,956.53	94.00	159.11	41.69	6,632.91
1964	187.04	94.00	1.99	43.62	86.80
1966	339.13	94.00	3.61	45.58	164.44
1972	1,626.21	94.00	17.30	51.52	891.24
1974	3,753.34	94.00	39.93	53.51	2,136.57
1975	89,419.87	94.00	951.27	54.51	51,850.63
1977	17,176.25	94.00	182.73	56.50	10,324.60
1981	9,308.02	94.00	99.02	60.50	5,990.86
1983	7,787.10	94.00	82.84	62.50	5,177.61
1985	60,682.85	94.00	645.56	64.50	41,638.84
1986	13,568.56	94.00	144.35	65.50	9,454.70
1987	3,024.76	94.00	32.18	66.50	2,139.86
1988	769.20	94.00	8.18	67.50	552.35
1989	20,413.49	94.00	217.16	68.50	14,875.80
1990	7,679.54	94.00	81.70	69.50	5,677.96
1991	250,922.14	94.00	2,669.38	70.50	188,191.69
1992	230,928.27	94.00	2,456.68	71.50	175,652.96
1993	28,337.29	94.00	301.46	72.50	21,855.89
1995	61,390.46	94.00	653.09	74.50	48,655.22
1996	31,462.68	94.00	334.71	75.50	25,270.56
1997	112,735.27	94.00	1,199.31	76.50	91,747.34
1998	139,074.46	94.00	1,479.51	77.50	114,662.48
1999	323,492.77	94.00	3,441.41	78.50	270,150.93
2000	3,017,973.96	94.00	32,106.07	79.50	2,552,435.91
2001	400,778.43	94.00	4,263.60	80.50	343,219.89

**ONG**  
**Electric Division**  
**385.00 Industrial Meas. And Reg. Equipment**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 94                      Survivor Curve: S4*

<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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
2002	273,484.73	94.00	2,909.41	81.50	237,117.12
2003	206,661.77	94.00	2,198.53	82.50	181,378.71
2004	550,802.24	94.00	5,859.59	83.50	489,276.52
2005	279,572.17	94.00	2,974.17	84.50	251,317.57
2006	297,227.52	94.00	3,161.99	85.50	270,350.59
2007	570,537.56	94.00	6,069.54	86.50	525,015.99
2008	519,916.92	94.00	5,531.03	87.50	483,965.26
2009	277,424.92	94.00	2,951.33	88.50	261,192.63
2010	518,959.58	94.00	5,520.84	89.50	494,115.80
2011	422,557.45	94.00	4,495.29	90.50	406,823.94
2012	1,020,411.76	94.00	10,855.43	91.50	993,273.18
2013	602,308.89	94.00	6,407.53	92.50	592,697.59
2014	446,738.20	94.00	4,752.53	93.50	444,361.94
<b>Total</b>	10,839,362.71	94.00	115,312.25	83.44	9,621,771.96

**Composite Average Remaining Life ... 83.4 Years**

**ONG**  
**Electric Division**  
**390.10 Structures and Improvements**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 64                      Survivor Curve: R5*

<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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1952	9,266.73	64.00	144.79	7.06	1,022.13
1961	19,484.80	64.00	304.45	12.60	3,836.59
1968	745.43	64.00	11.65	18.28	212.91
1980	225,681.89	64.00	3,526.31	29.54	104,179.39
1981	6,426.56	64.00	100.42	30.53	3,065.72
1986	587.52	64.00	9.18	35.50	325.91
1987	3,219.20	64.00	50.30	36.50	1,836.01
1988	51,064.23	64.00	797.88	37.50	29,920.87
1990	6,870.89	64.00	107.36	39.50	4,240.62
1994	65,635.14	64.00	1,025.56	43.50	44,611.23
1999	11,498.50	64.00	179.67	48.50	8,713.69
2002	10,979.96	64.00	171.56	51.50	8,835.42
2003	2,516.08	64.00	39.31	52.50	2,063.97
2004	28,089.52	64.00	438.90	53.50	23,481.05
2005	7,146.57	64.00	111.67	54.50	6,085.74
2006	38,753.84	64.00	605.53	55.50	33,606.81
2008	16,179.00	64.00	252.80	57.50	14,535.81
2010	431,940.27	64.00	6,749.12	59.50	401,569.25
2011	47,531.34	64.00	742.68	60.50	44,931.95
2012	178,585.87	64.00	2,790.42	61.50	171,609.81
2013	69,631.99	64.00	1,088.01	62.50	67,999.98
2014	30,003.79	64.00	468.81	63.50	29,769.38
<b>Total</b>	1,261,839.12	64.00	19,716.38	51.05	1,006,454.24

**Composite Average Remaining Life ... 51.0 Years**

**ONG**  
**Electric Division**  
**391.10 Office Furniture and Fixtures**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 17                      Survivor Curve: SQ*

<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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1999	104,735.21	17.00	6,160.89	1.50	9,241.34
2000	223,589.39	17.00	13,152.32	2.50	32,880.79
2001	835,763.73	17.00	49,162.57	3.50	172,069.00
2002	106,840.52	17.00	6,284.74	4.50	28,281.31
2003	33,477.50	17.00	1,969.26	5.50	10,830.96
2004	122,866.02	17.00	7,227.41	6.50	46,978.18
2005	70,320.30	17.00	4,136.49	7.50	31,023.66
2006	978,390.30	17.00	57,552.37	8.50	489,195.15
2007	518,113.25	17.00	30,477.25	9.50	289,533.88
2008	152,853.72	17.00	8,991.40	10.50	94,409.65
2009	5,486.93	17.00	322.76	11.50	3,711.75
2010	268,469.13	17.00	15,792.30	12.50	197,403.77
2011	51,725.78	17.00	3,042.69	13.50	41,076.35
2012	26,570.89	17.00	1,562.99	14.50	22,663.41
2013	132,230.71	17.00	7,778.28	15.50	120,563.29
2014	4,449.85	17.00	261.76	16.50	4,318.97
<b>Total</b>	<b>3,635,883.23</b>	<b>17.00</b>	<b>213,875.48</b>	<b>7.45</b>	<b>1,594,181.48</b>

**Composite Average Remaining Life ... 7.45 Years**

**ONG**  
**Electric Division**  
**391.20 Data Processing Equipment**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 10                      Survivor Curve: SQ*

<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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
2005	659.40	10.00	65.94	0.50	32.97
2010	234,440.86	10.00	23,444.09	5.50	128,942.47
<b>Total</b>	235,100.26	10.00	23,510.03	5.49	128,975.44

**Composite Average Remaining Life ... 5.49 Years**

**ONG**  
**Electric Division**  
**391.30 Office Machines**

**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 20                      Survivor Curve: SQ*

<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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
2001	23,691.35	20.00	1,184.57	6.50	7,699.69
2002	10,840.93	20.00	542.05	7.50	4,065.35
2003	892.24	20.00	44.61	8.50	379.20
2005	8,102.35	20.00	405.12	10.50	4,253.73
2006	27,547.18	20.00	1,377.36	11.50	15,839.63
2007	42,515.10	20.00	2,125.76	12.50	26,571.94
2008	74,372.47	20.00	3,718.62	13.50	50,201.42
2009	34,449.00	20.00	1,722.45	14.50	24,975.53
2010	83,111.89	20.00	4,155.59	15.50	64,411.71
2011	23,500.00	20.00	1,175.00	16.50	19,387.50
<b>Total</b>	329,022.51	20.00	16,451.13	13.24	217,785.70

**Composite Average Remaining Life ... 13.2 Years**

**ONG**  
**Electric Division**  
**391.60 Purchased Software**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 10                      Survivor Curve: SQ*

<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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
2005	277,283.56	10.00	27,728.36	0.50	13,864.18
2006	6,567,385.64	10.00	656,738.56	1.50	985,107.85
2007	261,016.10	10.00	26,101.61	2.50	65,254.03
2008	3,540,361.48	10.00	354,036.15	3.50	1,239,126.52
2009	1,359,299.96	10.00	135,930.00	4.50	611,684.98
2010	4,346,454.09	10.00	434,645.41	5.50	2,390,549.75
2011	2,224,571.71	10.00	222,457.17	6.50	1,445,971.61
2012	2,744,683.86	10.00	274,468.39	7.50	2,058,512.90
2013	122,336.78	10.00	12,233.68	8.50	103,986.26
2014	436,271.67	10.00	43,627.17	9.50	414,458.09
<b>Total</b>	<b>21,879,664.85</b>	<b>10.00</b>	<b>2,187,966.49</b>	<b>4.26</b>	<b>9,328,516.15</b>

**Composite Average Remaining Life ... 4.26 Years**

**ONG**  
**Electric Division**  
**391.80 Micro Computer Equipment**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 10                      Survivor Curve: SQ*

<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>
2008	227,702.75	10.00	22,770.28	3.50	79,695.96
2009	1,047,624.12	10.00	104,762.41	4.50	471,430.85
2010	206,077.78	10.00	20,607.78	5.50	113,342.78
2011	47,648.04	10.00	4,764.80	6.50	30,971.23
2012	644,291.30	10.00	64,429.13	7.50	483,218.48
2013	2,059,379.58	10.00	205,937.96	8.50	1,750,472.64
2014	674,394.27	10.00	67,439.43	9.50	640,674.56
<b>Total</b>	4,907,117.84	10.00	490,711.78	7.27	3,569,806.50

**Composite Average Remaining Life ... 7.27 Years**



**ONG**  
**Electric Division**  
**392.02 Trucks and Vans**

**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 9                      Survivor Curve: L1.5*

<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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1986	14,856.10	0.00	0.00	0.00	0.00
1988	19,113.45	9.00	2,123.55	0.57	1,206.60
1989	35,862.01	9.00	3,984.35	0.69	2,744.83
1990	118,851.93	9.00	13,204.71	0.83	10,899.84
1991	147,896.53	9.00	16,431.62	0.96	15,820.49
1992	160,693.34	9.00	17,853.38	1.10	19,595.98
1993	34,400.37	9.00	3,821.96	1.24	4,723.19
1994	167,614.41	9.00	18,622.32	1.38	25,743.16
1995	216,396.18	9.00	24,042.08	1.54	37,016.94
1996	42,693.91	9.00	4,743.39	1.71	8,103.61
1997	357,386.83	9.00	39,706.45	1.89	74,963.64
1998	459,649.67	9.00	51,068.07	2.08	106,252.07
1999	768,911.81	9.00	85,427.76	2.29	195,236.49
2000	496,817.84	9.00	55,197.53	2.50	138,153.91
2001	148,513.16	9.00	16,500.13	2.73	45,099.69
2002	10,253.22	9.00	1,139.15	2.98	3,389.75
2004	478.22	9.00	53.13	3.49	185.19
2007	998,668.39	9.00	110,954.21	4.30	476,903.66
2008	1,437,822.25	9.00	159,745.15	4.62	737,652.82
2009	5,657,836.68	9.00	628,597.85	5.00	3,142,983.30
2010	4,780,330.21	9.00	531,104.99	5.48	2,907,965.28
2011	3,349,833.03	9.00	372,173.67	6.07	2,260,777.56
2012	4,613,498.77	9.00	512,569.66	6.79	3,481,295.71
2013	5,511,528.01	9.00	612,342.64	7.61	4,659,533.91
2014	208,172.66	9.00	23,128.43	8.52	197,045.67

**ONG**  
**Electric Division**  
**392.02 Trucks and Vans**

**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 9                      Survivor Curve: L1.5*

<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>
<b>Total</b>	29,758,078.98	8.64	3,304,536.17	5.61	18,553,293.29

**Composite Average Remaining Life ... 5.61 Years**

**ONG**  
**Electric Division**  
**392.10 Autos**

**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 6                      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>
2012	89,006.61	6.00	14,824.41	4.25	63,024.51
<b>Total</b>	89,006.61	6.00	14,824.41	4.25	63,024.51

*Composite Average Remaining Life ... 4.25 Years*

**ONG**  
**Electric Division**  
**392.50 Trailers**

**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 18                      Survivor Curve: L0*

<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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1975	7,673.12	18.00	426.28	5.41	2,305.02
1976	936.00	18.00	52.00	5.59	290.61
1977	2,784.62	18.00	154.70	5.77	893.04
1978	20,972.02	18.00	1,165.09	5.96	6,945.94
1980	14,588.12	18.00	810.44	6.35	5,146.62
1983	5,213.07	18.00	289.61	6.96	2,017.12
1984	3,112.95	18.00	172.94	7.18	1,241.54
1986	2,545.08	18.00	141.39	7.62	1,077.79
1987	14,578.62	18.00	809.91	7.85	6,360.14
1989	4,350.00	18.00	241.66	8.33	2,012.85
1990	5,937.20	18.00	329.84	8.58	2,828.63
1991	57,240.51	18.00	3,179.97	8.83	28,077.04
1992	18,242.02	18.00	1,013.43	9.09	9,210.57
1993	38,107.23	18.00	2,117.03	9.35	19,804.17
1994	18,363.17	18.00	1,020.16	9.63	9,822.14
1995	10,407.56	18.00	578.19	9.91	5,728.88
1996	22,183.92	18.00	1,232.42	10.20	12,566.24
1997	10,512.87	18.00	584.04	10.49	6,127.68
1998	9,438.25	18.00	524.34	10.80	5,660.66
1999	38,397.00	18.00	2,133.13	11.11	23,694.30
2000	82,279.30	18.00	4,570.99	11.43	52,240.41
2001	11,579.48	18.00	643.29	11.76	7,564.06
2002	31,001.22	18.00	1,722.26	12.10	20,834.91
2003	112,948.55	18.00	6,274.81	12.45	78,097.90
2004	35,215.01	18.00	1,956.36	12.81	25,051.23
2005	15,931.61	18.00	885.07	13.17	11,660.20
2007	3,806.55	18.00	211.47	13.95	2,949.46

**ONG**  
**Electric Division**  
**392.50 Trailers**

**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 18                      Survivor Curve: L0*

<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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
2008	119,816.61	18.00	6,656.36	14.36	95,574.77
2009	40,583.42	18.00	2,254.60	14.79	33,349.88
2010	105,296.86	18.00	5,849.73	15.25	89,233.48
2011	159,558.87	18.00	8,864.23	15.75	139,626.21
2012	53,197.13	18.00	2,955.35	16.29	48,151.71
2013	69,792.77	18.00	3,877.31	16.90	65,507.95
2014	1,454.13	18.00	80.78	17.59	1,420.78
<b>Total</b>	1,148,044.84	18.00	63,779.18	12.91	823,073.93

**Composite Average Remaining Life ... 12.9 Years**

**ONG**

**Electric Division**

392.70 Vehicle Electronics

**Original Cost Of Utility Plant In Service**

**And Development Of Composite Remaining Life as of December 31, 2014**

**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 10 Survivor Curve: SQ*

<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	296,287.00	10.00	29,628.70	5.50	162,957.85
2011	338,374.82	10.00	33,837.48	6.50	219,943.63
<b>Total</b>	634,661.82	10.00	63,466.18	6.03	382,901.48

**Composite Average Remaining Life ... 6.03 Years**

**ONG**  
**Electric Division**  
**393.00 Stores Equipment**

**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 25                      Survivor Curve: SQ*

<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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1997	21,277.29	25.00	851.09	7.50	6,383.19
1998	20,837.26	25.00	833.49	8.50	7,084.67
2000	14,416.23	25.00	576.65	10.50	6,054.82
2002	14,892.54	25.00	595.70	12.50	7,446.27
2003	17,959.98	25.00	718.40	13.50	9,698.39
2005	740.03	25.00	29.60	15.50	458.82
2008	58,743.51	25.00	2,349.74	18.50	43,470.20
2009	22,857.52	25.00	914.30	19.50	17,828.87
2010	122,715.36	25.00	4,908.61	20.50	100,626.60
<b>Total</b>	294,439.72	25.00	11,777.59	16.90	199,051.81

**Composite Average Remaining Life ... 16.9 Years**

**ONG**  
**Electric Division**  
**394.00 Tools, Shop and Garage Equipment**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 20                      Survivor Curve: SQ*

<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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1989	4,185.38	0.00	0.00	0.00	0.00
1990	1,064.65	0.00	0.00	0.00	0.00
1993	9,536.25	0.00	0.00	0.00	0.00
1994	19,115.10	0.00	0.00	0.00	0.00
1995	59,778.75	20.00	2,988.94	0.50	1,494.47
1996	206,854.51	20.00	10,342.73	1.50	15,514.09
1997	432,664.87	20.00	21,633.24	2.50	54,083.11
1998	420,172.95	20.00	21,008.65	3.50	73,530.27
1999	353,699.29	20.00	17,684.96	4.50	79,582.34
2000	507,302.23	20.00	25,365.11	5.50	139,508.11
2001	1,378,548.31	20.00	68,927.42	6.50	448,028.20
2002	1,655,203.82	20.00	82,760.19	7.50	620,701.43
2003	661,963.44	20.00	33,098.17	8.50	281,334.46
2004	1,547,458.35	20.00	77,372.92	9.50	735,042.72
2005	431,624.39	20.00	21,581.22	10.50	226,602.80
2006	464,574.85	20.00	23,228.74	11.50	267,130.54
2007	432,171.63	20.00	21,608.58	12.50	270,107.27
2008	468,104.85	20.00	23,405.24	13.50	315,970.77
2009	584,681.57	20.00	29,234.08	14.50	423,894.14
2010	2,110,782.79	20.00	105,539.14	15.50	1,635,856.66
2011	573,553.25	20.00	28,677.66	16.50	473,181.43
2012	3,352,592.43	20.00	167,629.62	17.50	2,933,518.38
2013	2,744,090.20	20.00	137,204.51	18.50	2,538,283.44
2014	2,197,249.55	20.00	109,862.48	19.50	2,142,318.31



**ONG**  
**Electric Division**  
**394.00 Tools, Shop and Garage Equipment**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 20                      Survivor Curve: SQ*

<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>
<b>Total</b>	20,616,973.41	16.67	1,029,153.60	13.29	13,675,682.94

**Composite Average Remaining Life ... 13.2 Years**

**ONG**  
**Electric Division**  
**396.00 Power Operated Equipment**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 19                      Survivor Curve: LI*

<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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1953	4,420.58	0.00	0.00	0.00	0.00
1955	1,137.05	19.00	59.84	0.50	29.92
1961	2,550.00	19.00	134.20	1.31	176.36
1963	1,060.68	19.00	55.82	1.63	90.92
1964	1,760.30	19.00	92.64	1.79	166.23
1968	2,421.60	19.00	127.44	2.48	315.93
1969	985.14	19.00	51.85	2.66	137.68
1971	3,430.28	19.00	180.53	3.02	545.79
1973	4,141.74	19.00	217.97	3.40	741.38
1974	3,624.04	19.00	190.72	3.60	685.90
1975	15,764.89	19.00	829.67	3.79	3,148.43
1976	78,387.01	19.00	4,125.32	4.00	16,489.00
1977	26,610.58	19.00	1,400.45	4.20	5,883.06
1978	16,545.05	19.00	870.73	4.41	3,840.27
1979	19,497.07	19.00	1,026.08	4.62	4,744.77
1980	53,652.15	19.00	2,823.59	4.84	13,672.19
1981	19,509.10	19.00	1,026.72	5.06	5,197.98
1982	9,296.50	19.00	489.25	5.29	2,587.86
1983	45,014.88	19.00	2,369.03	5.52	13,079.28
1984	21,515.17	19.00	1,132.29	5.76	6,519.12
1985	36,340.07	19.00	1,912.49	6.00	11,470.47
1986	46,096.35	19.00	2,425.94	6.24	15,148.83
1987	20,541.42	19.00	1,081.05	6.50	7,023.59
1988	62,081.60	19.00	3,267.21	6.75	22,068.64
1989	38,160.51	19.00	2,008.30	7.02	14,095.95
1990	374,212.33	19.00	19,693.91	7.29	143,559.80
1991	222,539.81	19.00	11,711.74	7.57	88,621.77

**ONG**  
**Electric Division**  
**396.00 Power Operated Equipment**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 19                      Survivor Curve: LI*

<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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1992	369,933.44	19.00	19,468.72	7.85	152,841.07
1993	289,053.23	19.00	15,212.19	8.14	123,857.56
1994	672,444.13	19.00	35,389.14	8.44	298,719.01
1995	474,574.43	19.00	24,975.73	8.75	218,483.99
1996	417,034.76	19.00	21,947.55	9.06	198,900.42
1997	267,543.71	19.00	14,080.19	9.39	132,158.65
1998	322,249.14	19.00	16,959.21	9.72	164,821.68
1999	166,593.07	19.00	8,767.40	10.06	88,205.50
2000	242,596.40	19.00	12,767.27	10.41	132,933.87
2001	19,485.76	19.00	1,025.49	10.77	11,048.49
2002	64,363.54	19.00	3,387.30	11.15	37,755.73
2003	103,938.66	19.00	5,470.05	11.53	63,067.80
2004	98,306.89	19.00	5,173.66	11.93	61,703.81
2005	17,082.49	19.00	899.01	12.35	11,101.63
2006	66,400.49	19.00	3,494.50	12.81	44,761.66
2007	332,705.65	19.00	17,509.51	13.32	233,210.48
2008	101,322.00	19.00	5,332.34	13.88	74,036.18
2009	452,976.56	19.00	23,839.08	14.51	345,910.31
2010	643,262.16	19.00	33,853.36	15.20	514,526.99
2011	220,396.49	19.00	11,598.94	15.95	185,011.11
2012	395,699.29	19.00	20,824.72	16.76	349,036.89
2013	248,785.26	19.00	13,092.98	17.62	230,749.61
<b>Total</b>	<b>7,118,043.45</b>	<b>18.61</b>	<b>374,373.10</b>	<b>10.83</b>	<b>4,052,883.57</b>

**Composite Average Remaining Life ... 10.8 Years**

**ONG**  
**Electric Division**  
**397.00 Communication Equipment**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 15                      Survivor Curve: SQ*

<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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1993	2,300,166.46	0.00	0.00	0.00	0.00
2001	388,034.75	15.00	25,868.98	1.50	38,803.48
2005	357,207.68	15.00	23,813.85	5.50	130,976.15
2007	243,023.48	15.00	16,201.57	7.50	121,511.74
2009	246,149.51	15.00	16,409.97	9.50	155,894.69
2013	25,552.90	15.00	1,703.53	13.50	22,997.61
<b>Total</b>	3,560,134.78	12.50	83,997.89	5.60	470,183.66

**Composite Average Remaining Life ... 5.60 Years**

**ONG**  
**Electric Division**  
**397.30 Radio Equipment - Stationary**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 20                      Survivor Curve: SQ*

<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>
2002	7,291.01	20.00	364.55	7.50	2,734.13
2008	16,289.49	20.00	814.47	13.50	10,995.41
<b>Total</b>	23,580.50	20.00	1,179.03	11.64	13,729.53

**Composite Average Remaining Life ... 11.6 Years**

**ONG**  
**Electric Division**  
**397.60 Communication Equipment - Towers**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 5                      Survivor Curve: SQ*

<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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
2001	5,225,221.91	0.00	0.00	0.00	0.00
2002	1,521,569.74	0.00	0.00	0.00	0.00
2003	274,253.46	0.00	0.00	0.00	0.00
<b>Total</b>	7,021,045.11	0.00	0.00	#Num!	0.00

*Composite Average Remaining Life ... #Nu Years*

**ONG**  
**Electric Division**  
**398.00 Miscellaneous Equipment**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 20                      Survivor Curve: SQ*

<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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
1960	6,021.21	0.00	0.00	0.00	0.00
1961	2,689.39	0.00	0.00	0.00	0.00
1979	1,405.70	0.00	0.00	0.00	0.00
1981	751.71	0.00	0.00	0.00	0.00
1982	1,030.64	0.00	0.00	0.00	0.00
1983	2,485.03	0.00	0.00	0.00	0.00
1985	681.79	0.00	0.00	0.00	0.00
1986	1,631.06	0.00	0.00	0.00	0.00
1988	1,224.08	0.00	0.00	0.00	0.00
1989	3,095.91	0.00	0.00	0.00	0.00
1990	9,439.24	0.00	0.00	0.00	0.00
1991	14,578.83	0.00	0.00	0.00	0.00
1992	2,576.77	0.00	0.00	0.00	0.00
1993	16,448.80	0.00	0.00	0.00	0.00
1994	11,501.34	0.00	0.00	0.00	0.00
1995	2,023.43	20.00	101.17	0.50	50.59
1996	6,121.80	20.00	306.09	1.50	459.14
1997	557.93	20.00	27.90	2.50	69.74
1998	14,625.59	20.00	731.28	3.50	2,559.48
1999	15,641.45	20.00	782.07	4.50	3,519.33
2000	5,541.08	20.00	277.05	5.50	1,523.80
2002	3,502.99	20.00	175.15	7.50	1,313.62
2003	4,292.34	20.00	214.62	8.50	1,824.24
2004	14,646.57	20.00	732.33	9.50	6,957.12
2005	6,104.39	20.00	305.22	10.50	3,204.80
2006	16,048.28	20.00	802.41	11.50	9,227.76
2007	8,605.47	20.00	430.27	12.50	5,378.42

**ONG**  
**Electric Division**  
**398.00 Miscellaneous Equipment**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 20                      Survivor Curve: SQ*

<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>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>
2008	7,025.00	20.00	351.25	13.50	4,741.88
<b>Total</b>	180,297.82	9.29	5,236.82	7.80	40,829.91

*Composite Average Remaining Life ... 7.80 Years*



**ONG**  
**Electric Division**  
**398.00 Miscellaneous Equipment**  
**Original Cost Of Utility Plant In Service**  
**And Development Of Composite Remaining Life as of December 31, 2014**  
**Based Upon Broad Group/Remaining Life Procedure and Technique**

*Average Service Life: 20                      Survivor Curve: SQ*

<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>
<hr/>					

**ONG**  
**Electric Division**  
**365.20 Rights of Way**  
**Observed Life Table**  
**Retirement Expr. 1983 TO 2014**  
**Placement Years 1926 TO 2013**

<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
0.0 - 0.5	\$1,559,389.72	\$0.00	0.00000	100.00
0.5 - 1.5	\$1,630,315.87	\$0.00	0.00000	100.00
1.5 - 2.5	\$1,710,866.06	\$0.00	0.00000	100.00
2.5 - 3.5	\$1,740,149.38	\$0.00	0.00000	100.00
3.5 - 4.5	\$1,802,193.13	\$2,772.49	0.00154	100.00
4.5 - 5.5	\$2,057,012.08	\$13,084.18	0.00636	99.85
5.5 - 6.5	\$2,164,510.71	\$14,299.04	0.00661	99.21
6.5 - 7.5	\$2,204,443.63	\$2,342.03	0.00106	98.56
7.5 - 8.5	\$2,220,380.74	\$818.88	0.00037	98.45
8.5 - 9.5	\$2,257,393.46	\$0.00	0.00000	98.41
9.5 - 10.5	\$2,398,725.92	\$12,353.94	0.00515	98.41
10.5 - 11.5	\$2,407,136.52	\$5,559.77	0.00231	97.91
11.5 - 12.5	\$2,503,866.84	\$965.62	0.00039	97.68
12.5 - 13.5	\$2,509,160.58	\$0.00	0.00000	97.64
13.5 - 14.5	\$2,558,416.42	\$0.00	0.00000	97.64
14.5 - 15.5	\$2,572,257.00	\$0.00	0.00000	97.64
15.5 - 16.5	\$2,576,579.58	\$324.23	0.00013	97.64
16.5 - 17.5	\$2,578,143.79	\$1,219.81	0.00047	97.63
17.5 - 18.5	\$2,587,263.68	\$406.74	0.00016	97.59
18.5 - 19.5	\$2,605,033.83	\$1,518.62	0.00058	97.57
19.5 - 20.5	\$2,559,951.71	\$0.00	0.00000	97.51
20.5 - 21.5	\$2,366,575.54	\$5,171.04	0.00219	97.51
21.5 - 22.5	\$2,186,755.77	\$750.18	0.00034	97.30
22.5 - 23.5	\$2,138,913.99	\$6.72	0.00000	97.27
23.5 - 24.5	\$2,054,775.19	\$0.00	0.00000	97.27
24.5 - 25.5	\$1,961,238.03	\$0.00	0.00000	97.27
25.5 - 26.5	\$1,877,478.12	\$0.00	0.00000	97.27
26.5 - 27.5	\$1,812,952.94	\$0.00	0.00000	97.27
27.5 - 28.5	\$1,722,597.87	\$4,784.21	0.00278	97.27
28.5 - 29.5	\$1,659,640.68	\$95.72	0.00006	97.00
29.5 - 30.5	\$1,655,524.18	\$0.00	0.00000	96.99
30.5 - 31.5	\$1,605,633.96	\$0.00	0.00000	96.99
31.5 - 32.5	\$1,453,618.15	\$956.39	0.00066	96.99
32.5 - 33.5	\$1,397,080.12	\$737.47	0.00053	96.93
33.5 - 34.5	\$1,314,970.80	\$3,715.29	0.00283	96.88
34.5 - 35.5	\$1,283,490.81	\$0.00	0.00000	96.60
35.5 - 36.5	\$1,225,907.73	\$4,174.51	0.00341	96.60

**ONG**  
**Electric Division**  
**365.20 Rights of Way**  
**Observed Life Table**  
**Retirement Expr. 1983 TO 2014**  
**Placement Years 1926 TO 2013**

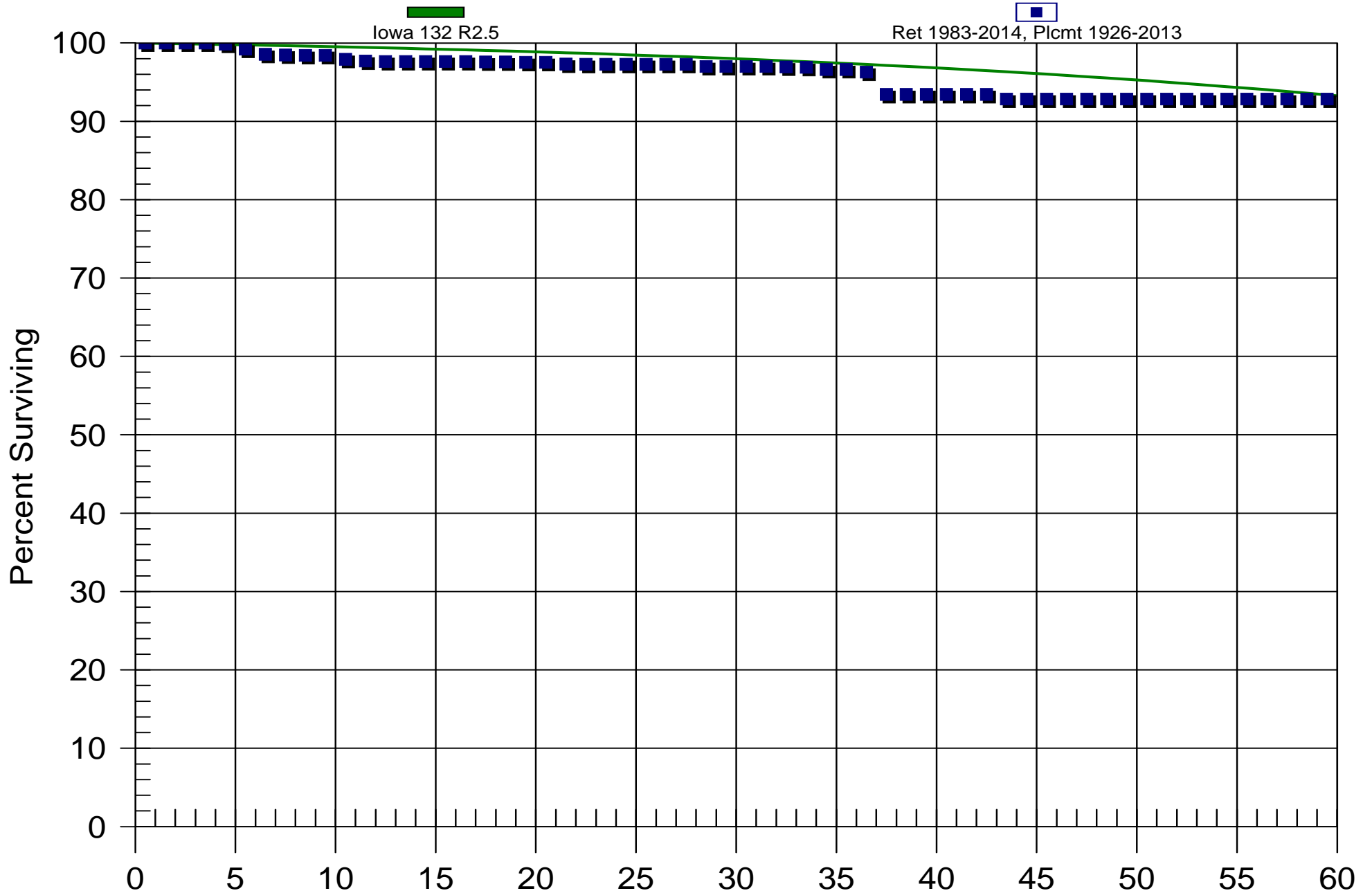
<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
36.5 - 37.5	\$969,312.82	\$28,561.95	0.02947	96.27
37.5 - 38.5	\$820,918.24	\$0.00	0.00000	93.44
38.5 - 39.5	\$767,395.75	\$0.00	0.00000	93.44
39.5 - 40.5	\$754,190.36	\$0.00	0.00000	93.44
40.5 - 41.5	\$717,871.09	\$0.00	0.00000	93.44
41.5 - 42.5	\$576,538.63	\$0.00	0.00000	93.44
42.5 - 43.5	\$556,730.48	\$3,492.97	0.00627	93.44
43.5 - 44.5	\$455,731.63	\$0.00	0.00000	92.85
44.5 - 45.5	\$391,650.87	\$0.00	0.00000	92.85
45.5 - 46.5	\$342,395.03	\$28.39	0.00008	92.85
46.5 - 47.5	\$326,855.88	\$0.00	0.00000	92.84
47.5 - 48.5	\$322,533.30	\$0.00	0.00000	92.84
48.5 - 49.5	\$319,080.88	\$0.00	0.00000	92.84
49.5 - 50.5	\$307,785.62	\$0.00	0.00000	92.84
50.5 - 51.5	\$278,218.51	\$0.00	0.00000	92.84
51.5 - 52.5	\$264,235.68	\$0.00	0.00000	92.84
52.5 - 53.5	\$156,438.80	\$0.00	0.00000	92.84
53.5 - 54.5	\$156,437.18	\$0.00	0.00000	92.84
54.5 - 55.5	\$157,606.13	\$0.00	0.00000	92.84
55.5 - 56.5	\$163,253.22	\$0.00	0.00000	92.84
56.5 - 57.5	\$195,166.05	\$0.00	0.00000	92.84
57.5 - 58.5	\$183,523.34	\$0.00	0.00000	92.84
58.5 - 59.5	\$178,970.61	\$0.00	0.00000	92.84
59.5 - 60.5	\$171,173.55	\$0.00	0.00000	92.84
60.5 - 61.5	\$160,139.69	\$0.00	0.00000	92.84
61.5 - 62.5	\$117,568.25	\$0.00	0.00000	92.84
62.5 - 63.5	\$67,814.24	\$0.00	0.00000	92.84
63.5 - 64.5	\$67,711.63	\$0.00	0.00000	92.84
64.5 - 65.5	\$53,587.18	\$0.00	0.00000	92.84
65.5 - 66.5	\$53,386.72	\$0.00	0.00000	92.84
66.5 - 67.5	\$53,386.72	\$0.00	0.00000	92.84
67.5 - 68.5	\$48,926.05	\$0.00	0.00000	92.84
68.5 - 69.5	\$48,926.05	\$0.00	0.00000	92.84
69.5 - 70.5	\$48,926.05	\$0.00	0.00000	92.84
70.5 - 71.5	\$48,223.30	\$0.00	0.00000	92.84
71.5 - 72.5	\$43,149.55	\$0.00	0.00000	92.84
72.5 - 73.5	\$41,637.22	\$34.21	0.00082	92.84

**ONG**  
**Electric Division**  
**365.20 Rights of Way**  
**Observed Life Table**  
**Retirement Expr. 1983 TO 2014**  
**Placement Years 1926 TO 2013**

<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
73.5 - 74.5	\$41,603.01	\$0.00	0.00000	92.77
74.5 - 75.5	\$41,603.01	\$0.00	0.00000	92.77
75.5 - 76.5	\$41,603.01	\$0.00	0.00000	92.77
76.5 - 77.5	\$41,603.01	\$0.00	0.00000	92.77
77.5 - 78.5	\$41,603.01	\$0.00	0.00000	92.77
78.5 - 79.5	\$41,603.01	\$0.00	0.00000	92.77
79.5 - 80.5	\$41,603.01	\$0.00	0.00000	92.77
80.5 - 81.5	\$41,603.01	\$0.00	0.00000	92.77
81.5 - 82.5	\$41,590.48	\$0.00	0.00000	92.77
82.5 - 83.5	\$41,590.48	\$0.00	0.00000	92.77
83.5 - 84.5	\$41,590.48	\$0.00	0.00000	92.77
84.5 - 85.5	\$41,590.48	\$0.00	0.00000	92.77
85.5 - 86.5	\$41,590.48	\$0.00	0.00000	92.77
86.5 - 87.5	\$40,421.53	\$0.00	0.00000	92.77
87.5 - 88.5	\$31,878.62	\$0.00	0.00000	92.77

# ONG

## Electric Division 365.20 Rights of Way Original And Smooth Survivor Curves



**ONG**  
**Electric Division**  
**366.20 Meas. And Reg. Stat. Structures**

**Observed Life Table**  
**Retirement Expr. 1983 TO 2014**  
**Placement Years 1949 TO 2010**

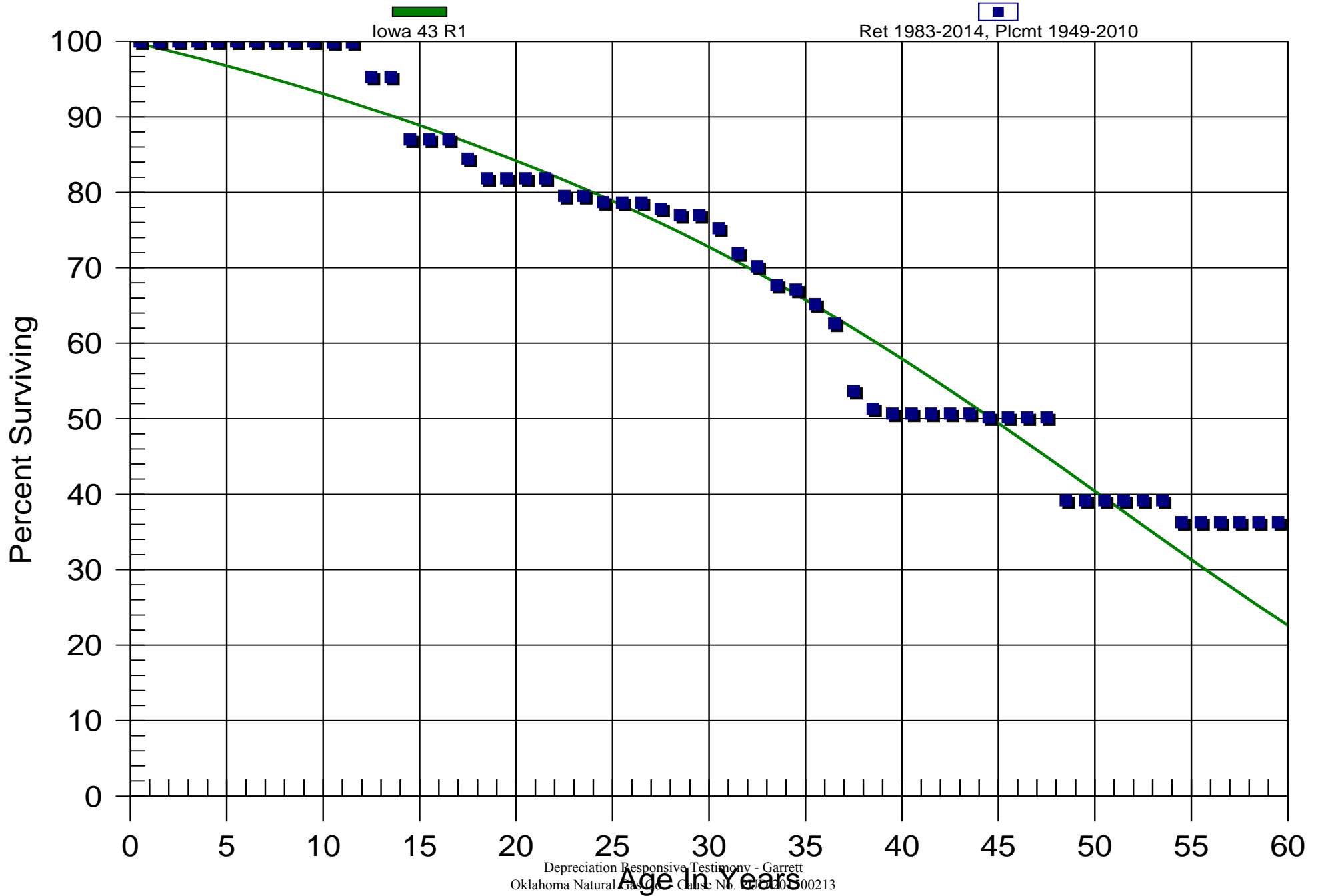
<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
0.0 - 0.5	\$141,072.13	\$0.00	0.00000	100.00
0.5 - 1.5	\$146,286.67	\$0.00	0.00000	100.00
1.5 - 2.5	\$148,335.45	\$0.00	0.00000	100.00
2.5 - 3.5	\$149,243.14	\$0.00	0.00000	100.00
3.5 - 4.5	\$149,243.14	\$0.00	0.00000	100.00
4.5 - 5.5	\$79,277.62	\$0.00	0.00000	100.00
5.5 - 6.5	\$82,911.06	\$0.00	0.00000	100.00
6.5 - 7.5	\$82,911.06	\$0.00	0.00000	100.00
7.5 - 8.5	\$83,338.44	\$0.00	0.00000	100.00
8.5 - 9.5	\$83,362.29	\$0.00	0.00000	100.00
9.5 - 10.5	\$83,362.29	\$98.77	0.00118	100.00
10.5 - 11.5	\$83,681.77	\$0.00	0.00000	99.88
11.5 - 12.5	\$87,405.72	\$4,018.88	0.04598	99.88
12.5 - 13.5	\$69,654.77	\$0.00	0.00000	95.29
13.5 - 14.5	\$69,654.77	\$6,052.84	0.08690	95.29
14.5 - 15.5	\$65,553.23	\$0.00	0.00000	87.01
15.5 - 16.5	\$66,581.01	\$0.00	0.00000	87.01
16.5 - 17.5	\$67,932.01	\$1,993.20	0.02934	87.01
17.5 - 18.5	\$66,290.87	\$2,048.78	0.03091	84.46
18.5 - 19.5	\$65,299.07	\$0.00	0.00000	81.85
19.5 - 20.5	\$66,723.62	\$0.00	0.00000	81.85
20.5 - 21.5	\$65,622.34	\$0.00	0.00000	81.85
21.5 - 22.5	\$62,700.36	\$1,780.25	0.02839	81.85
22.5 - 23.5	\$60,920.11	\$0.00	0.00000	79.52
23.5 - 24.5	\$41,083.10	\$427.38	0.01040	79.52
24.5 - 25.5	\$39,636.25	\$23.85	0.00060	78.69
25.5 - 26.5	\$39,612.40	\$0.00	0.00000	78.65
26.5 - 27.5	\$39,612.40	\$418.25	0.01056	78.65
27.5 - 28.5	\$39,359.62	\$429.12	0.01090	77.82
28.5 - 29.5	\$38,930.50	\$0.00	0.00000	76.97
29.5 - 30.5	\$36,047.12	\$811.64	0.02252	76.97
30.5 - 31.5	\$35,235.48	\$1,539.17	0.04368	75.24
31.5 - 32.5	\$42,271.46	\$1,027.78	0.02431	71.95
32.5 - 33.5	\$38,049.04	\$1,351.00	0.03551	70.20
33.5 - 34.5	\$38,486.83	\$352.06	0.00915	67.71
34.5 - 35.5	\$37,227.08	\$1,056.98	0.02839	67.09
35.5 - 36.5	\$36,170.10	\$1,424.55	0.03938	65.18

**ONG**  
**Electric Division**  
**366.20 Meas. And Reg. Stat. Structures**  
**Observed Life Table**  
**Retirement Expr. 1983 TO 2014**  
**Placement Years 1949 TO 2010**

<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
36.5 - 37.5	\$24,746.43	\$3,532.39	0.14274	62.62
37.5 - 38.5	\$18,392.24	\$805.71	0.04381	53.68
38.5 - 39.5	\$17,586.53	\$225.46	0.01282	51.33
39.5 - 40.5	\$17,361.07	\$0.00	0.00000	50.67
40.5 - 41.5	\$17,361.07	\$0.00	0.00000	50.67
41.5 - 42.5	\$17,361.07	\$0.00	0.00000	50.67
42.5 - 43.5	\$17,361.07	\$0.00	0.00000	50.67
43.5 - 44.5	\$17,361.07	\$165.47	0.00953	50.67
44.5 - 45.5	\$17,195.60	\$0.00	0.00000	50.19
45.5 - 46.5	\$17,195.60	\$0.00	0.00000	50.19
46.5 - 47.5	\$16,783.47	\$0.00	0.00000	50.19
47.5 - 48.5	\$16,783.47	\$3,677.46	0.21911	50.19
48.5 - 49.5	\$13,106.01	\$0.00	0.00000	39.19
49.5 - 50.5	\$13,106.01	\$0.00	0.00000	39.19
50.5 - 51.5	\$13,106.01	\$0.00	0.00000	39.19
51.5 - 52.5	\$13,106.01	\$0.00	0.00000	39.19
52.5 - 53.5	\$13,106.01	\$0.00	0.00000	39.19
53.5 - 54.5	\$13,106.01	\$970.57	0.07406	39.19
54.5 - 55.5	\$12,135.44	\$0.00	0.00000	36.29
55.5 - 56.5	\$10,847.32	\$0.00	0.00000	36.29
56.5 - 57.5	\$10,847.32	\$0.00	0.00000	36.29
57.5 - 58.5	\$10,847.32	\$0.00	0.00000	36.29
58.5 - 59.5	\$10,847.32	\$0.00	0.00000	36.29
59.5 - 60.5	\$10,847.32	\$0.00	0.00000	36.29
60.5 - 61.5	\$10,847.32	\$0.00	0.00000	36.29
61.5 - 62.5	\$5,715.91	\$0.00	0.00000	36.29
62.5 - 63.5	\$5,715.91	\$0.00	0.00000	36.29
63.5 - 64.5	\$1,788.79	\$0.00	0.00000	36.29
64.5 - 65.5	\$1,788.79	\$0.00	0.00000	36.29

# ONG

## Electric Division 366.20 Meas. And Reg. Stat. Structures Original And Smooth Survivor Curves



Iowa 43 R1

Ret 1983-2014, Plcmt 1949-2010



**ONG**  
**Electric Division**  
**367.00 Mains**  
**Observed Life Table**  
**Retirement Expr. 1983 TO 2014**  
**Placement Years 1926 TO 2014**

<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
0.0 - 0.5	\$92,768,336.48	\$120,541.83	0.00130	100.00
0.5 - 1.5	\$88,823,093.35	\$957,690.50	0.01078	99.87
1.5 - 2.5	\$85,925,226.06	\$924,071.34	0.01075	98.79
2.5 - 3.5	\$79,561,657.33	\$115,034.94	0.00145	97.73
3.5 - 4.5	\$73,699,797.89	\$484,488.76	0.00657	97.59
4.5 - 5.5	\$70,409,902.43	\$73,959.78	0.00105	96.95
5.5 - 6.5	\$69,965,187.36	\$661,464.55	0.00945	96.85
6.5 - 7.5	\$55,568,339.45	\$147,033.70	0.00265	95.93
7.5 - 8.5	\$54,625,558.57	\$96,215.41	0.00176	95.68
8.5 - 9.5	\$52,741,605.83	\$31,202.96	0.00059	95.51
9.5 - 10.5	\$54,589,216.68	\$124,122.54	0.00227	95.45
10.5 - 11.5	\$51,491,087.58	\$125,579.72	0.00244	95.23
11.5 - 12.5	\$50,319,331.35	\$128,078.98	0.00255	95.00
12.5 - 13.5	\$50,621,838.44	\$92,563.93	0.00183	94.76
13.5 - 14.5	\$49,863,816.82	\$35,858.42	0.00072	94.59
14.5 - 15.5	\$47,380,977.67	\$24,011.85	0.00051	94.52
15.5 - 16.5	\$46,424,933.86	\$77,861.52	0.00168	94.47
16.5 - 17.5	\$46,138,139.68	\$163,835.21	0.00355	94.31
17.5 - 18.5	\$45,550,205.80	\$19,962.85	0.00044	93.98
18.5 - 19.5	\$46,320,154.91	\$199,894.55	0.00432	93.94
19.5 - 20.5	\$44,434,580.18	\$75,584.91	0.00170	93.53
20.5 - 21.5	\$44,854,565.61	\$17,916.60	0.00040	93.37
21.5 - 22.5	\$42,758,607.03	\$25,779.51	0.00060	93.34
22.5 - 23.5	\$41,544,863.83	\$45,357.84	0.00109	93.28
23.5 - 24.5	\$39,355,802.26	\$58,408.13	0.00148	93.18
24.5 - 25.5	\$36,721,494.18	\$19,432.23	0.00053	93.04
25.5 - 26.5	\$35,650,920.40	\$97,563.22	0.00274	92.99
26.5 - 27.5	\$35,047,137.14	\$61,360.71	0.00175	92.73
27.5 - 28.5	\$34,912,431.44	\$75,677.37	0.00217	92.57
28.5 - 29.5	\$34,865,371.10	\$29,004.12	0.00083	92.37
29.5 - 30.5	\$34,867,746.09	\$62,507.09	0.00179	92.30
30.5 - 31.5	\$36,429,786.67	\$511.77	0.00001	92.13
31.5 - 32.5	\$34,503,465.30	\$183,124.64	0.00531	92.13
32.5 - 33.5	\$33,211,435.23	\$590,760.34	0.01779	91.64
33.5 - 34.5	\$32,189,125.16	\$8,657.18	0.00027	90.01
34.5 - 35.5	\$30,950,167.65	\$40,559.49	0.00131	89.99
35.5 - 36.5	\$30,091,654.89	\$111,248.51	0.00370	89.87

**ONG**  
**Electric Division**  
**367.00 Mains**  
**Observed Life Table**  
**Retirement Expr. 1983 TO 2014**  
**Placement Years 1926 TO 2014**

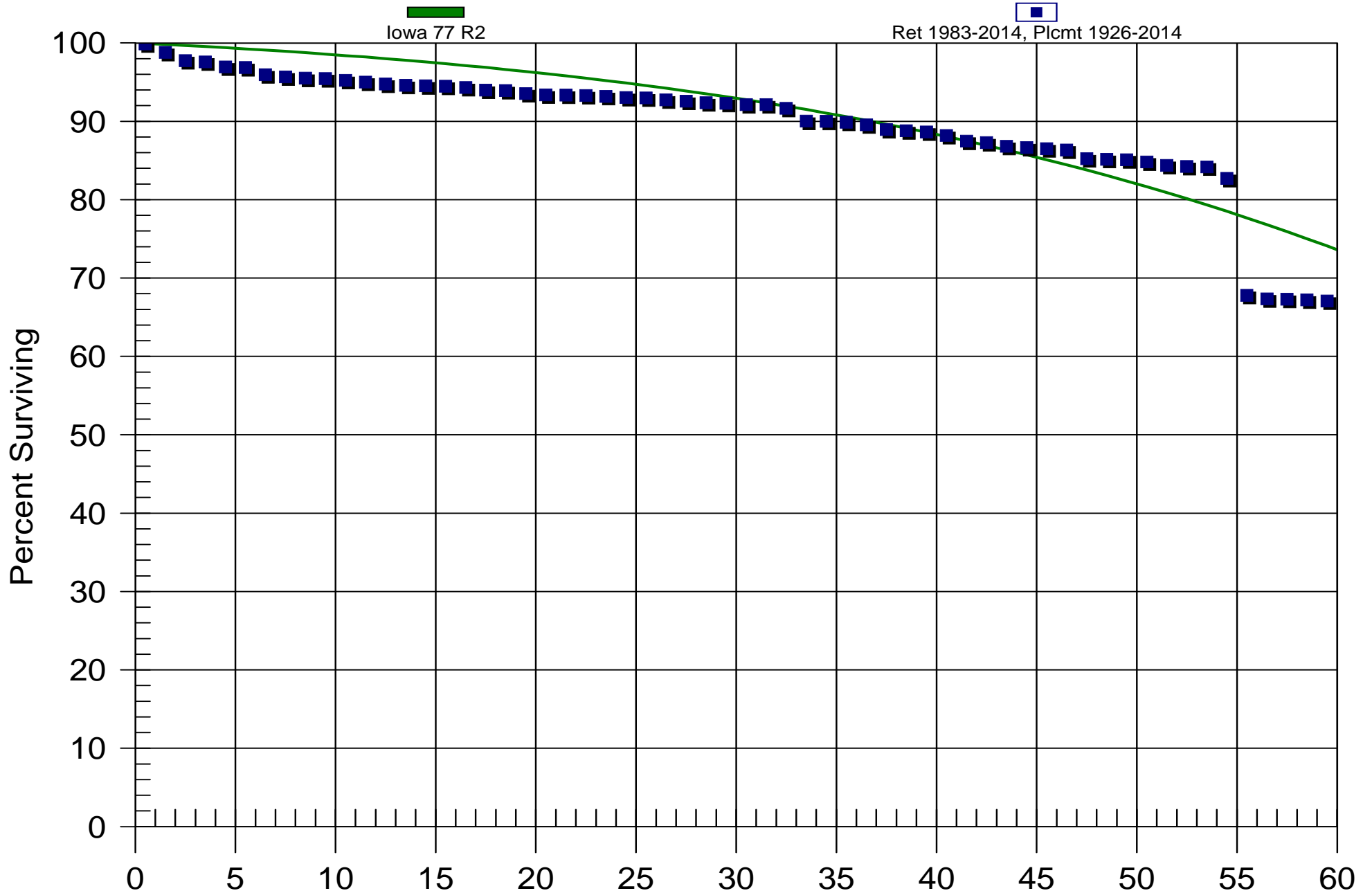
<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
36.5 - 37.5	\$27,385,175.95	\$179,713.81	0.00656	89.53
37.5 - 38.5	\$25,828,858.70	\$39,203.40	0.00152	88.95
38.5 - 39.5	\$24,944,226.30	\$50,722.46	0.00203	88.81
39.5 - 40.5	\$24,436,483.87	\$117,748.07	0.00482	88.63
40.5 - 41.5	\$21,917,857.06	\$179,176.07	0.00817	88.20
41.5 - 42.5	\$19,042,688.20	\$42,175.82	0.00221	87.48
42.5 - 43.5	\$18,368,437.45	\$99,102.97	0.00540	87.29
43.5 - 44.5	\$17,625,802.13	\$33,599.25	0.00191	86.82
44.5 - 45.5	\$16,929,206.55	\$29,380.23	0.00174	86.65
45.5 - 46.5	\$15,575,647.38	\$31,829.10	0.00204	86.50
46.5 - 47.5	\$15,110,171.30	\$190,395.05	0.01260	86.33
47.5 - 48.5	\$14,499,647.25	\$15,362.33	0.00106	85.24
48.5 - 49.5	\$14,196,118.78	\$9,766.36	0.00069	85.15
49.5 - 50.5	\$13,878,548.33	\$46,816.97	0.00337	85.09
50.5 - 51.5	\$12,857,995.70	\$64,659.08	0.00503	84.80
51.5 - 52.5	\$12,058,267.52	\$21,646.97	0.00180	84.38
52.5 - 53.5	\$8,991,849.30	\$4,906.64	0.00055	84.22
53.5 - 54.5	\$8,857,512.31	\$153,756.32	0.01736	84.18
54.5 - 55.5	\$8,536,776.70	\$1,541,166.75	0.18053	82.72
55.5 - 56.5	\$6,681,939.98	\$44,034.17	0.00659	67.78
56.5 - 57.5	\$6,868,483.67	\$6,257.57	0.00091	67.34
57.5 - 58.5	\$6,592,694.56	\$6,742.42	0.00102	67.28
58.5 - 59.5	\$6,405,632.83	\$12,056.92	0.00188	67.21
59.5 - 60.5	\$6,499,701.08	\$52,614.37	0.00809	67.08
60.5 - 61.5	\$5,760,958.70	\$10,851.03	0.00188	66.54
61.5 - 62.5	\$4,347,733.72	\$1,720.34	0.00040	66.41
62.5 - 63.5	\$1,324,564.41	\$3,829.71	0.00289	66.39
63.5 - 64.5	\$1,229,569.87	\$0.00	0.00000	66.19
64.5 - 65.5	\$1,089,795.15	\$0.00	0.00000	66.19
65.5 - 66.5	\$836,812.33	\$308.76	0.00037	66.19
66.5 - 67.5	\$777,970.58	\$0.00	0.00000	66.17
67.5 - 68.5	\$565,659.68	\$0.00	0.00000	66.17
68.5 - 69.5	\$564,168.73	\$0.00	0.00000	66.17
69.5 - 70.5	\$564,168.73	\$0.00	0.00000	66.17
70.5 - 71.5	\$510,186.77	\$0.00	0.00000	66.17
71.5 - 72.5	\$443,289.88	\$860.43	0.00194	66.17
72.5 - 73.5	\$442,429.45	\$0.00	0.00000	66.04

**ONG**  
**Electric Division**  
**367.00 Mains**  
**Observed Life Table**  
**Retirement Expr. 1983 TO 2014**  
**Placement Years 1926 TO 2014**

<i>Age Interval</i>	<i>\$ Surviving At Beginning of Age Interval</i>	<i>\$ Retired During The Age Interval</i>	<i>Retirement Ratio</i>	<i>% Surviving At Beginning of Age Interval</i>
73.5 - 74.5	\$442,429.45	\$0.00	0.00000	66.04
74.5 - 75.5	\$441,052.13	\$0.00	0.00000	66.04
75.5 - 76.5	\$441,052.13	\$0.00	0.00000	66.04
76.5 - 77.5	\$441,052.13	\$0.00	0.00000	66.04
77.5 - 78.5	\$441,052.13	\$0.00	0.00000	66.04
78.5 - 79.5	\$441,052.13	\$3,629.22	0.00823	66.04
79.5 - 80.5	\$437,422.91	\$673.42	0.00154	65.50
80.5 - 81.5	\$436,749.49	\$0.00	0.00000	65.40
81.5 - 82.5	\$436,749.49	\$0.00	0.00000	65.40
82.5 - 83.5	\$436,749.49	\$0.00	0.00000	65.40
83.5 - 84.5	\$436,749.49	\$0.00	0.00000	65.40
84.5 - 85.5	\$430,482.51	\$0.00	0.00000	65.40
85.5 - 86.5	\$430,482.51	\$22.06	0.00005	65.40
86.5 - 87.5	\$429,748.59	\$195.81	0.00046	65.39
87.5 - 88.5	\$429,376.67	\$0.00	0.00000	65.36

# ONG

## Electric Division 367.00 Mains Original And Smooth Survivor Curves



**ONG**  
**Electric Division**  
**369.00 Meas. And Reg. Stat. Equipments**

**Observed Life Table**  
**Retirement Expr. 1983 TO 2014**  
**Placement Years 1940 TO 2013**

<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
0.0 - 0.5	\$5,273,017.73	\$0.00	0.00000	100.00
0.5 - 1.5	\$5,332,544.37	\$0.00	0.00000	100.00
1.5 - 2.5	\$4,896,760.07	\$160.82	0.00003	100.00
2.5 - 3.5	\$3,661,007.68	\$23,495.49	0.00642	100.00
3.5 - 4.5	\$3,641,761.24	\$41,640.78	0.01143	99.35
4.5 - 5.5	\$3,393,205.43	\$0.00	0.00000	98.22
5.5 - 6.5	\$3,339,122.90	\$4,024.14	0.00121	98.22
6.5 - 7.5	\$3,086,591.07	\$24.10	0.00001	98.10
7.5 - 8.5	\$3,096,587.72	\$17,930.71	0.00579	98.10
8.5 - 9.5	\$3,120,437.60	\$8,412.70	0.00270	97.53
9.5 - 10.5	\$3,096,820.52	\$18,848.50	0.00609	97.27
10.5 - 11.5	\$2,987,903.43	\$21,227.86	0.00710	96.68
11.5 - 12.5	\$2,850,955.95	\$25,762.95	0.00904	95.99
12.5 - 13.5	\$2,722,980.02	\$46,097.68	0.01693	95.12
13.5 - 14.5	\$2,588,269.69	\$4,498.28	0.00174	93.51
14.5 - 15.5	\$2,591,102.00	\$15,574.10	0.00601	93.35
15.5 - 16.5	\$2,461,029.82	\$61,807.34	0.02511	92.79
16.5 - 17.5	\$2,421,795.55	\$137,467.44	0.05676	90.46
17.5 - 18.5	\$2,263,290.20	\$10,928.53	0.00483	85.32
18.5 - 19.5	\$2,245,419.21	\$25,984.33	0.01157	84.91
19.5 - 20.5	\$2,164,098.53	\$28,696.32	0.01326	83.93
20.5 - 21.5	\$2,108,527.53	\$5,755.18	0.00273	82.82
21.5 - 22.5	\$1,906,742.12	\$1,364.92	0.00072	82.59
22.5 - 23.5	\$1,829,218.90	\$55,606.38	0.03040	82.53
23.5 - 24.5	\$1,158,844.09	\$12,303.73	0.01062	80.02
24.5 - 25.5	\$962,016.75	\$65,818.40	0.06842	79.17
25.5 - 26.5	\$893,787.55	\$7,739.11	0.00866	73.76
26.5 - 27.5	\$810,786.72	\$10,126.72	0.01249	73.12
27.5 - 28.5	\$801,384.54	\$20,971.62	0.02617	72.20
28.5 - 29.5	\$700,982.12	\$1,448.66	0.00207	70.31
29.5 - 30.5	\$698,172.43	\$303.35	0.00043	70.17
30.5 - 31.5	\$660,911.85	\$5,297.89	0.00802	70.14
31.5 - 32.5	\$652,983.82	\$570.22	0.00087	69.58
32.5 - 33.5	\$639,773.88	\$30,594.63	0.04782	69.52
33.5 - 34.5	\$535,045.20	\$3,210.30	0.00600	66.19
34.5 - 35.5	\$469,056.18	\$6,451.72	0.01375	65.79
35.5 - 36.5	\$392,620.77	\$6,595.82	0.01680	64.89

**ONG**  
**Electric Division**

**369.00 Meas. And Reg. Stat. Equipments**

**Observed Life Table**  
**Retirement Expr. 1983 TO 2014**  
**Placement Years 1940 TO 2013**

<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
36.5 - 37.5	\$386,170.44	\$37,106.12	0.09609	63.80
37.5 - 38.5	\$271,868.74	\$12,287.89	0.04520	57.67
38.5 - 39.5	\$247,687.17	\$2,177.92	0.00879	55.06
39.5 - 40.5	\$231,354.87	\$1,356.70	0.00586	54.58
40.5 - 41.5	\$221,232.77	\$8,984.05	0.04061	54.26
41.5 - 42.5	\$212,194.43	\$537.29	0.00253	52.05
42.5 - 43.5	\$206,080.15	\$0.00	0.00000	51.92
43.5 - 44.5	\$205,056.57	\$1,632.79	0.00796	51.92
44.5 - 45.5	\$180,381.74	\$737.23	0.00409	51.51
45.5 - 46.5	\$175,751.79	\$40,023.57	0.22773	51.30
46.5 - 47.5	\$133,938.45	\$14,634.28	0.10926	39.62
47.5 - 48.5	\$116,121.04	\$0.00	0.00000	35.29
48.5 - 49.5	\$113,663.85	\$0.00	0.00000	35.29
49.5 - 50.5	\$94,957.56	\$2,972.51	0.03130	35.29
50.5 - 51.5	\$87,113.14	\$0.00	0.00000	34.18
51.5 - 52.5	\$87,097.97	\$0.00	0.00000	34.18
52.5 - 53.5	\$78,780.17	\$0.00	0.00000	34.18
53.5 - 54.5	\$76,242.67	\$0.00	0.00000	34.18
54.5 - 55.5	\$72,598.75	\$17,744.65	0.24442	34.18
55.5 - 56.5	\$53,786.27	\$0.00	0.00000	25.83
56.5 - 57.5	\$46,807.87	\$0.00	0.00000	25.83
57.5 - 58.5	\$46,807.87	\$2,888.92	0.06172	25.83
58.5 - 59.5	\$41,670.72	\$0.00	0.00000	24.23
59.5 - 60.5	\$40,946.18	\$0.00	0.00000	24.23
60.5 - 61.5	\$19,488.92	\$0.00	0.00000	24.23
61.5 - 62.5	\$19,488.92	\$0.00	0.00000	24.23
62.5 - 63.5	\$9,075.45	\$0.00	0.00000	24.23
63.5 - 64.5	\$9,075.45	\$0.00	0.00000	24.23
64.5 - 65.5	\$5,241.82	\$0.00	0.00000	24.23
65.5 - 66.5	\$1,687.71	\$0.00	0.00000	24.23
66.5 - 67.5	\$1,687.71	\$0.00	0.00000	24.23
67.5 - 68.5	\$1,687.71	\$0.00	0.00000	24.23
68.5 - 69.5	\$397.04	\$0.00	0.00000	24.23
69.5 - 70.5	\$397.04	\$0.00	0.00000	24.23
70.5 - 71.5	\$397.04	\$0.00	0.00000	24.23
71.5 - 72.5	\$397.04	\$0.00	0.00000	24.23
72.5 - 73.5	\$126.28	\$0.00	0.00000	24.23

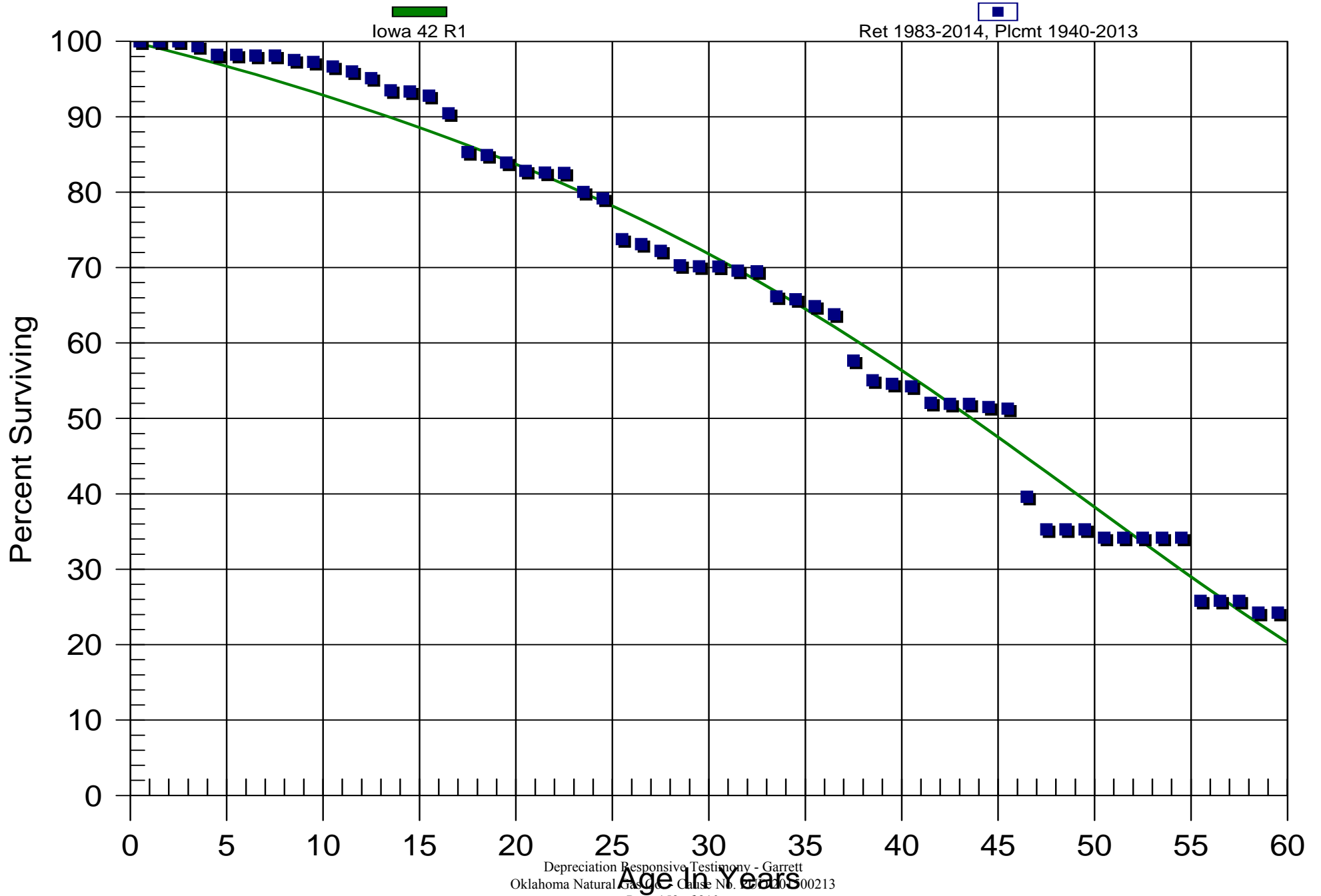
**ONG**  
**Electric Division**  
**369.00 Meas. And Reg. Stat. Equipments**

**Observed Life Table**  
**Retirement Expr. 1983 TO 2014**  
**Placement Years 1940 TO 2013**

<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
73.5 - 74.5	\$126.28	\$0.00	0.00000	24.23

# ONG

## Electric Division 369.00 Meas. And Reg. Stat. Equipments Original And Smooth Survivor Curves



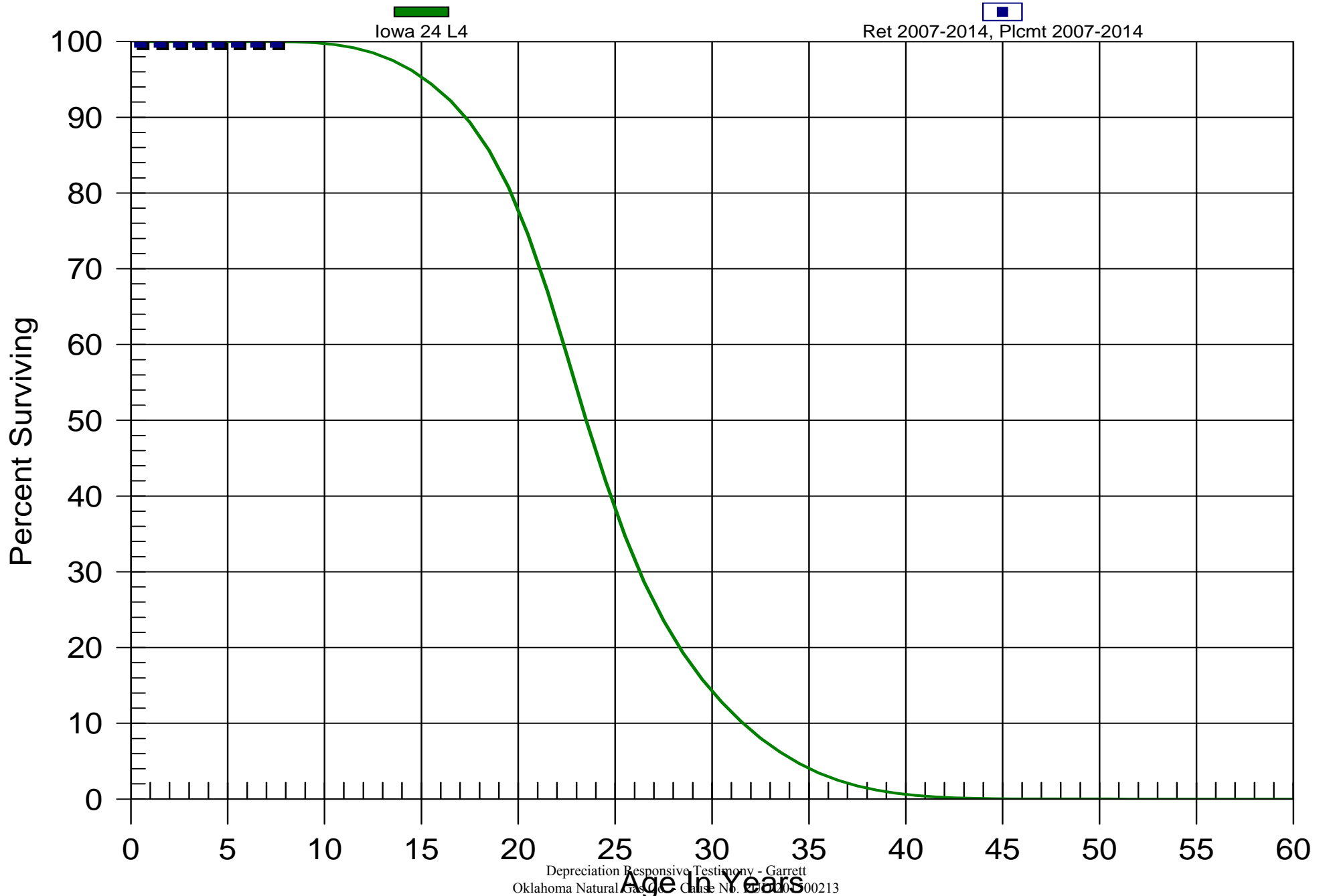


**ONG**  
**Electric Division**  
**374.20 Rights of Way**  
**Observed Life Table**  
**Retirement Expr. 2007 TO 2014**  
**Placement Years 2007 TO 2014**

<i>Age Interval</i>	<i>\$ Surviving At Beginning of Age Interval</i>	<i>\$ Retired During The Age Interval</i>	<i>Retirement Ratio</i>	<i>% Surviving At Beginning of Age Interval</i>
0.0 - 0.5	\$103,942.22	\$0.00	0.00000	100.00
0.5 - 1.5	\$58,736.71	\$0.00	0.00000	100.00
1.5 - 2.5	\$52,023.68	\$0.00	0.00000	100.00
2.5 - 3.5	\$9,896.44	\$0.00	0.00000	100.00
3.5 - 4.5	\$0.00	\$0.00	0.00000	100.00
4.5 - 5.5	\$54,803.09	\$0.00	0.00000	100.00
5.5 - 6.5	\$54,803.09	\$0.00	0.00000	100.00
6.5 - 7.5	\$54,803.09	\$0.00	0.00000	100.00

# ONG

## Electric Division 374.20 Rights of Way Original And Smooth Survivor Curves



**ONG**  
**Electric Division**  
**375.10 District Regulator Structures**

**Observed Life Table**  
**Retirement Expr. 1983 TO 2014**  
**Placement Years 1926 TO 2012**

<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
0.0 - 0.5	\$1,251,332.28	\$0.00	0.00000	100.00
0.5 - 1.5	\$1,248,962.11	\$0.00	0.00000	100.00
1.5 - 2.5	\$1,228,611.71	\$0.00	0.00000	100.00
2.5 - 3.5	\$642,186.66	\$215,015.04	0.33482	100.00
3.5 - 4.5	\$328,819.58	\$0.00	0.00000	66.52
4.5 - 5.5	\$150,887.11	\$0.00	0.00000	66.52
5.5 - 6.5	\$148,089.11	\$14,991.59	0.10123	66.52
6.5 - 7.5	\$132,415.05	\$0.00	0.00000	59.78
7.5 - 8.5	\$132,565.05	\$0.00	0.00000	59.78
8.5 - 9.5	\$132,732.05	\$0.00	0.00000	59.78
9.5 - 10.5	\$132,732.05	\$0.00	0.00000	59.78
10.5 - 11.5	\$132,732.05	\$576.98	0.00435	59.78
11.5 - 12.5	\$94,612.91	\$0.00	0.00000	59.52
12.5 - 13.5	\$95,038.64	\$392.83	0.00413	59.52
13.5 - 14.5	\$94,742.50	\$199.90	0.00211	59.28
14.5 - 15.5	\$59,261.44	\$652.78	0.01102	59.15
15.5 - 16.5	\$58,608.66	\$0.00	0.00000	58.50
16.5 - 17.5	\$52,083.29	\$0.00	0.00000	58.50
17.5 - 18.5	\$55,696.04	\$0.00	0.00000	58.50
18.5 - 19.5	\$56,730.68	\$0.00	0.00000	58.50
19.5 - 20.5	\$59,096.54	\$1,573.10	0.02662	58.50
20.5 - 21.5	\$69,229.53	\$5,218.79	0.07538	56.94
21.5 - 22.5	\$68,470.56	\$0.00	0.00000	52.65
22.5 - 23.5	\$68,506.54	\$3,897.69	0.05690	52.65
23.5 - 24.5	\$37,746.39	\$0.00	0.00000	49.66
24.5 - 25.5	\$31,709.97	\$2,952.18	0.09310	49.66
25.5 - 26.5	\$28,757.79	\$1,095.33	0.03809	45.03
26.5 - 27.5	\$27,662.46	\$0.00	0.00000	43.32
27.5 - 28.5	\$26,254.20	\$0.00	0.00000	43.32
28.5 - 29.5	\$24,894.35	\$1,010.44	0.04059	43.32
29.5 - 30.5	\$23,883.91	\$0.00	0.00000	41.56
30.5 - 31.5	\$29,727.97	\$0.00	0.00000	41.56
31.5 - 32.5	\$33,629.77	\$0.00	0.00000	41.56
32.5 - 33.5	\$41,133.81	\$263.08	0.00640	41.56
33.5 - 34.5	\$41,226.23	\$440.34	0.01068	41.29
34.5 - 35.5	\$54,677.30	\$0.00	0.00000	40.85
35.5 - 36.5	\$62,181.30	\$626.81	0.01008	40.85

**ONG**  
**Electric Division**  
**375.10 District Regulator Structures**

**Observed Life Table**  
**Retirement Expr. 1983 TO 2014**  
**Placement Years 1926 TO 2012**

<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
36.5 - 37.5	\$63,535.43	\$0.00	0.00000	40.44
37.5 - 38.5	\$65,678.37	\$100.00	0.00152	40.44
38.5 - 39.5	\$65,634.70	\$0.00	0.00000	40.38
39.5 - 40.5	\$69,795.10	\$704.69	0.01010	40.38
40.5 - 41.5	\$80,375.88	\$0.00	0.00000	39.97
41.5 - 42.5	\$82,163.90	\$1,777.73	0.02164	39.97
42.5 - 43.5	\$82,032.66	\$927.75	0.01131	39.11
43.5 - 44.5	\$82,527.34	\$4,021.95	0.04873	38.66
44.5 - 45.5	\$79,594.02	\$1,342.67	0.01687	36.78
45.5 - 46.5	\$80,249.37	\$4,425.98	0.05515	36.16
46.5 - 47.5	\$76,135.23	\$5,790.78	0.07606	34.17
47.5 - 48.5	\$70,344.45	\$827.00	0.01176	31.57
48.5 - 49.5	\$69,423.21	\$1,521.14	0.02191	31.20
49.5 - 50.5	\$65,114.99	\$603.68	0.00927	30.51
50.5 - 51.5	\$64,168.67	\$3,222.56	0.05022	30.23
51.5 - 52.5	\$60,946.11	\$10,451.62	0.17149	28.71
52.5 - 53.5	\$47,370.60	\$105.40	0.00223	23.79
53.5 - 54.5	\$60,573.32	\$0.00	0.00000	23.73
54.5 - 55.5	\$63,556.50	\$712.25	0.01121	23.73
55.5 - 56.5	\$67,526.89	\$5,921.93	0.08770	23.47
56.5 - 57.5	\$83,266.28	\$821.78	0.00987	21.41
57.5 - 58.5	\$82,444.50	\$0.00	0.00000	21.20
58.5 - 59.5	\$82,444.50	\$623.20	0.00756	21.20
59.5 - 60.5	\$81,821.30	\$0.00	0.00000	21.04
60.5 - 61.5	\$81,821.30	\$3,667.66	0.04483	21.04
61.5 - 62.5	\$78,153.64	\$2,980.97	0.03814	20.10
62.5 - 63.5	\$69,328.61	\$1,144.49	0.01651	19.33
63.5 - 64.5	\$66,668.66	\$2,009.73	0.03015	19.01
64.5 - 65.5	\$57,865.59	\$12,536.64	0.21665	18.44
65.5 - 66.5	\$44,053.27	\$0.00	0.00000	14.44
66.5 - 67.5	\$41,448.47	\$0.00	0.00000	14.44
67.5 - 68.5	\$38,790.80	\$437.44	0.01128	14.44
68.5 - 69.5	\$37,517.88	\$162.56	0.00433	14.28
69.5 - 70.5	\$35,212.38	\$425.13	0.01207	14.22
70.5 - 71.5	\$34,730.92	\$0.00	0.00000	14.05
71.5 - 72.5	\$34,567.55	\$1,492.00	0.04316	14.05
72.5 - 73.5	\$30,107.03	\$0.00	0.00000	13.44

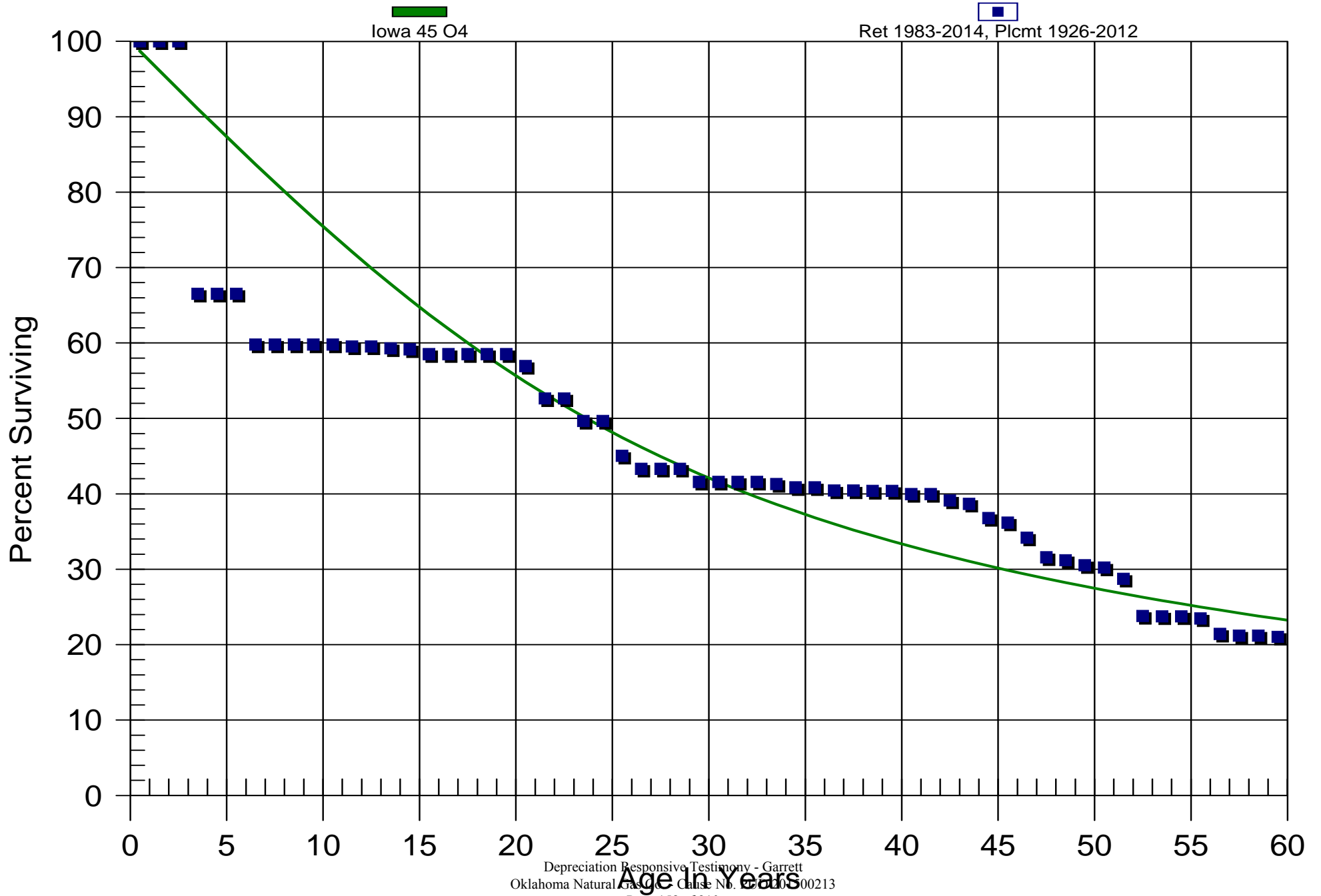
**ONG**  
**Electric Division**  
**375.10 District Regulator Structures**

**Observed Life Table**  
**Retirement Expr. 1983 TO 2014**  
**Placement Years 1926 TO 2012**

<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
73.5 - 74.5	\$29,331.86	\$0.00	0.00000	13.44
74.5 - 75.5	\$28,508.29	\$0.00	0.00000	13.44
75.5 - 76.5	\$27,701.12	\$0.00	0.00000	13.44
76.5 - 77.5	\$26,852.49	\$1,416.89	0.05277	13.44
77.5 - 78.5	\$23,437.58	\$1,414.21	0.06034	12.73
78.5 - 79.5	\$22,023.37	\$0.00	0.00000	11.96
79.5 - 80.5	\$22,023.37	\$0.00	0.00000	11.96
80.5 - 81.5	\$22,023.37	\$437.79	0.01988	11.96
81.5 - 82.5	\$21,585.58	\$0.00	0.00000	11.72
82.5 - 83.5	\$21,585.58	\$0.00	0.00000	11.72
83.5 - 84.5	\$21,585.58	\$0.00	0.00000	11.72
84.5 - 85.5	\$19,010.52	\$0.00	0.00000	11.72
85.5 - 86.5	\$11,567.03	\$0.00	0.00000	11.72
86.5 - 87.5	\$9,579.06	\$0.00	0.00000	11.72
87.5 - 88.5	\$8,857.54	\$0.00	0.00000	11.72

# ONG

## Electric Division 375.10 District Regulator Structures Original And Smooth Survivor Curves



**ONG**  
**Electric Division**  
**375.20 Other District Structures**

**Observed Life Table**  
**Retirement Expr. 1983 TO 2014**  
**Placement Years 1923 TO 2014**

<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
0.0 - 0.5	\$41,499,258.62	\$10,629.00	0.00026	100.00
0.5 - 1.5	\$43,141,788.27	\$173,763.08	0.00403	99.97
1.5 - 2.5	\$43,942,339.53	\$609,367.75	0.01387	99.57
2.5 - 3.5	\$45,926,832.41	\$124,816.41	0.00272	98.19
3.5 - 4.5	\$46,780,025.89	\$114,019.64	0.00244	97.92
4.5 - 5.5	\$48,463,463.89	\$203,969.06	0.00421	97.69
5.5 - 6.5	\$47,537,283.00	\$238,460.47	0.00502	97.27
6.5 - 7.5	\$46,902,130.74	\$574,388.72	0.01225	96.79
7.5 - 8.5	\$46,097,822.37	\$308,037.02	0.00668	95.60
8.5 - 9.5	\$46,547,034.49	\$218,677.49	0.00470	94.96
9.5 - 10.5	\$46,309,407.47	\$130,255.20	0.00281	94.52
10.5 - 11.5	\$45,645,310.88	\$471,833.01	0.01034	94.25
11.5 - 12.5	\$44,385,445.66	\$199,502.11	0.00449	93.28
12.5 - 13.5	\$39,238,014.65	\$546,570.99	0.01393	92.86
13.5 - 14.5	\$30,474,339.19	\$770,637.76	0.02529	91.56
14.5 - 15.5	\$29,179,579.31	\$242,370.02	0.00831	89.25
15.5 - 16.5	\$27,983,251.56	\$114,738.81	0.00410	88.51
16.5 - 17.5	\$27,185,504.61	\$947,915.57	0.03487	88.14
17.5 - 18.5	\$24,949,896.41	\$861,740.03	0.03454	85.07
18.5 - 19.5	\$22,475,487.60	\$3,114,949.22	0.13859	82.13
19.5 - 20.5	\$19,383,879.51	\$596,563.62	0.03078	70.75
20.5 - 21.5	\$18,637,116.46	\$431,623.05	0.02316	68.57
21.5 - 22.5	\$17,700,866.46	\$242,456.96	0.01370	66.98
22.5 - 23.5	\$17,195,054.14	\$153,017.66	0.00890	66.07
23.5 - 24.5	\$14,744,658.69	\$402,152.40	0.02727	65.48
24.5 - 25.5	\$14,204,955.67	\$225,235.53	0.01586	63.69
25.5 - 26.5	\$14,166,308.30	\$52,638.01	0.00372	62.68
26.5 - 27.5	\$13,912,831.41	\$306,019.48	0.02200	62.45
27.5 - 28.5	\$13,583,892.22	\$41,529.12	0.00306	61.08
28.5 - 29.5	\$13,123,397.36	\$84,819.68	0.00646	60.89
29.5 - 30.5	\$12,471,880.26	\$22,657.21	0.00182	60.50
30.5 - 31.5	\$10,187,047.55	\$152,932.49	0.01501	60.39
31.5 - 32.5	\$10,952,411.51	\$120,089.30	0.01096	59.48
32.5 - 33.5	\$9,807,078.53	\$41,748.65	0.00426	58.83
33.5 - 34.5	\$9,432,980.43	\$82,563.83	0.00875	58.58
34.5 - 35.5	\$7,492,918.46	\$14,937.23	0.00199	58.06
35.5 - 36.5	\$7,358,584.95	\$52,060.57	0.00707	57.95

**ONG**  
**Electric Division**  
**375.20 Other District Structures**

**Observed Life Table**  
**Retirement Expr. 1983 TO 2014**  
**Placement Years 1923 TO 2014**

<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
36.5 - 37.5	\$5,711,320.43	\$126,893.54	0.02222	57.54
37.5 - 38.5	\$5,468,661.27	\$32,099.80	0.00587	56.26
38.5 - 39.5	\$5,415,709.70	\$22,317.50	0.00412	55.93
39.5 - 40.5	\$4,970,472.73	\$99,586.39	0.02004	55.70
40.5 - 41.5	\$4,766,273.71	\$12,801.29	0.00269	54.58
41.5 - 42.5	\$4,691,284.04	\$16,372.82	0.00349	54.44
42.5 - 43.5	\$4,671,320.55	\$25,023.12	0.00536	54.25
43.5 - 44.5	\$4,629,327.88	\$43,762.47	0.00945	53.96
44.5 - 45.5	\$4,583,591.80	\$128,376.14	0.02801	53.45
45.5 - 46.5	\$4,441,956.79	\$17,750.02	0.00400	51.95
46.5 - 47.5	\$4,416,630.96	\$35,483.46	0.00803	51.74
47.5 - 48.5	\$4,365,251.27	\$37,386.22	0.00856	51.33
48.5 - 49.5	\$4,325,182.29	\$53,591.81	0.01239	50.89
49.5 - 50.5	\$3,940,435.57	\$15,169.83	0.00385	50.26
50.5 - 51.5	\$3,923,662.41	\$55,201.92	0.01407	50.06
51.5 - 52.5	\$3,850,382.14	\$65,694.67	0.01706	49.36
52.5 - 53.5	\$3,783,416.45	\$144,851.72	0.03829	48.52
53.5 - 54.5	\$3,616,487.43	\$9.25	0.00000	46.66
54.5 - 55.5	\$3,585,325.77	\$258,379.39	0.07207	46.66
55.5 - 56.5	\$3,331,771.90	\$6,536.18	0.00196	43.30
56.5 - 57.5	\$3,309,872.29	\$4,437.66	0.00134	43.21
57.5 - 58.5	\$3,115,956.68	\$0.00	0.00000	43.15
58.5 - 59.5	\$3,090,435.53	\$640.97	0.00021	43.15
59.5 - 60.5	\$3,065,001.49	\$816,380.58	0.26636	43.14
60.5 - 61.5	\$978,941.45	\$0.00	0.00000	31.65
61.5 - 62.5	\$976,384.23	\$0.00	0.00000	31.65
62.5 - 63.5	\$922,502.68	\$0.00	0.00000	31.65
63.5 - 64.5	\$46,479.59	\$6,758.06	0.14540	31.65
64.5 - 65.5	\$37,924.02	\$0.00	0.00000	27.05
65.5 - 66.5	\$6,459.83	\$0.00	0.00000	27.05
66.5 - 67.5	\$6,459.83	\$0.00	0.00000	27.05
67.5 - 68.5	\$6,459.83	\$0.00	0.00000	27.05
68.5 - 69.5	\$6,459.83	\$0.00	0.00000	27.05
69.5 - 70.5	\$6,459.83	\$0.00	0.00000	27.05
70.5 - 71.5	\$6,459.83	\$1,101.43	0.17050	27.05
71.5 - 72.5	\$5,358.40	\$0.00	0.00000	22.44
72.5 - 73.5	\$5,358.40	\$0.00	0.00000	22.44

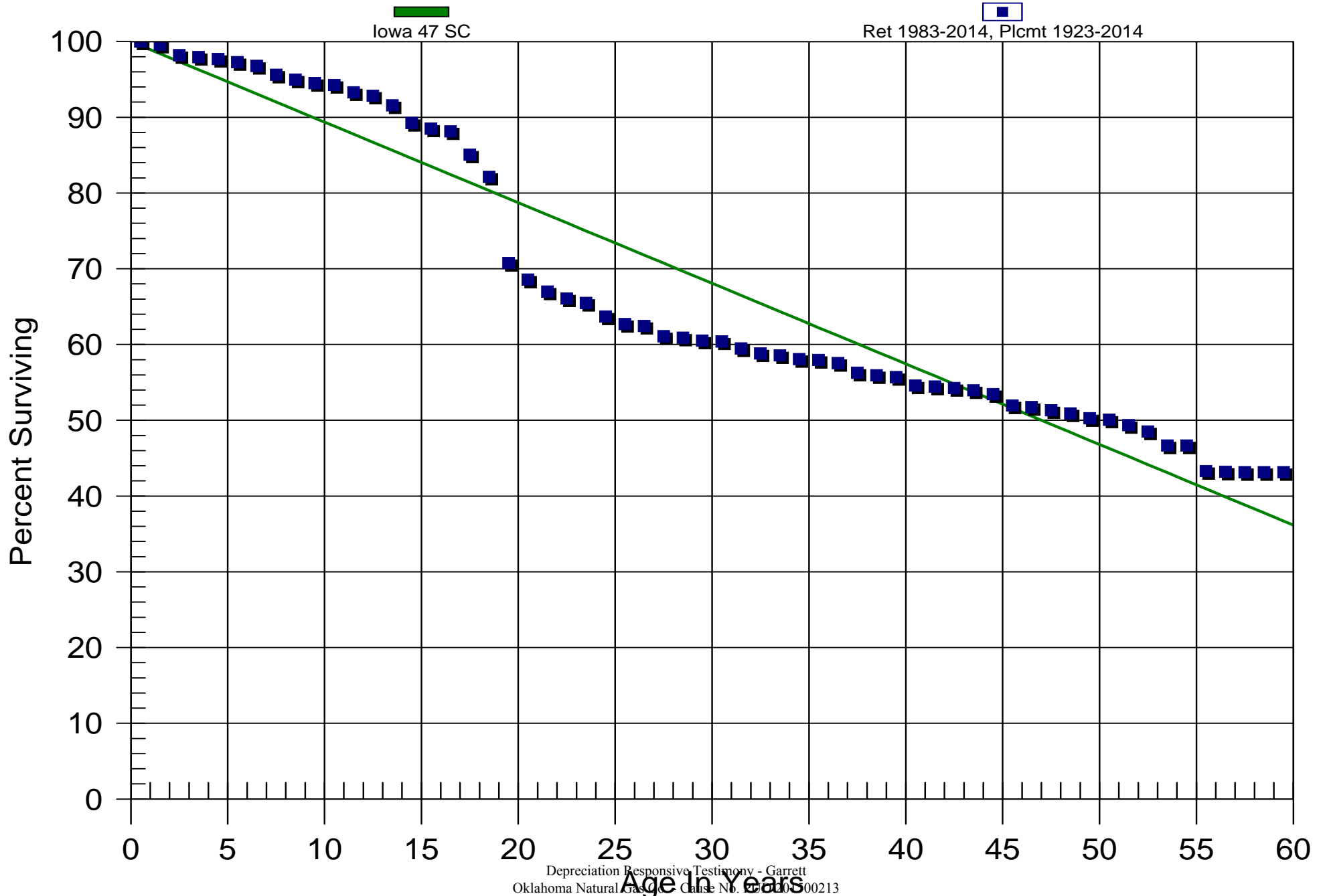


**ONG**  
**Electric Division**  
**375.20 Other District Structures**  
**Observed Life Table**  
**Retirement Expr. 1983 TO 2014**  
**Placement Years 1923 TO 2014**

<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
73.5 - 74.5	\$5,358.40	\$0.00	0.00000	22.44
74.5 - 75.5	\$5,358.40	\$0.00	0.00000	22.44
75.5 - 76.5	\$5,358.40	\$0.00	0.00000	22.44
76.5 - 77.5	\$5,358.40	\$0.00	0.00000	22.44
77.5 - 78.5	\$5,358.40	\$0.00	0.00000	22.44
78.5 - 79.5	\$5,358.40	\$0.00	0.00000	22.44
79.5 - 80.5	\$5,358.40	\$0.00	0.00000	22.44
80.5 - 81.5	\$5,358.40	\$0.00	0.00000	22.44
81.5 - 82.5	\$5,358.40	\$0.00	0.00000	22.44
82.5 - 83.5	\$5,358.40	\$0.00	0.00000	22.44
83.5 - 84.5	\$5,358.40	\$0.00	0.00000	22.44
84.5 - 85.5	\$4,148.12	\$0.00	0.00000	22.44
85.5 - 86.5	\$2,953.05	\$0.00	0.00000	22.44
86.5 - 87.5	\$2,953.05	\$0.00	0.00000	22.44
87.5 - 88.5	\$2,953.05	\$0.00	0.00000	22.44
88.5 - 89.5	\$2,502.30	\$0.00	0.00000	22.44
89.5 - 90.5	\$2,502.30	\$0.00	0.00000	22.44
90.5 - 91.5	\$2,502.30	\$0.00	0.00000	22.44

# ONG

## Electric Division 375.20 Other District Structures Original And Smooth Survivor Curves



**ONG**  
**Electric Division**  
**378.00 Meas. And Reg. Stat. Equipment - General**

**Observed Life Table**  
**Retirement Expr. 1983 TO 2014**  
**Placement Years 1900 TO 2014**

<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
0.0 - 0.5	\$60,626,410.87	\$29,030.38	0.00048	100.00
0.5 - 1.5	\$56,161,226.93	\$104,551.12	0.00186	99.95
1.5 - 2.5	\$53,339,671.69	\$136,475.95	0.00256	99.77
2.5 - 3.5	\$50,531,207.08	\$339,650.15	0.00672	99.51
3.5 - 4.5	\$46,285,113.31	\$384,440.10	0.00831	98.84
4.5 - 5.5	\$43,281,218.38	\$573,521.12	0.01325	98.02
5.5 - 6.5	\$41,081,954.59	\$608,467.22	0.01481	96.72
6.5 - 7.5	\$38,994,650.90	\$2,556,682.63	0.06556	95.29
7.5 - 8.5	\$35,128,514.44	\$709,448.23	0.02020	89.04
8.5 - 9.5	\$33,478,046.53	\$103,064.49	0.00308	87.24
9.5 - 10.5	\$32,607,140.26	\$114,995.39	0.00353	86.97
10.5 - 11.5	\$30,929,442.62	\$379,431.05	0.01227	86.67
11.5 - 12.5	\$25,987,092.02	\$142,967.90	0.00550	85.61
12.5 - 13.5	\$23,071,474.18	\$185,994.69	0.00806	85.13
13.5 - 14.5	\$21,870,907.02	\$225,431.00	0.01031	84.45
14.5 - 15.5	\$20,278,138.74	\$161,048.45	0.00794	83.58
15.5 - 16.5	\$18,894,038.74	\$64,369.82	0.00341	82.91
16.5 - 17.5	\$18,023,541.30	\$43,873.24	0.00243	82.63
17.5 - 18.5	\$15,801,649.83	\$113,623.47	0.00719	82.43
18.5 - 19.5	\$14,866,498.77	\$91,434.90	0.00615	81.84
19.5 - 20.5	\$13,997,274.67	\$91,781.54	0.00656	81.33
20.5 - 21.5	\$12,093,882.80	\$146,586.51	0.01212	80.80
21.5 - 22.5	\$11,312,867.33	\$167,455.49	0.01480	79.82
22.5 - 23.5	\$10,665,447.97	\$103,541.14	0.00971	78.64
23.5 - 24.5	\$10,294,611.24	\$95,606.70	0.00929	77.88
24.5 - 25.5	\$8,980,936.65	\$63,872.57	0.00711	77.15
25.5 - 26.5	\$8,147,992.80	\$63,533.30	0.00780	76.60
26.5 - 27.5	\$7,416,419.86	\$89,298.25	0.01204	76.01
27.5 - 28.5	\$6,882,264.39	\$194,553.56	0.02827	75.09
28.5 - 29.5	\$5,932,742.45	\$158,125.98	0.02665	72.97
29.5 - 30.5	\$5,291,646.30	\$42,323.15	0.00800	71.02
30.5 - 31.5	\$4,882,318.44	\$117,575.32	0.02408	70.46
31.5 - 32.5	\$4,481,582.25	\$51,760.23	0.01155	68.76
32.5 - 33.5	\$4,159,204.71	\$35,095.14	0.00844	67.97
33.5 - 34.5	\$3,748,963.91	\$30,000.70	0.00800	67.39
34.5 - 35.5	\$3,384,268.37	\$102,424.05	0.03026	66.85
35.5 - 36.5	\$3,067,763.19	\$36,639.93	0.01194	64.83

**ONG**  
**Electric Division**  
**378.00 Meas. And Reg. Stat. Equipment - General**

**Observed Life Table**  
**Retirement Expr. 1983 TO 2014**  
**Placement Years 1900 TO 2014**

<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
36.5 - 37.5	\$2,720,421.48	\$61,334.44	0.02255	64.05
37.5 - 38.5	\$2,423,863.94	\$37,770.23	0.01558	62.61
38.5 - 39.5	\$2,166,267.52	\$90,559.78	0.04180	61.64
39.5 - 40.5	\$1,989,484.95	\$25,292.12	0.01271	59.06
40.5 - 41.5	\$1,911,525.59	\$35,422.46	0.01853	58.31
41.5 - 42.5	\$1,784,279.05	\$36,082.11	0.02022	57.23
42.5 - 43.5	\$1,683,544.53	\$24,695.93	0.01467	56.07
43.5 - 44.5	\$1,606,727.47	\$16,917.25	0.01053	55.25
44.5 - 45.5	\$1,546,818.36	\$18,259.84	0.01180	54.67
45.5 - 46.5	\$1,557,700.56	\$27,690.29	0.01778	54.02
46.5 - 47.5	\$1,452,238.93	\$45,885.44	0.03160	53.06
47.5 - 48.5	\$1,281,631.67	\$25,466.19	0.01987	51.38
48.5 - 49.5	\$1,215,435.08	\$23,634.45	0.01945	50.36
49.5 - 50.5	\$1,142,558.02	\$35,657.45	0.03121	49.38
50.5 - 51.5	\$1,102,230.15	\$20,364.86	0.01848	47.84
51.5 - 52.5	\$955,526.65	\$2,928.71	0.00307	46.96
52.5 - 53.5	\$808,318.28	\$14,369.13	0.01778	46.81
53.5 - 54.5	\$792,722.81	\$946.76	0.00119	45.98
54.5 - 55.5	\$738,813.72	\$12,388.72	0.01677	45.93
55.5 - 56.5	\$358,101.85	\$5,200.53	0.01452	45.16
56.5 - 57.5	\$357,076.31	\$9,461.83	0.02650	44.50
57.5 - 58.5	\$345,930.78	\$15,166.50	0.04384	43.32
58.5 - 59.5	\$321,150.14	\$33,638.53	0.10474	41.42
59.5 - 60.5	\$263,767.53	\$10,470.81	0.03970	37.08
60.5 - 61.5	\$245,342.21	\$23,590.38	0.09615	35.61
61.5 - 62.5	\$217,061.25	\$12,157.88	0.05601	32.19
62.5 - 63.5	\$194,828.61	\$10,420.68	0.05349	30.38
63.5 - 64.5	\$182,044.96	\$6,015.96	0.03305	28.76
64.5 - 65.5	\$174,294.74	\$15,365.90	0.08816	27.81
65.5 - 66.5	\$148,778.82	\$111,213.81	0.74751	25.36
66.5 - 67.5	\$35,869.37	\$4.50	0.00013	6.40
67.5 - 68.5	\$35,627.15	\$0.00	0.00000	6.40
68.5 - 69.5	\$35,477.92	\$0.00	0.00000	6.40
69.5 - 70.5	\$35,477.92	\$26.89	0.00076	6.40
70.5 - 71.5	\$31,805.79	\$0.00	0.00000	6.40
71.5 - 72.5	\$31,622.50	\$0.00	0.00000	6.40
72.5 - 73.5	\$31,566.39	\$0.00	0.00000	6.40

**ONG**  
**Electric Division**  
**378.00 Meas. And Reg. Stat. Equipment - General**

**Observed Life Table**  
**Retirement Expr. 1983 TO 2014**  
**Placement Years 1900 TO 2014**

<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
73.5 - 74.5	\$31,506.39	\$0.00	0.00000	6.40
74.5 - 75.5	\$31,506.39	\$0.00	0.00000	6.40
75.5 - 76.5	\$31,506.39	\$121.97	0.00387	6.40
76.5 - 77.5	\$31,384.42	\$0.00	0.00000	6.37
77.5 - 78.5	\$30,212.54	\$0.00	0.00000	6.37
78.5 - 79.5	\$30,212.54	\$0.00	0.00000	6.37
79.5 - 80.5	\$30,212.54	\$0.00	0.00000	6.37
80.5 - 81.5	\$1,244.18	\$0.00	0.00000	6.37
81.5 - 82.5	\$1,244.18	\$0.00	0.00000	6.37
82.5 - 83.5	\$30,177.41	\$0.00	0.00000	6.37
83.5 - 84.5	\$29,996.76	\$0.00	0.00000	6.37
84.5 - 85.5	\$29,893.28	\$0.00	0.00000	6.37
85.5 - 86.5	\$29,420.68	\$0.00	0.00000	6.37
86.5 - 87.5	\$29,420.68	\$0.00	0.00000	6.37
87.5 - 88.5	\$29,224.16	\$0.00	0.00000	6.37
88.5 - 89.5	\$29,224.16	\$0.00	0.00000	6.37
89.5 - 90.5	\$29,224.16	\$0.00	0.00000	6.37
90.5 - 91.5	\$29,199.16	\$0.00	0.00000	6.37
91.5 - 92.5	\$28,933.23	\$0.00	0.00000	6.37
92.5 - 93.5	\$28,933.23	\$0.00	0.00000	6.37
93.5 - 94.5	\$28,933.23	\$0.00	0.00000	6.37
94.5 - 95.5	\$28,933.23	\$0.00	0.00000	6.37
95.5 - 96.5	\$28,933.23	\$0.00	0.00000	6.37
96.5 - 97.5	\$28,933.23	\$0.00	0.00000	6.37
97.5 - 98.5	\$28,933.23	\$0.00	0.00000	6.37
98.5 - 99.5	\$28,933.23	\$0.00	0.00000	6.37
99.5 - 100.5	\$28,933.23	\$0.00	0.00000	6.37
100.5 - 101.5	\$28,933.23	\$0.00	0.00000	6.37
101.5 - 102.5	\$28,933.23	\$0.00	0.00000	6.37
102.5 - 103.5	\$28,933.23	\$0.00	0.00000	6.37
103.5 - 104.5	\$28,933.23	\$0.00	0.00000	6.37
104.5 - 105.5	\$28,933.23	\$0.00	0.00000	6.37
105.5 - 106.5	\$28,933.23	\$0.00	0.00000	6.37
106.5 - 107.5	\$28,933.23	\$0.00	0.00000	6.37
107.5 - 108.5	\$28,933.23	\$0.00	0.00000	6.37
108.5 - 109.5	\$28,933.23	\$0.00	0.00000	6.37
109.5 - 110.5	\$28,933.23	\$0.00	0.00000	6.37

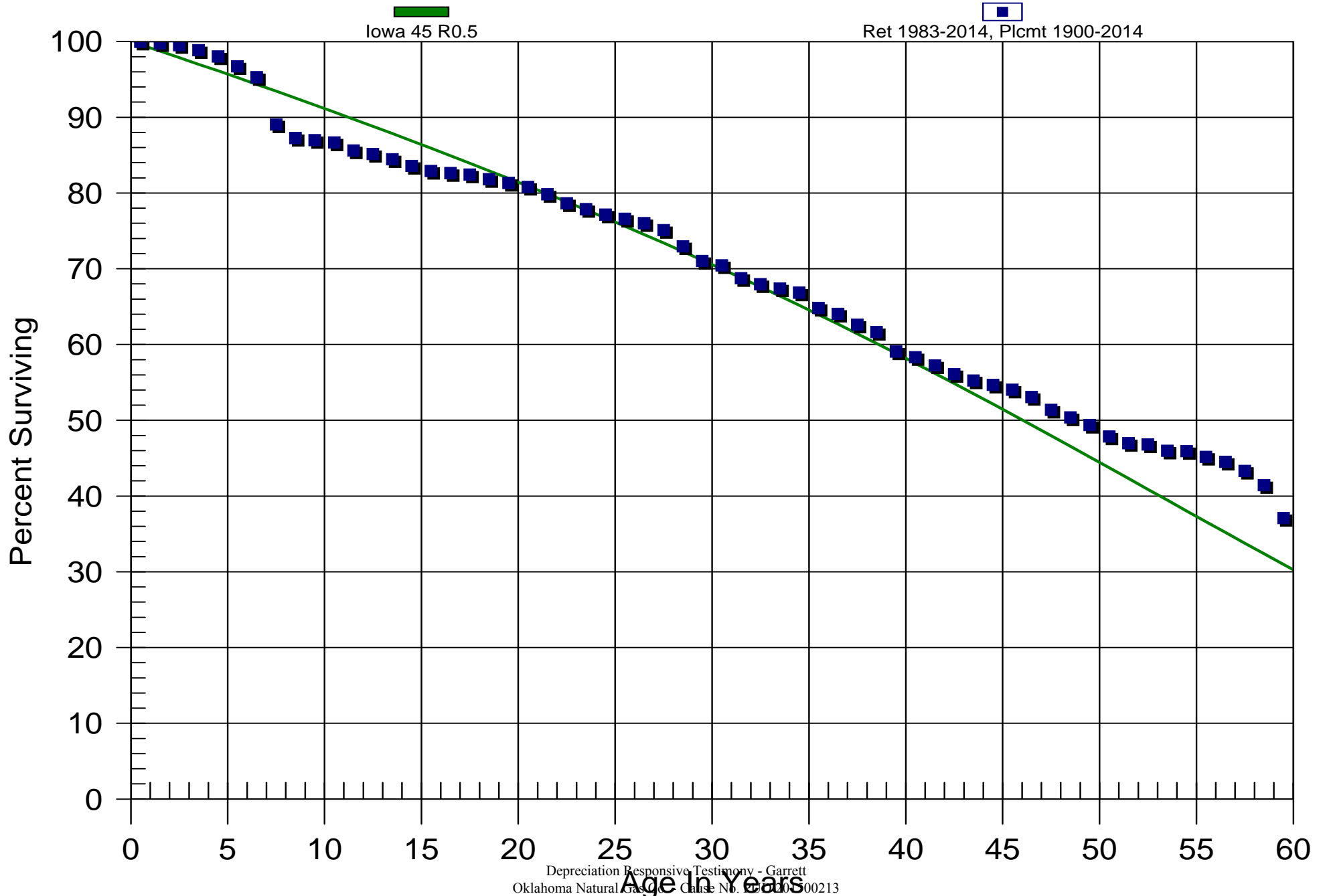
**ONG**  
**Electric Division**  
**378.00 Meas. And Reg. Stat. Equipment - General**

**Observed Life Table**  
**Retirement Expr. 1983 TO 2014**  
**Placement Years 1900 TO 2014**

<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
110.5 - 111.5	\$28,933.23	\$0.00	0.00000	6.37
111.5 - 112.5	\$28,933.23	\$0.00	0.00000	6.37
112.5 - 113.5	\$28,933.23	\$0.00	0.00000	6.37
113.5 - 114.5	\$28,933.23	\$0.00	0.00000	6.37

# ONG

## Electric Division 378.00 Meas. And Reg. Stat. Equipment - General Original And Smooth Survivor Curves



**ONG**  
**Electric Division**  
**379.00 Meas. And Reg. Stat. Equipment - City Gate**

**Observed Life Table**  
**Retirement Expr. 1983 TO 2014**  
**Placement Years 1924 TO 2014**

<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
0.0 - 0.5	\$2,083,809.08	\$0.00	0.00000	100.00
0.5 - 1.5	\$1,896,951.35	\$0.00	0.00000	100.00
1.5 - 2.5	\$1,805,488.64	\$8,775.98	0.00486	100.00
2.5 - 3.5	\$1,785,584.67	\$0.00	0.00000	99.51
3.5 - 4.5	\$1,780,314.60	\$0.00	0.00000	99.51
4.5 - 5.5	\$739,194.08	\$0.00	0.00000	99.51
5.5 - 6.5	\$722,099.43	\$0.00	0.00000	99.51
6.5 - 7.5	\$329,015.34	\$0.00	0.00000	99.51
7.5 - 8.5	\$332,161.50	\$0.00	0.00000	99.51
8.5 - 9.5	\$334,203.06	\$0.00	0.00000	99.51
9.5 - 10.5	\$335,064.76	\$0.00	0.00000	99.51
10.5 - 11.5	\$340,585.49	\$0.00	0.00000	99.51
11.5 - 12.5	\$347,964.94	\$0.00	0.00000	99.51
12.5 - 13.5	\$362,619.10	\$0.00	0.00000	99.51
13.5 - 14.5	\$362,931.97	\$0.00	0.00000	99.51
14.5 - 15.5	\$285,810.83	\$0.00	0.00000	99.51
15.5 - 16.5	\$281,959.77	\$0.00	0.00000	99.51
16.5 - 17.5	\$282,021.70	\$0.00	0.00000	99.51
17.5 - 18.5	\$282,021.70	\$0.00	0.00000	99.51
18.5 - 19.5	\$211,467.73	\$0.00	0.00000	99.51
19.5 - 20.5	\$199,455.62	\$0.00	0.00000	99.51
20.5 - 21.5	\$176,035.15	\$0.00	0.00000	99.51
21.5 - 22.5	\$176,591.18	\$0.00	0.00000	99.51
22.5 - 23.5	\$177,504.72	\$0.00	0.00000	99.51
23.5 - 24.5	\$160,816.54	\$0.00	0.00000	99.51
24.5 - 25.5	\$156,260.62	\$50.11	0.00032	99.51
25.5 - 26.5	\$104,491.32	\$0.00	0.00000	99.48
26.5 - 27.5	\$74,973.75	\$63.85	0.00085	99.48
27.5 - 28.5	\$74,909.90	\$0.00	0.00000	99.40
28.5 - 29.5	\$68,101.34	\$0.00	0.00000	99.40
29.5 - 30.5	\$71,460.43	\$330.49	0.00462	99.40
30.5 - 31.5	\$63,154.39	\$21.25	0.00034	98.94
31.5 - 32.5	\$61,065.90	\$0.00	0.00000	98.90
32.5 - 33.5	\$60,946.09	\$0.00	0.00000	98.90
33.5 - 34.5	\$60,946.09	\$194.12	0.00319	98.90
34.5 - 35.5	\$60,751.97	\$3,576.87	0.05888	98.59
35.5 - 36.5	\$51,794.79	\$2,404.08	0.04642	92.78



**ONG**  
**Electric Division**  
**379.00 Meas. And Reg. Stat. Equipment - City Gate**

**Observed Life Table**  
**Retirement Expr. 1983 TO 2014**  
**Placement Years 1924 TO 2014**

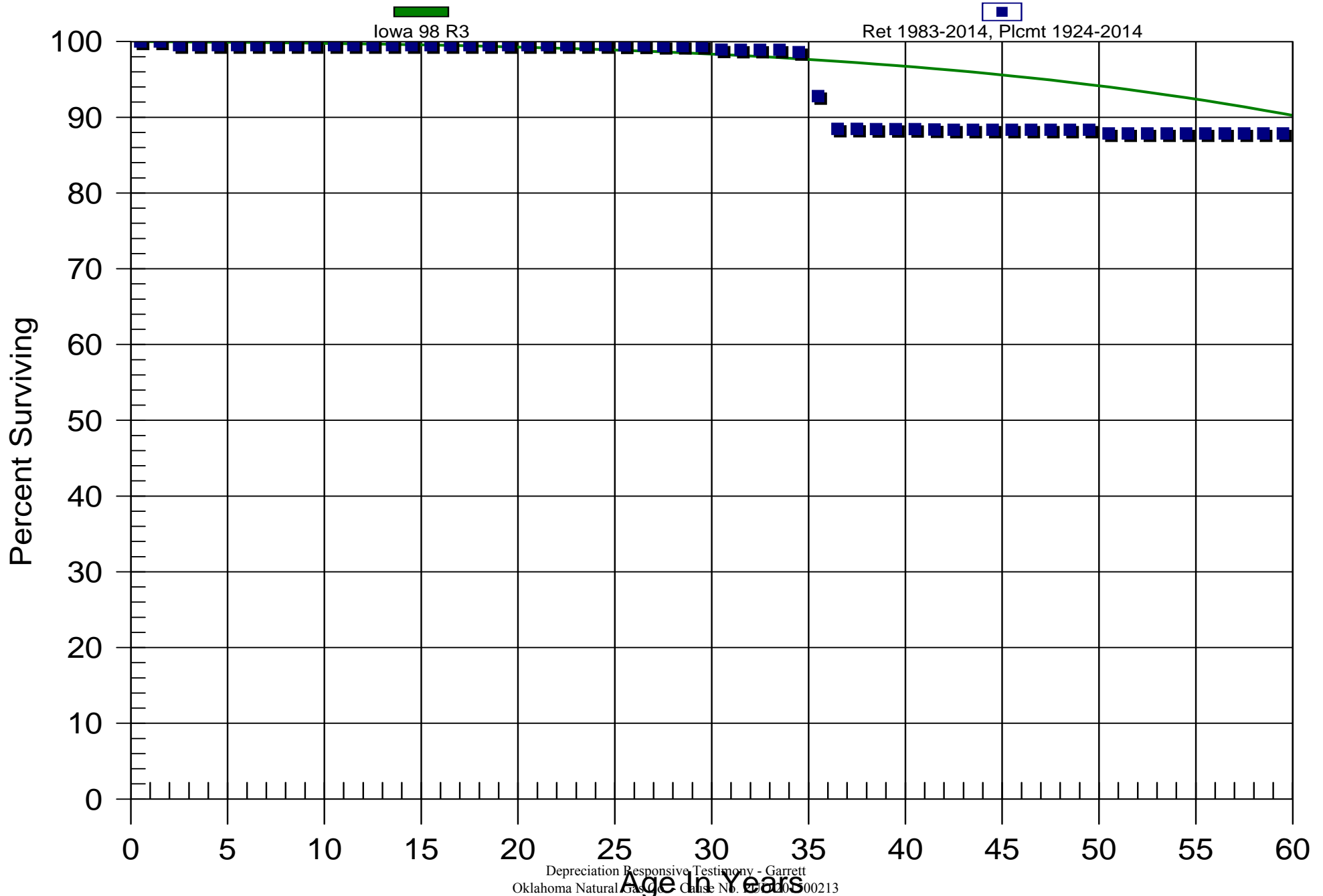
<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
36.5 - 37.5	\$45,008.04	\$0.00	0.00000	88.48
37.5 - 38.5	\$38,570.15	\$16.41	0.00043	88.48
38.5 - 39.5	\$34,843.19	\$0.00	0.00000	88.44
39.5 - 40.5	\$31,748.84	\$0.00	0.00000	88.44
40.5 - 41.5	\$31,748.84	\$14.69	0.00046	88.44
41.5 - 42.5	\$31,066.57	\$14.69	0.00047	88.40
42.5 - 43.5	\$29,122.71	\$0.00	0.00000	88.36
43.5 - 44.5	\$22,085.07	\$0.00	0.00000	88.36
44.5 - 45.5	\$12,286.33	\$0.00	0.00000	88.36
45.5 - 46.5	\$11,973.46	\$0.00	0.00000	88.36
46.5 - 47.5	\$6,893.64	\$0.00	0.00000	88.36
47.5 - 48.5	\$5,889.28	\$0.00	0.00000	88.36
48.5 - 49.5	\$5,827.35	\$0.00	0.00000	88.36
49.5 - 50.5	\$5,827.35	\$32.46	0.00557	88.36
50.5 - 51.5	\$5,413.05	\$0.00	0.00000	87.87
51.5 - 52.5	\$3,586.02	\$0.00	0.00000	87.87
52.5 - 53.5	\$930.63	\$0.00	0.00000	87.87
53.5 - 54.5	\$374.60	\$0.00	0.00000	87.87
54.5 - 55.5	\$374.60	\$0.00	0.00000	87.87
55.5 - 56.5	\$374.60	\$0.00	0.00000	87.87
56.5 - 57.5	\$374.60	\$0.00	0.00000	87.87
57.5 - 58.5	\$132.62	\$0.00	0.00000	87.87
58.5 - 59.5	\$3,540.71	\$0.00	0.00000	87.87
59.5 - 60.5	\$3,540.71	\$0.00	0.00000	87.87
60.5 - 61.5	\$3,540.71	\$0.00	0.00000	87.87
61.5 - 62.5	\$181.62	\$0.00	0.00000	87.87
62.5 - 63.5	\$181.62	\$0.00	0.00000	87.87
63.5 - 64.5	\$49.00	\$0.00	0.00000	87.87
64.5 - 65.5	\$49.00	\$0.00	0.00000	87.87
65.5 - 66.5	\$49.00	\$0.00	0.00000	87.87
66.5 - 67.5	\$49.00	\$0.00	0.00000	87.87
67.5 - 68.5	\$49.00	\$0.00	0.00000	87.87
68.5 - 69.5	\$49.00	\$0.00	0.00000	87.87
69.5 - 70.5	\$49.00	\$0.00	0.00000	87.87
70.5 - 71.5	\$49.00	\$0.00	0.00000	87.87
71.5 - 72.5	\$49.00	\$0.00	0.00000	87.87
72.5 - 73.5	\$49.00	\$0.00	0.00000	87.87

**ONG**  
**Electric Division**  
**379.00 Meas. And Reg. Stat. Equipment - City Gate**

**Observed Life Table**  
**Retirement Expr. 1983 TO 2014**  
**Placement Years 1924 TO 2014**

<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
73.5 - 74.5	\$49.00	\$0.00	0.00000	87.87
74.5 - 75.5	\$49.00	\$0.00	0.00000	87.87
75.5 - 76.5	\$49.00	\$0.00	0.00000	87.87
76.5 - 77.5	\$49.00	\$0.00	0.00000	87.87
77.5 - 78.5	\$49.00	\$0.00	0.00000	87.87
78.5 - 79.5	\$49.00	\$0.00	0.00000	87.87
79.5 - 80.5	\$49.00	\$0.00	0.00000	87.87
80.5 - 81.5	\$49.00	\$0.00	0.00000	87.87
81.5 - 82.5	\$49.00	\$0.00	0.00000	87.87
82.5 - 83.5	\$49.00	\$0.00	0.00000	87.87
83.5 - 84.5	\$49.00	\$0.00	0.00000	87.87
84.5 - 85.5	\$49.00	\$0.00	0.00000	87.87
85.5 - 86.5	\$49.00	\$0.00	0.00000	87.87
86.5 - 87.5	\$49.00	\$0.00	0.00000	87.87
87.5 - 88.5	\$49.00	\$0.00	0.00000	87.87
88.5 - 89.5	\$49.00	\$0.00	0.00000	87.87
89.5 - 90.5	\$49.00	\$0.00	0.00000	87.87

Electric Division  
379.00 Meas. And Reg. Stat. Equipment - City Gate  
Original And Smooth Survivor Curves



**ONG**  
**Electric Division**  
**380.00 Services - Plastic**  
**Observed Life Table**  
**Retirement Expr. 2002 TO 2014**  
**Placement Years 1901 TO 2014**

<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
0.0 - 0.5	\$338,308,998.47	\$602,967.09	0.00178	100.00
0.5 - 1.5	\$311,124,489.86	\$679,568.07	0.00218	99.82
1.5 - 2.5	\$288,270,295.09	\$594,324.84	0.00206	99.60
2.5 - 3.5	\$268,282,513.72	\$514,463.59	0.00192	99.40
3.5 - 4.5	\$252,759,107.87	\$964,931.55	0.00382	99.21
4.5 - 5.5	\$242,517,981.14	\$694,321.35	0.00286	98.83
5.5 - 6.5	\$233,843,767.25	\$716,224.29	0.00306	98.55
6.5 - 7.5	\$217,494,585.84	\$1,062,765.71	0.00489	98.24
7.5 - 8.5	\$196,833,743.11	\$1,449,338.03	0.00736	97.76
8.5 - 9.5	\$186,357,411.58	\$266,617.79	0.00143	97.04
9.5 - 10.5	\$174,527,309.38	\$122,834.01	0.00070	96.91
10.5 - 11.5	\$164,839,437.57	\$91,441.87	0.00055	96.84
11.5 - 12.5	\$138,368,915.10	\$151,614.73	0.00110	96.78
12.5 - 13.5	\$135,850,918.75	\$128,127.75	0.00094	96.68
13.5 - 14.5	\$122,697,631.96	\$84,412.77	0.00069	96.59
14.5 - 15.5	\$112,089,480.89	\$115,379.48	0.00103	96.52
15.5 - 16.5	\$106,163,215.96	\$78,368.32	0.00074	96.42
16.5 - 17.5	\$103,534,067.92	\$168,220.37	0.00162	96.35
17.5 - 18.5	\$99,948,057.32	\$146,703.27	0.00147	96.19
18.5 - 19.5	\$95,234,770.78	\$73,741.61	0.00077	96.05
19.5 - 20.5	\$90,029,723.54	\$142,885.63	0.00159	95.98
20.5 - 21.5	\$83,411,033.94	\$151,718.47	0.00182	95.82
21.5 - 22.5	\$78,147,176.54	\$125,869.89	0.00161	95.65
22.5 - 23.5	\$72,669,434.58	\$222,203.93	0.00306	95.50
23.5 - 24.5	\$67,955,339.26	\$103,899.04	0.00153	95.20
24.5 - 25.5	\$64,093,593.42	\$108,787.90	0.00170	95.06
25.5 - 26.5	\$61,542,628.56	\$134,123.31	0.00218	94.90
26.5 - 27.5	\$58,570,605.53	\$159,097.54	0.00272	94.69
27.5 - 28.5	\$54,187,896.64	\$149,981.02	0.00277	94.43
28.5 - 29.5	\$48,827,002.21	\$111,631.49	0.00229	94.17
29.5 - 30.5	\$42,244,827.94	\$50,951.37	0.00121	93.96
30.5 - 31.5	\$35,469,956.74	\$66,901.38	0.00189	93.84
31.5 - 32.5	\$29,366,995.94	\$78,131.10	0.00266	93.67
32.5 - 33.5	\$23,229,760.09	\$135,144.52	0.00582	93.42
33.5 - 34.5	\$18,251,484.30	\$37,116.33	0.00203	92.87
34.5 - 35.5	\$14,525,467.79	\$32,500.30	0.00224	92.69
35.5 - 36.5	\$10,815,155.04	\$26,784.87	0.00248	92.48

**ONG**  
**Electric Division**  
**380.00 Services - Plastic**  
**Observed Life Table**  
**Retirement Expr. 2002 TO 2014**  
**Placement Years 1901 TO 2014**

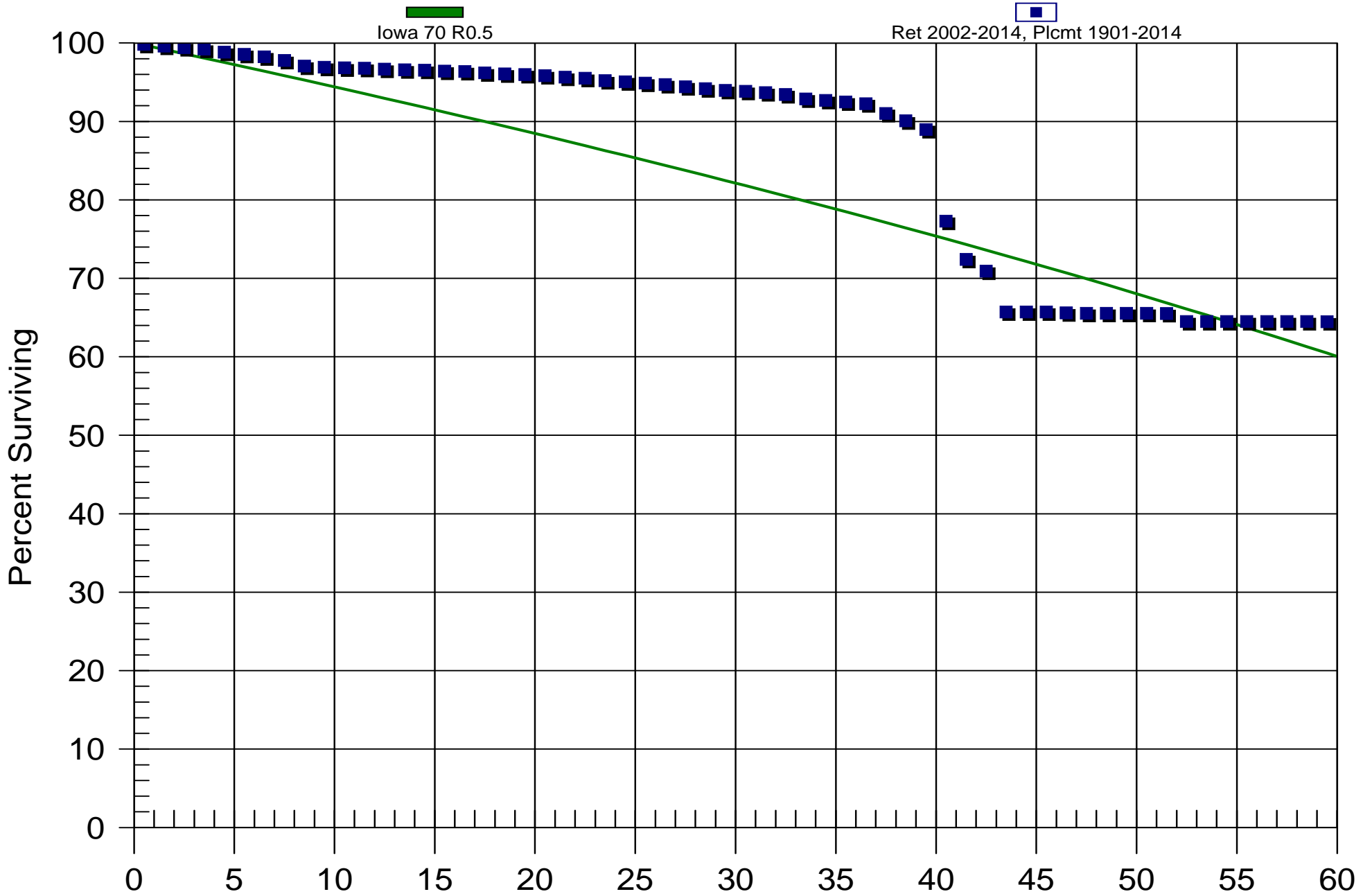
<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
36.5 - 37.5	\$8,034,447.82	\$106,902.85	0.01331	92.25
37.5 - 38.5	\$5,530,333.89	\$58,126.40	0.01051	91.02
38.5 - 39.5	\$3,793,208.55	\$45,925.07	0.01211	90.06
39.5 - 40.5	\$2,550,339.37	\$334,937.54	0.13133	88.97
40.5 - 41.5	\$1,767,858.51	\$111,798.91	0.06324	77.29
41.5 - 42.5	\$1,141,547.20	\$23,603.36	0.02068	72.40
42.5 - 43.5	\$461,475.44	\$33,769.04	0.07318	70.90
43.5 - 44.5	\$185,641.52	\$0.00	0.00000	65.72
44.5 - 45.5	\$172,661.91	\$38.53	0.00022	65.72
45.5 - 46.5	\$154,676.78	\$231.29	0.00150	65.70
46.5 - 47.5	\$167,336.72	\$177.96	0.00106	65.60
47.5 - 48.5	\$268,244.00	\$0.00	0.00000	65.53
48.5 - 49.5	\$255,485.35	\$0.00	0.00000	65.53
49.5 - 50.5	\$251,843.73	\$0.00	0.00000	65.53
50.5 - 51.5	\$257,917.28	\$16.86	0.00007	65.53
51.5 - 52.5	\$260,607.18	\$4,159.09	0.01596	65.53
52.5 - 53.5	\$223,209.60	\$0.00	0.00000	64.48
53.5 - 54.5	\$216,814.34	\$0.00	0.00000	64.48
54.5 - 55.5	\$197,312.86	\$0.00	0.00000	64.48
55.5 - 56.5	\$185,027.92	\$0.00	0.00000	64.48
56.5 - 57.5	\$183,603.99	\$0.00	0.00000	64.48
57.5 - 58.5	\$179,712.70	\$0.00	0.00000	64.48
58.5 - 59.5	\$157,041.77	\$39.89	0.00025	64.48
59.5 - 60.5	\$44,446.52	\$0.00	0.00000	64.47
60.5 - 61.5	\$39,767.71	\$0.00	0.00000	64.47
61.5 - 62.5	\$36,595.49	\$0.00	0.00000	64.47
62.5 - 63.5	\$24,451.93	\$0.00	0.00000	64.47
63.5 - 64.5	\$16,028.83	\$0.00	0.00000	64.47
64.5 - 65.5	\$14,000.52	\$0.00	0.00000	64.47
65.5 - 66.5	\$12,164.49	\$0.00	0.00000	64.47
66.5 - 67.5	\$9,130.16	\$0.00	0.00000	64.47
67.5 - 68.5	\$8,553.12	\$0.00	0.00000	64.47
68.5 - 69.5	\$8,227.98	\$0.00	0.00000	64.47
69.5 - 70.5	\$8,101.23	\$0.00	0.00000	64.47
70.5 - 71.5	\$7,517.11	\$0.00	0.00000	64.47
71.5 - 72.5	\$1,981.27	\$0.00	0.00000	64.47
72.5 - 73.5	\$1,436.60	\$0.00	0.00000	64.47

**ONG**  
**Electric Division**  
**380.00 Services - Plastic**  
**Observed Life Table**  
**Retirement Expr. 2002 TO 2014**  
**Placement Years 1901 TO 2014**

<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
73.5 - 74.5	\$976.39	\$0.00	0.00000	64.47
74.5 - 75.5	\$817.39	\$0.00	0.00000	64.47
75.5 - 76.5	\$662.47	\$0.00	0.00000	64.47
76.5 - 77.5	\$713.11	\$0.00	0.00000	64.47
77.5 - 78.5	\$770.67	\$0.00	0.00000	64.47
78.5 - 79.5	\$777.57	\$0.00	0.00000	64.47
79.5 - 80.5	\$588.75	\$0.00	0.00000	64.47
80.5 - 81.5	\$529.04	\$0.00	0.00000	64.47
81.5 - 82.5	\$1,310.42	\$0.00	0.00000	64.47
82.5 - 83.5	\$2,040.50	\$0.00	0.00000	64.47
83.5 - 84.5	\$2,768.52	\$0.00	0.00000	64.47
84.5 - 85.5	\$3,473.32	\$0.00	0.00000	64.47
85.5 - 86.5	\$3,575.31	\$0.00	0.00000	64.47
86.5 - 87.5	\$3,985.36	\$378.43	0.09496	64.47
87.5 - 88.5	\$5,943.87	\$0.00	0.00000	58.35
88.5 - 89.5	\$5,930.05	\$0.00	0.00000	58.35
89.5 - 90.5	\$5,923.15	\$0.00	0.00000	58.35
90.5 - 91.5	\$5,950.78	\$0.00	0.00000	58.35
91.5 - 92.5	\$5,950.78	\$0.00	0.00000	58.35
92.5 - 93.5	\$5,619.19	\$0.00	0.00000	58.35
93.5 - 94.5	\$4,990.40	\$0.00	0.00000	58.35
94.5 - 95.5	\$4,239.37	\$0.00	0.00000	58.35
95.5 - 96.5	\$3,426.39	\$32.23	0.00941	58.35
96.5 - 97.5	\$3,069.26	\$0.00	0.00000	57.80
97.5 - 98.5	\$2,626.98	\$71.36	0.02716	57.80
98.5 - 99.5	\$174.94	\$6.91	0.03950	56.23
99.5 - 100.5	\$1,731.71	\$0.00	0.00000	54.01
100.5 - 101.5	\$2,091.44	\$0.00	0.00000	54.01
101.5 - 102.5	\$2,084.54	\$0.00	0.00000	54.01
102.5 - 103.5	\$2,084.54	\$0.00	0.00000	54.01
103.5 - 104.5	\$2,084.54	\$0.00	0.00000	54.01
104.5 - 105.5	\$1,990.16	\$1,607.42	0.80768	54.01
105.5 - 106.5	\$366.63	\$359.73	0.98118	10.39
106.5 - 107.5	\$6.90	\$0.00	0.00000	0.20
107.5 - 108.5	\$6.90	\$0.00	0.00000	0.20

# ONG

## Electric Division 380.00 Services - Plastic Original And Smooth Survivor Curves



**ONG**  
**Electric Division**  
**380.30 CNG Fill Station Customers**

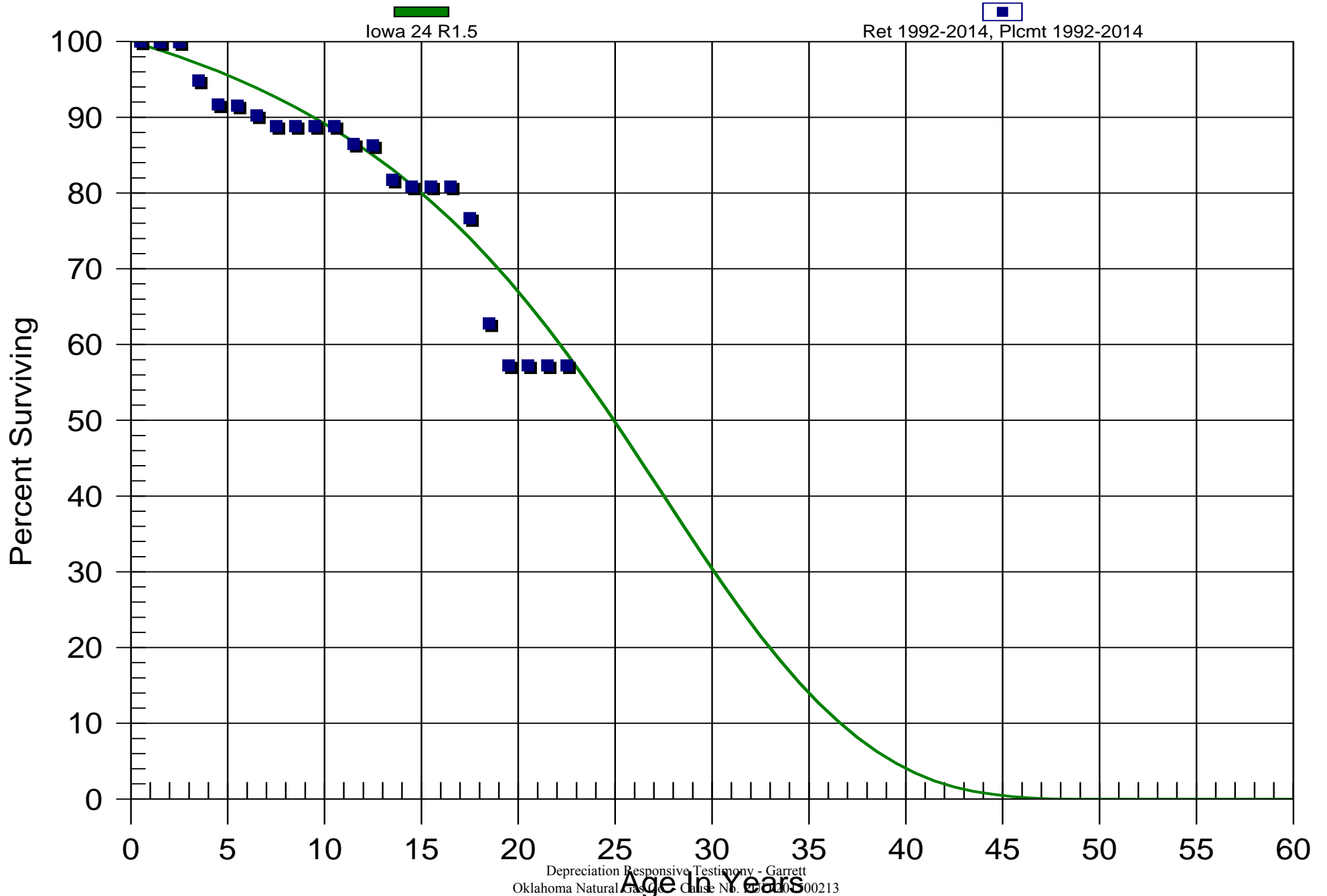
**Observed Life Table**  
**Retirement Expr. 1992 TO 2014**  
**Placement Years 1992 TO 2014**

<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
0.0 - 0.5	\$5,057,815.22	\$0.00	0.00000	100.00
0.5 - 1.5	\$4,810,847.12	\$4,134.02	0.00086	100.00
1.5 - 2.5	\$4,736,346.10	\$0.00	0.00000	99.91
2.5 - 3.5	\$4,584,056.35	\$232,365.00	0.05069	99.91
3.5 - 4.5	\$4,225,086.45	\$141,059.74	0.03339	94.85
4.5 - 5.5	\$4,043,762.85	\$5,676.92	0.00140	91.68
5.5 - 6.5	\$4,005,374.30	\$57,791.65	0.01443	91.55
6.5 - 7.5	\$3,947,582.65	\$60,984.62	0.01545	90.23
7.5 - 8.5	\$3,858,695.06	\$0.00	0.00000	88.84
8.5 - 9.5	\$3,858,695.06	\$0.00	0.00000	88.84
9.5 - 10.5	\$3,858,695.06	\$0.00	0.00000	88.84
10.5 - 11.5	\$3,624,089.05	\$96,347.08	0.02659	88.84
11.5 - 12.5	\$3,468,080.79	\$7,721.16	0.00223	86.48
12.5 - 13.5	\$3,414,520.77	\$180,313.69	0.05281	86.28
13.5 - 14.5	\$2,782,347.64	\$29,754.33	0.01069	81.73
14.5 - 15.5	\$2,498,617.52	\$0.00	0.00000	80.85
15.5 - 16.5	\$2,413,876.72	\$0.00	0.00000	80.85
16.5 - 17.5	\$2,140,606.42	\$110,984.00	0.05185	80.85
17.5 - 18.5	\$1,730,797.09	\$313,608.50	0.18119	76.66
18.5 - 19.5	\$1,215,557.45	\$106,974.97	0.08800	62.77
19.5 - 20.5	\$712,628.09	\$0.00	0.00000	57.25
20.5 - 21.5	\$291,936.11	\$0.00	0.00000	57.25
21.5 - 22.5	\$291,936.11	\$0.00	0.00000	57.25



# ONG

## Electric Division 380.30 CNG Fill Station Customers Original And Smooth Survivor Curves



**ONG**  
**Electric Division**  
**380.50 Services - Metallic**  
**Observed Life Table**  
**Retirement Expr. 2002 TO 2014**  
**Placement Years 1907 TO 2014**

<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
0.0 - 0.5	\$9,683,788.34	\$58,195.05	0.00601	100.00
0.5 - 1.5	\$12,808,383.47	\$898,227.29	0.07013	99.40
1.5 - 2.5	\$13,544,548.40	\$518,916.68	0.03831	92.43
2.5 - 3.5	\$13,567,200.88	\$135,880.30	0.01002	88.89
3.5 - 4.5	\$13,876,069.40	\$150,786.62	0.01087	88.00
4.5 - 5.5	\$13,737,912.66	\$73,764.71	0.00537	87.04
5.5 - 6.5	\$13,759,872.32	\$33,553.57	0.00244	86.57
6.5 - 7.5	\$14,075,069.37	\$16,875.21	0.00120	86.36
7.5 - 8.5	\$14,648,379.52	\$53,679.30	0.00366	86.26
8.5 - 9.5	\$14,518,891.95	\$39,752.45	0.00274	85.94
9.5 - 10.5	\$14,865,480.33	\$40,569.95	0.00273	85.71
10.5 - 11.5	\$12,929,785.61	\$51,298.91	0.00397	85.47
11.5 - 12.5	\$13,259,976.27	\$28,026.84	0.00211	85.13
12.5 - 13.5	\$13,562,129.24	\$35,066.44	0.00259	84.95
13.5 - 14.5	\$11,236,548.98	\$73,554.72	0.00655	84.73
14.5 - 15.5	\$8,953,990.12	\$214,060.69	0.02391	84.18
15.5 - 16.5	\$9,152,950.85	\$53,416.93	0.00584	82.17
16.5 - 17.5	\$9,451,565.27	\$37,585.21	0.00398	81.69
17.5 - 18.5	\$9,540,199.33	\$11,807.48	0.00124	81.36
18.5 - 19.5	\$9,442,280.66	\$109,516.07	0.01160	81.26
19.5 - 20.5	\$9,549,093.99	\$52,781.07	0.00553	80.32
20.5 - 21.5	\$9,621,780.74	\$57,775.24	0.00600	79.88
21.5 - 22.5	\$9,785,393.98	\$115,449.14	0.01180	79.40
22.5 - 23.5	\$9,860,585.45	\$194,828.22	0.01976	78.46
23.5 - 24.5	\$9,991,041.30	\$99,990.62	0.01001	76.91
24.5 - 25.5	\$10,103,803.99	\$123,279.31	0.01220	76.14
25.5 - 26.5	\$11,181,035.49	\$68,389.56	0.00612	75.21
26.5 - 27.5	\$11,287,081.11	\$77,537.49	0.00687	74.75
27.5 - 28.5	\$11,284,950.94	\$30,538.60	0.00271	74.24
28.5 - 29.5	\$11,683,814.65	\$18,643.47	0.00160	74.04
29.5 - 30.5	\$11,984,581.67	\$98,814.65	0.00825	73.92
30.5 - 31.5	\$12,278,818.65	\$37,227.13	0.00303	73.31
31.5 - 32.5	\$23,270,042.76	\$60,247.85	0.00259	73.09
32.5 - 33.5	\$22,311,378.99	\$1,003,200.20	0.04496	72.90
33.5 - 34.5	\$20,460,989.13	\$211,147.33	0.01032	69.62
34.5 - 35.5	\$19,705,892.36	\$266,634.35	0.01353	68.90
35.5 - 36.5	\$18,761,455.92	\$256,413.93	0.01367	67.97

**ONG**  
**Electric Division**  
**380.50 Services - Metallic**  
**Observed Life Table**  
**Retirement Expr. 2002 TO 2014**  
**Placement Years 1907 TO 2014**

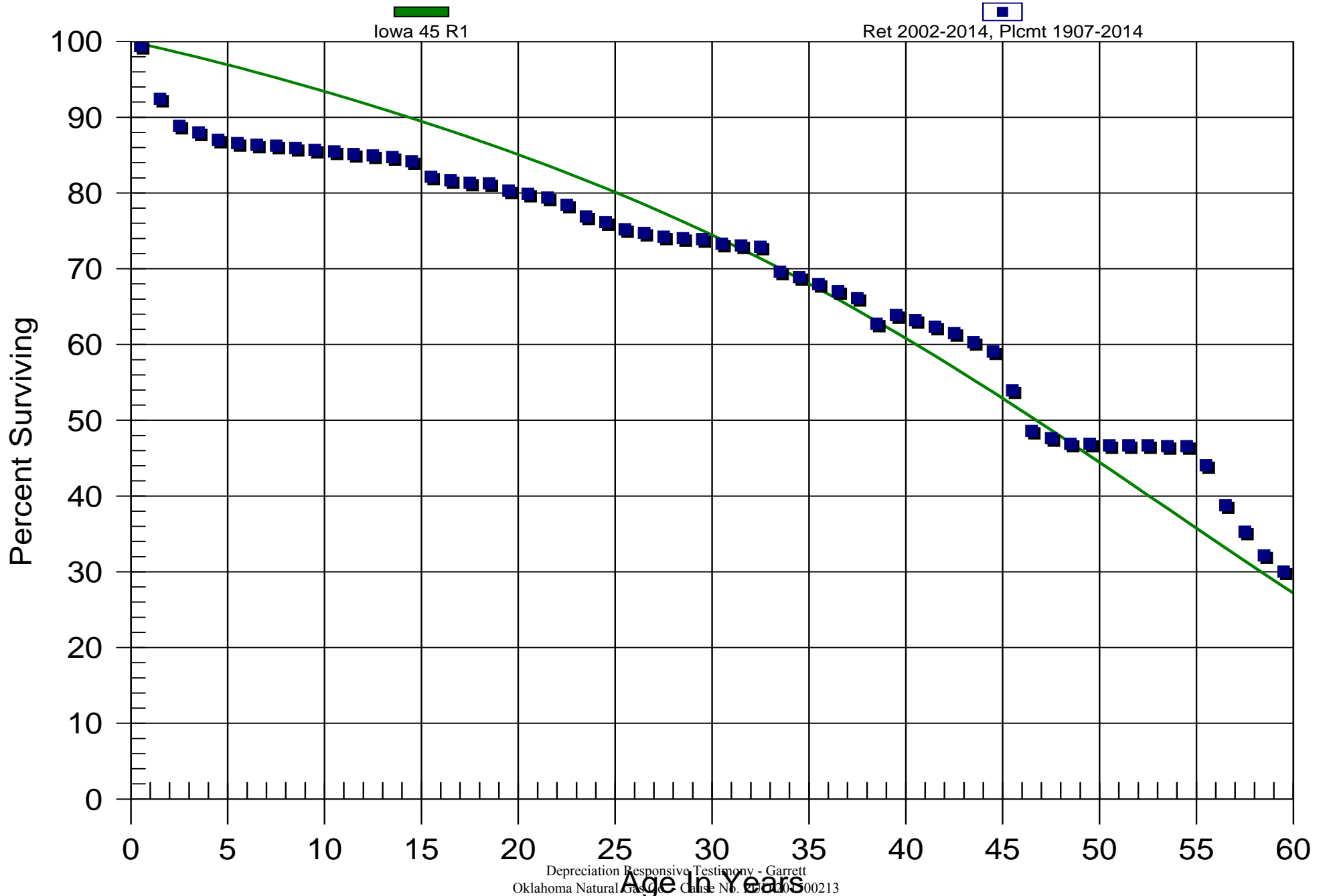
<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
36.5 - 37.5	\$17,734,092.26	\$239,248.18	0.01349	67.04
37.5 - 38.5	\$16,742,030.89	\$856,946.27	0.05119	66.14
38.5 - 39.5	\$14,301,332.32	(\$259,122.04)	-0.01812	62.75
39.5 - 40.5	\$13,723,729.44	\$142,301.08	0.01037	63.89
40.5 - 41.5	\$12,947,638.77	\$181,286.28	0.01400	63.22
41.5 - 42.5	\$11,634,397.46	\$155,206.83	0.01334	62.34
42.5 - 43.5	\$10,433,548.37	\$203,576.31	0.01951	61.51
43.5 - 44.5	\$9,192,771.95	\$189,155.53	0.02058	60.31
44.5 - 45.5	\$168,878.15	\$14,612.84	0.08653	59.07
45.5 - 46.5	\$135,253.02	\$13,412.45	0.09917	53.96
46.5 - 47.5	\$116,699.49	\$2,332.89	0.01999	48.61
47.5 - 48.5	\$110,381.59	\$1,711.06	0.01550	47.63
48.5 - 49.5	\$100,833.53	\$3.46	0.00003	46.90
49.5 - 50.5	\$96,606.52	\$409.07	0.00423	46.89
50.5 - 51.5	\$62,939.96	\$14.67	0.00023	46.70
51.5 - 52.5	\$24,933.05	\$0.00	0.00000	46.68
52.5 - 53.5	\$23,840.27	\$55.48	0.00233	46.68
53.5 - 54.5	\$22,846.02	\$0.00	0.00000	46.58
54.5 - 55.5	\$22,846.02	\$1,233.29	0.05398	46.58
55.5 - 56.5	\$21,612.73	\$2,599.67	0.12028	44.06
56.5 - 57.5	\$53,002.60	\$4,738.48	0.08940	38.76
57.5 - 58.5	\$47,603.13	\$4,248.13	0.08924	35.30
58.5 - 59.5	\$42,133.32	\$2,777.38	0.06592	32.15
59.5 - 60.5	\$39,214.33	\$3,726.79	0.09504	30.03
60.5 - 61.5	\$35,068.01	\$445.79	0.01271	27.17
61.5 - 62.5	\$34,220.93	\$0.00	0.00000	26.83
62.5 - 63.5	\$34,075.01	\$0.00	0.00000	26.83
63.5 - 64.5	\$34,061.74	\$0.00	0.00000	26.83
64.5 - 65.5	\$34,061.74	\$0.00	0.00000	26.83
65.5 - 66.5	\$34,061.74	\$30,385.63	0.89208	26.83
66.5 - 67.5	\$24,755.51	\$0.00	0.00000	2.90
67.5 - 68.5	\$24,755.51	\$202.11	0.00816	2.90
68.5 - 69.5	\$24,553.40	\$0.00	0.00000	2.87
69.5 - 70.5	\$21,079.40	\$0.00	0.00000	2.87
70.5 - 71.5	\$21,079.40	\$0.00	0.00000	2.87
71.5 - 72.5	\$21,079.40	\$0.00	0.00000	2.87
72.5 - 73.5	\$21,152.36	\$0.00	0.00000	2.87

**ONG**  
**Electric Division**  
**380.50 Services - Metallic**  
**Observed Life Table**  
**Retirement Expr. 2002 TO 2014**  
**Placement Years 1907 TO 2014**

<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
73.5 - 74.5	\$21,152.36	\$0.00	0.00000	2.87
74.5 - 75.5	\$21,152.36	\$0.00	0.00000	2.87
75.5 - 76.5	\$21,152.36	\$18,380.17	0.86894	2.87
76.5 - 77.5	\$5,361.03	\$0.00	0.00000	0.38
77.5 - 78.5	\$5,361.03	\$4.23	0.00079	0.38
78.5 - 79.5	\$5,356.80	\$72.96	0.01362	0.38
79.5 - 80.5	\$2,588.84	\$0.00	0.00000	0.37
80.5 - 81.5	\$2,588.84	\$0.00	0.00000	0.37
81.5 - 82.5	\$2,588.84	\$364.81	0.14092	0.37
82.5 - 83.5	\$2,224.03	\$0.00	0.00000	0.32
83.5 - 84.5	\$2,224.03	\$0.00	0.00000	0.32
84.5 - 85.5	\$2,224.03	\$0.00	0.00000	0.32
85.5 - 86.5	\$2,224.03	\$1,786.26	0.80316	0.32
86.5 - 87.5	\$931.95	\$0.00	0.00000	0.06
87.5 - 88.5	\$931.95	\$4.25	0.00456	0.06
88.5 - 89.5	\$927.70	\$0.00	0.00000	0.06
89.5 - 90.5	\$494.18	\$0.00	0.00000	0.06
90.5 - 91.5	\$494.18	\$0.00	0.00000	0.06
91.5 - 92.5	\$494.18	\$56.41	0.11415	0.06
92.5 - 93.5	\$437.77	\$0.00	0.00000	0.06
93.5 - 94.5	\$437.77	\$0.00	0.00000	0.06
94.5 - 95.5	\$875.54	\$0.00	0.00000	0.06
95.5 - 96.5	\$875.54	\$0.00	0.00000	0.06
96.5 - 97.5	\$875.54	\$0.00	0.00000	0.06
97.5 - 98.5	\$875.54	\$0.00	0.00000	0.06
98.5 - 99.5	\$875.54	\$0.00	0.00000	0.06

# ONG

## Electric Division 380.50 Services - Metallic Original And Smooth Survivor Curves



**ONG**  
**Electric Division**  
**381.00 Meters**  
**Observed Life Table**  
**Retirement Expr. 1983 TO 2014**  
**Placement Years 1901 TO 2014**

<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
0.0 - 0.5	\$142,623,938.06	\$369,951.68	0.00259	100.00
0.5 - 1.5	\$132,696,473.95	\$125,715.50	0.00095	99.74
1.5 - 2.5	\$123,466,123.43	\$271,275.90	0.00220	99.65
2.5 - 3.5	\$116,118,346.72	\$63,352.77	0.00055	99.43
3.5 - 4.5	\$103,221,512.50	\$35,770.95	0.00035	99.37
4.5 - 5.5	\$90,089,040.84	\$81,813.98	0.00091	99.34
5.5 - 6.5	\$87,238,448.31	\$72,759.10	0.00083	99.25
6.5 - 7.5	\$83,205,286.86	\$103,176.27	0.00124	99.17
7.5 - 8.5	\$80,936,255.03	\$207,896.70	0.00257	99.04
8.5 - 9.5	\$79,169,890.26	\$201,668.23	0.00255	98.79
9.5 - 10.5	\$76,124,274.19	\$299,307.67	0.00393	98.54
10.5 - 11.5	\$73,215,598.67	\$347,366.20	0.00474	98.15
11.5 - 12.5	\$73,357,128.07	\$284,731.04	0.00388	97.68
12.5 - 13.5	\$64,668,036.06	\$627,882.56	0.00971	97.30
13.5 - 14.5	\$64,880,032.84	\$458,008.60	0.00706	96.36
14.5 - 15.5	\$63,121,156.28	\$218,572.67	0.00346	95.68
15.5 - 16.5	\$60,212,659.70	\$167,174.00	0.00278	95.35
16.5 - 17.5	\$57,842,722.12	\$138,804.97	0.00240	95.08
17.5 - 18.5	\$55,060,386.49	\$201,064.29	0.00365	94.86
18.5 - 19.5	\$52,508,658.42	\$431,935.38	0.00823	94.51
19.5 - 20.5	\$49,653,832.22	\$1,225,131.64	0.02467	93.73
20.5 - 21.5	\$46,107,346.92	\$298,863.58	0.00648	91.42
21.5 - 22.5	\$43,741,299.81	\$937,689.90	0.02144	90.83
22.5 - 23.5	\$39,599,583.33	\$819,294.23	0.02069	88.88
23.5 - 24.5	\$34,624,176.55	\$238,845.37	0.00690	87.04
24.5 - 25.5	\$32,310,191.07	\$315,617.74	0.00977	86.44
25.5 - 26.5	\$30,832,098.83	\$1,322,174.43	0.04288	85.60
26.5 - 27.5	\$28,195,422.39	\$2,624,740.06	0.09309	81.92
27.5 - 28.5	\$25,748,071.56	\$2,962,638.21	0.11506	74.30
28.5 - 29.5	\$21,981,420.02	\$2,924,042.34	0.13302	65.75
29.5 - 30.5	\$18,345,076.47	\$3,361,788.33	0.18325	57.00
30.5 - 31.5	\$13,984,908.93	\$4,433,793.32	0.31704	46.56
31.5 - 32.5	\$8,588,836.38	\$2,473,122.26	0.28795	31.80
32.5 - 33.5	\$5,197,877.99	\$379,887.83	0.07309	22.64
33.5 - 34.5	\$3,543,745.94	\$1,045,806.84	0.29511	20.99
34.5 - 35.5	\$2,278,460.46	\$539,484.28	0.23678	14.79
35.5 - 36.5	\$1,492,596.11	\$149,543.27	0.10019	11.29

**ONG**  
**Electric Division**  
**381.00 Meters**  
**Observed Life Table**  
**Retirement Expr. 1983 TO 2014**  
**Placement Years 1901 TO 2014**

<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
36.5 - 37.5	\$1,277,671.93	\$79,235.39	0.06202	10.16
37.5 - 38.5	\$824,987.03	\$44,574.06	0.05403	9.53
38.5 - 39.5	\$720,507.75	\$5,191.41	0.00721	9.01
39.5 - 40.5	\$686,483.32	\$4,645.43	0.00677	8.95
40.5 - 41.5	\$633,680.16	\$8,836.63	0.01394	8.89
41.5 - 42.5	\$562,484.50	\$16,478.45	0.02930	8.76
42.5 - 43.5	\$693,345.60	\$1,558.84	0.00225	8.51
43.5 - 44.5	\$658,694.55	\$11,877.82	0.01803	8.49
44.5 - 45.5	\$345,597.18	\$1,956.69	0.00566	8.34
45.5 - 46.5	\$319,391.55	\$3,302.52	0.01034	8.29
46.5 - 47.5	\$313,134.49	\$5,383.20	0.01719	8.20
47.5 - 48.5	\$295,197.78	\$45,075.84	0.15270	8.06
48.5 - 49.5	\$237,215.66	\$0.09	0.00000	6.83
49.5 - 50.5	\$179,817.80	\$288.26	0.00160	6.83
50.5 - 51.5	\$115,004.69	\$0.00	0.00000	6.82
51.5 - 52.5	\$106,214.43	\$0.00	0.00000	6.82
52.5 - 53.5	\$154,352.32	\$3.00	0.00002	6.82
53.5 - 54.5	\$158,585.06	\$0.03	0.00000	6.82
54.5 - 55.5	\$131,638.84	\$0.01	0.00000	6.82
55.5 - 56.5	\$125,086.22	\$0.00	0.00000	6.82
56.5 - 57.5	\$61,899.36	\$0.00	0.00000	6.82
57.5 - 58.5	\$53,361.60	\$0.03	0.00000	6.82
58.5 - 59.5	\$43,590.95	\$0.00	0.00000	6.82
59.5 - 60.5	\$166,856.33	\$0.00	0.00000	6.82
60.5 - 61.5	\$157,667.95	\$0.00	0.00000	6.82
61.5 - 62.5	\$36,446.34	\$0.00	0.00000	6.82
62.5 - 63.5	\$38,702.98	\$0.00	0.00000	6.82
63.5 - 64.5	\$28,159.40	\$0.00	0.00000	6.82
64.5 - 65.5	\$17,699.63	\$193.21	0.01092	6.82
65.5 - 66.5	\$6,261.77	\$0.00	0.00000	6.75
66.5 - 67.5	\$7,990.71	\$0.00	0.00000	6.75
67.5 - 68.5	\$5,544.27	\$0.00	0.00000	6.75
68.5 - 69.5	\$3,528.30	\$0.00	0.00000	6.75
69.5 - 70.5	\$2,019.37	\$0.00	0.00000	6.75
70.5 - 71.5	\$2,009.16	\$0.00	0.00000	6.75
71.5 - 72.5	\$7,263.59	\$0.00	0.00000	6.75
72.5 - 73.5	\$7,263.59	\$0.00	0.00000	6.75

**ONG**  
**Electric Division**  
**381.00 Meters**  
**Observed Life Table**  
**Retirement Expr. 1983 TO 2014**  
**Placement Years 1901 TO 2014**

<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
73.5 - 74.5	\$2,008.69	\$0.00	0.00000	6.75
74.5 - 75.5	\$1,737.11	\$0.00	0.00000	6.75
75.5 - 76.5	\$1,690.67	\$0.00	0.00000	6.75
76.5 - 77.5	\$1,669.36	\$261.39	0.15658	6.75
77.5 - 78.5	\$1,394.32	\$297.99	0.21372	5.69
78.5 - 79.5	\$1,096.33	\$187.44	0.17097	4.47
79.5 - 80.5	\$908.89	\$0.00	0.00000	3.71
80.5 - 81.5	\$29,877.25	\$0.00	0.00000	3.71
81.5 - 82.5	\$29,961.15	\$0.00	0.00000	3.71
82.5 - 83.5	\$29,909.30	\$0.00	0.00000	3.71
83.5 - 84.5	\$940.94	\$0.00	0.00000	3.71
84.5 - 85.5	\$940.94	\$0.00	0.00000	3.71
85.5 - 86.5	\$929.72	\$0.00	0.00000	3.71
86.5 - 87.5	\$910.87	\$0.00	0.00000	3.71
87.5 - 88.5	\$850.52	\$0.00	0.00000	3.71
88.5 - 89.5	\$812.82	\$0.00	0.00000	3.71
89.5 - 90.5	\$812.82	\$0.00	0.00000	3.71
90.5 - 91.5	\$730.11	\$0.00	0.00000	3.71
91.5 - 92.5	\$711.26	\$0.00	0.00000	3.71
92.5 - 93.5	\$664.94	\$0.00	0.00000	3.71
93.5 - 94.5	\$664.94	\$0.00	0.00000	3.71
94.5 - 95.5	\$457.46	\$0.00	0.00000	3.71
95.5 - 96.5	\$432.96	\$0.00	0.00000	3.71
96.5 - 97.5	\$432.96	\$0.00	0.00000	3.71
97.5 - 98.5	\$295.56	\$0.00	0.00000	3.71
98.5 - 99.5	\$295.56	\$0.00	0.00000	3.71
99.5 - 100.5	\$295.56	\$83.90	0.28387	3.71
100.5 - 101.5	\$211.66	\$0.00	0.00000	2.66
101.5 - 102.5	\$24.95	\$0.00	0.00000	2.66
102.5 - 103.5	\$24.95	\$0.00	0.00000	2.66
103.5 - 104.5	\$24.95	\$0.00	0.00000	2.66
104.5 - 105.5	\$24.95	\$0.00	0.00000	2.66
105.5 - 106.5	\$24.95	\$0.00	0.00000	2.66
106.5 - 107.5	\$24.95	\$0.00	0.00000	2.66
107.5 - 108.5	\$0.00	\$0.00	0.00000	2.66
108.5 - 109.5	\$0.00	\$0.00	0.00000	2.66
109.5 - 110.5	\$0.00	\$0.00	0.00000	2.66



**ONG**  
**Electric Division**  
**381.00 Meters**  
**Observed Life Table**  
**Retirement Expr. 1983 TO 2014**  
**Placement Years 1901 TO 2014**

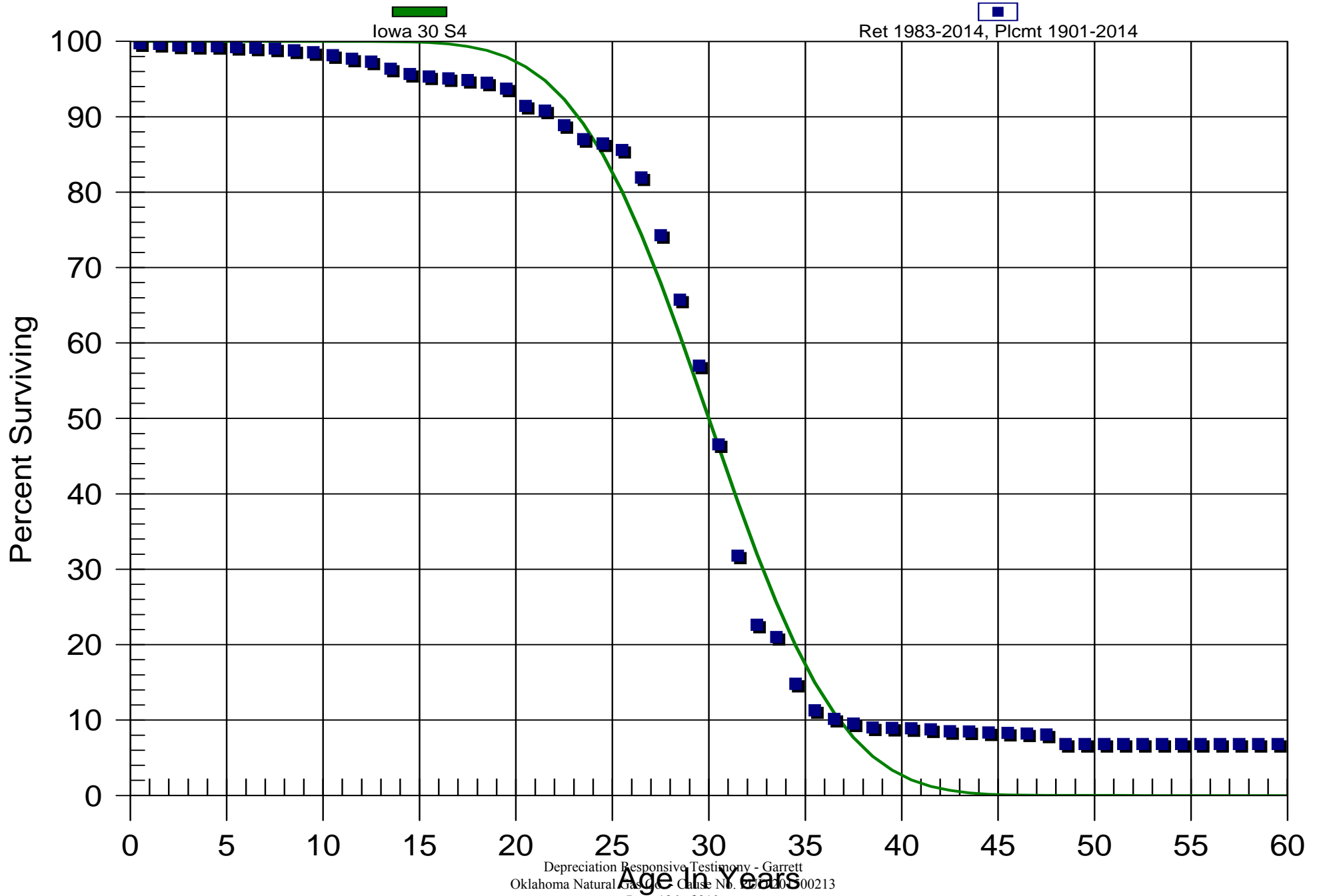
<i>Age Interval</i>	<i>\$ Surviving At Beginning of Age Interval</i>	<i>\$ Retired During The Age Interval</i>	<i>Retirement Ratio</i>	<i>% Surviving At Beginning of Age Interval</i>
110.5 - 111.5	\$0.00	\$0.00	0.00000	2.66
111.5 - 112.5	\$0.00	\$0.00	0.00000	2.66
112.5 - 113.5	\$0.00	\$0.00	0.00000	2.66

# ONG

Electric Division

381.00 Meters

## Original And Smooth Survivor Curves

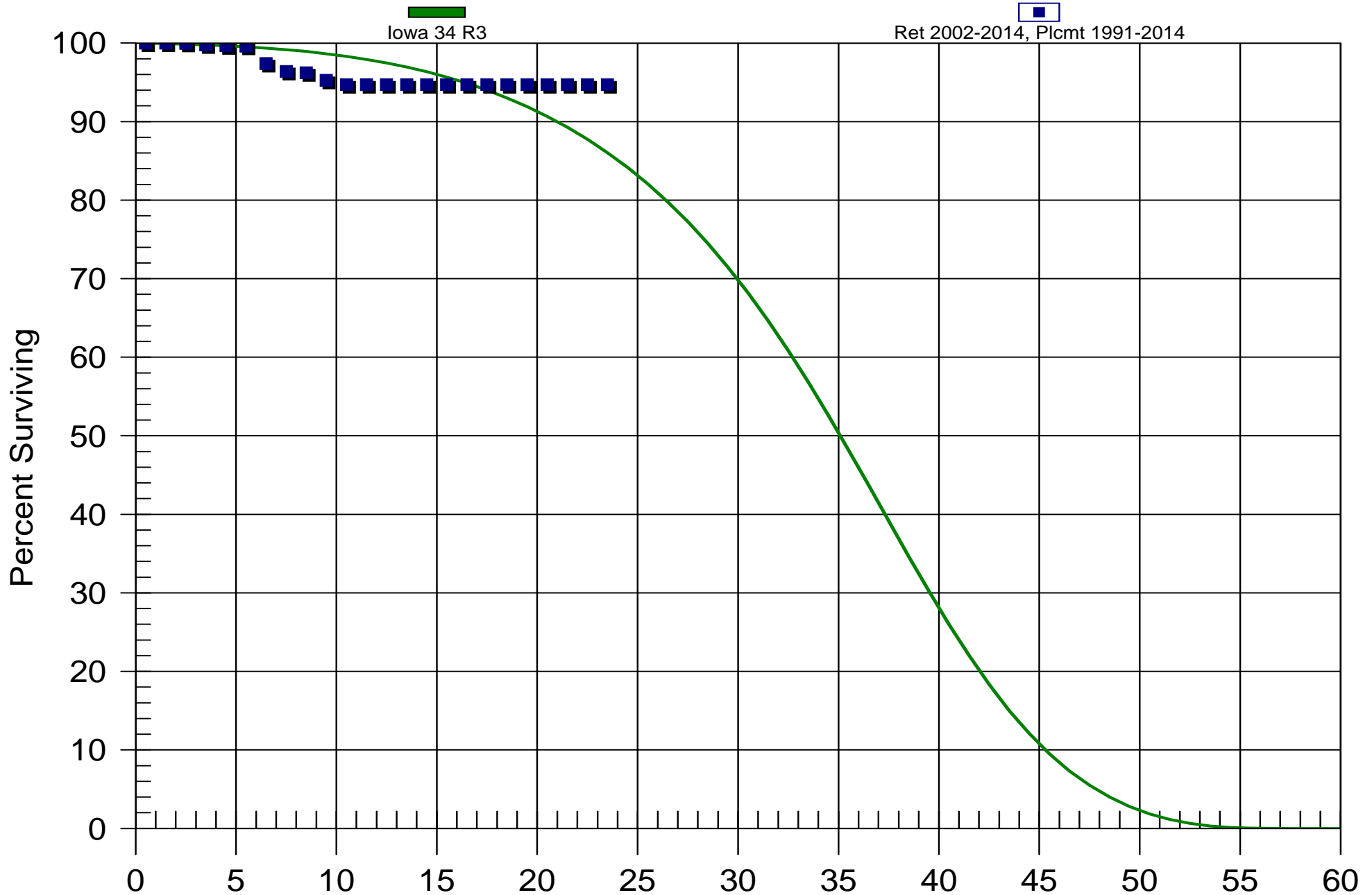


**ONG**  
**Electric Division**  
**381.10 Meter Communication Devices**

**Observed Life Table**  
**Retirement Expr. 2002 TO 2014**  
**Placement Years 1991 TO 2014**

<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
0.0 - 0.5	\$5,745,066.83	\$0.00	0.00000	100.00
0.5 - 1.5	\$7,893,590.10	\$0.00	0.00000	100.00
1.5 - 2.5	\$8,286,653.48	\$2,733.07	0.00033	100.00
2.5 - 3.5	\$8,086,998.76	\$15,697.68	0.00194	99.97
3.5 - 4.5	\$9,092,363.85	\$11,230.86	0.00124	99.77
4.5 - 5.5	\$8,868,719.59	\$4,412.78	0.00050	99.65
5.5 - 6.5	\$8,653,131.76	\$191,685.93	0.02215	99.60
6.5 - 7.5	\$7,741,608.54	\$80,529.35	0.01040	97.39
7.5 - 8.5	\$6,668,350.98	\$10,803.18	0.00162	96.38
8.5 - 9.5	\$5,358,431.85	\$54,377.88	0.01015	96.22
9.5 - 10.5	\$3,609,521.54	\$20,455.22	0.00567	95.25
10.5 - 11.5	\$2,235,725.29	\$0.00	0.00000	94.71
11.5 - 12.5	\$1,652,974.79	\$0.00	0.00000	94.71
12.5 - 13.5	\$1,544,737.89	\$0.00	0.00000	94.71
13.5 - 14.5	\$303,984.70	\$0.00	0.00000	94.71
14.5 - 15.5	\$83,721.99	\$0.00	0.00000	94.71
15.5 - 16.5	\$27,296.45	\$0.00	0.00000	94.71
16.5 - 17.5	\$14,925.01	\$0.00	0.00000	94.71
17.5 - 18.5	\$14,925.01	\$0.00	0.00000	94.71
18.5 - 19.5	\$14,925.01	\$0.00	0.00000	94.71
19.5 - 20.5	\$14,925.01	\$0.00	0.00000	94.71
20.5 - 21.5	\$14,925.01	\$0.00	0.00000	94.71
21.5 - 22.5	\$14,925.01	\$0.00	0.00000	94.71
22.5 - 23.5	\$10,709.18	\$0.00	0.00000	94.71

## Electric Division 381.10 Meter Communication Devices Original And Smooth Survivor Curves



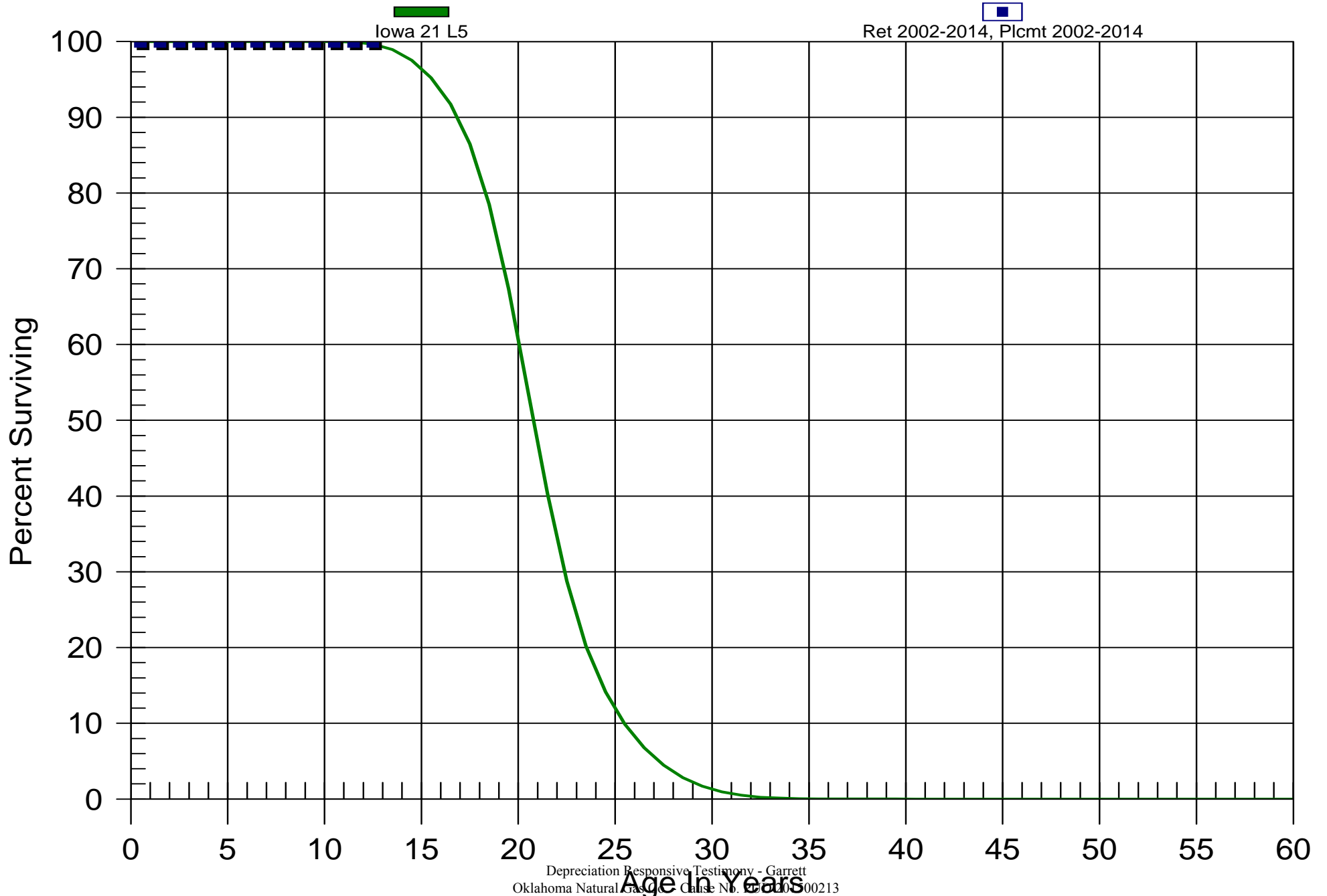
Percent Surviving

Age in Years

**ONG**  
**Electric Division**  
**381.50 AMR Communication Devices**  
**Observed Life Table**  
**Retirement Expr. 2002 TO 2014**  
**Placement Years 2002 TO 2014**

<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
0.0 - 0.5	\$51,360,234.15	\$0.00	0.00000	100.00
0.5 - 1.5	\$50,684,623.63	\$0.00	0.00000	100.00
1.5 - 2.5	\$50,141,408.60	\$72.82	0.00000	100.00
2.5 - 3.5	\$45,853,942.75	\$0.00	0.00000	100.00
3.5 - 4.5	\$40,371,657.61	\$0.00	0.00000	100.00
4.5 - 5.5	\$8,797,135.74	\$0.00	0.00000	100.00
5.5 - 6.5	\$7,266,792.84	\$0.00	0.00000	100.00
6.5 - 7.5	\$6,642,053.72	\$0.00	0.00000	100.00
7.5 - 8.5	\$6,008,034.66	\$0.00	0.00000	100.00
8.5 - 9.5	\$5,587,363.63	\$0.00	0.00000	100.00
9.5 - 10.5	\$3,405,670.94	\$0.00	0.00000	100.00
10.5 - 11.5	\$7,884.53	\$0.00	0.00000	100.00
11.5 - 12.5	\$2,424.16	\$0.00	0.00000	100.00

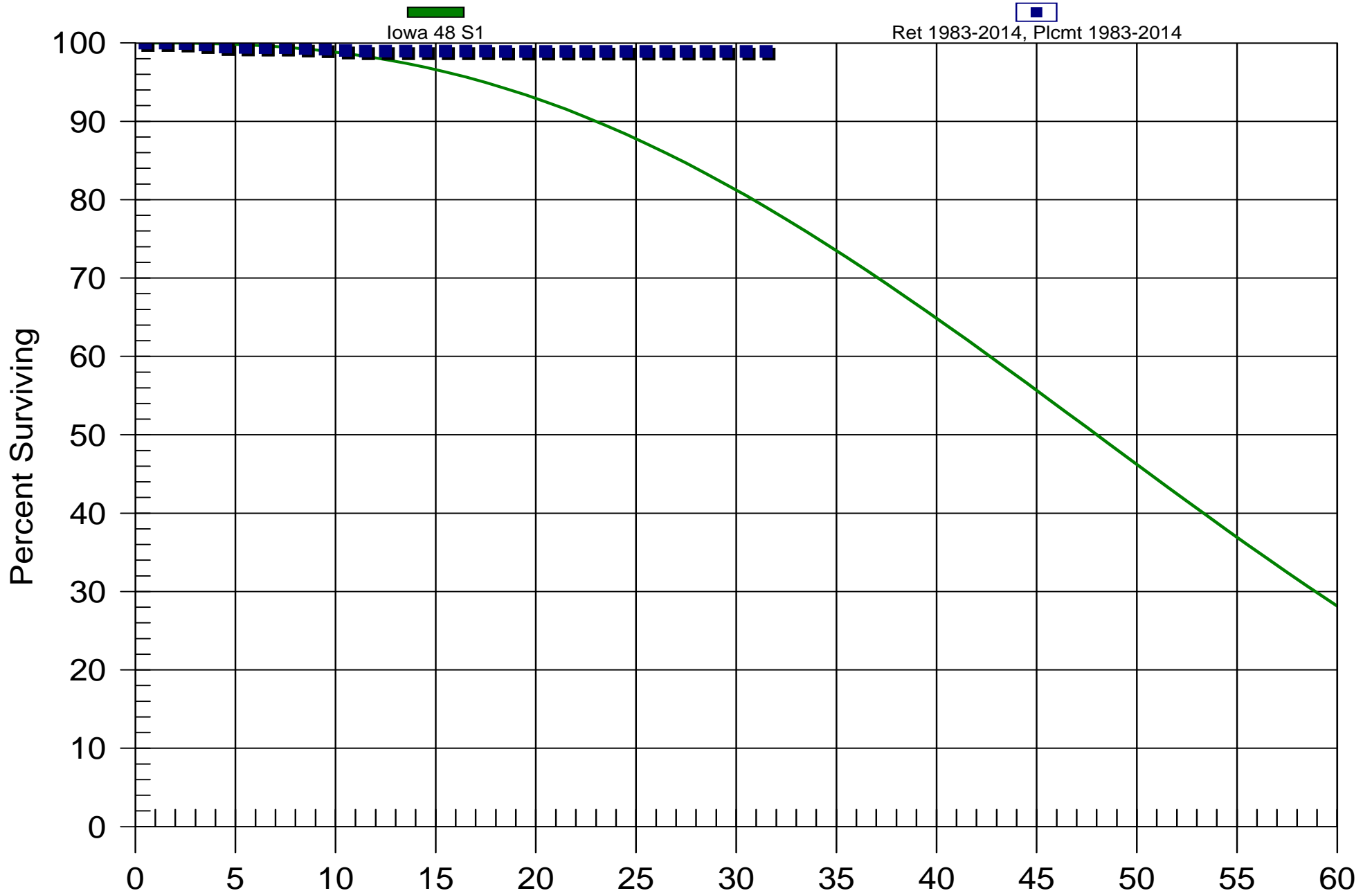
## Electric Division 381.50 AMR Communication Devices Original And Smooth Survivor Curves



**ONG**  
**Electric Division**  
**383.00 House Regulators**  
**Observed Life Table**  
**Retirement Expr. 1983 TO 2014**  
**Placement Years 1983 TO 2014**

<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
0.0 - 0.5	\$20,345,419.70	\$0.00	0.00000	100.00
0.5 - 1.5	\$17,803,181.91	\$4,203.28	0.00024	100.00
1.5 - 2.5	\$16,391,669.34	\$8,600.81	0.00052	99.98
2.5 - 3.5	\$15,370,059.70	\$27,750.25	0.00181	99.92
3.5 - 4.5	\$14,070,966.38	\$36,030.01	0.00256	99.74
4.5 - 5.5	\$12,575,787.15	\$6,080.38	0.00048	99.49
5.5 - 6.5	\$11,439,281.35	\$2,767.50	0.00024	99.44
6.5 - 7.5	\$10,702,656.27	\$2,543.60	0.00024	99.42
7.5 - 8.5	\$10,333,209.32	\$9,953.58	0.00096	99.39
8.5 - 9.5	\$7,218,578.03	\$6,924.67	0.00096	99.30
9.5 - 10.5	\$6,639,864.98	\$10,416.86	0.00157	99.20
10.5 - 11.5	\$7,201,409.91	\$5,673.00	0.00079	99.05
11.5 - 12.5	\$6,578,736.79	\$0.00	0.00000	98.97
12.5 - 13.5	\$6,433,782.44	\$213.32	0.00003	98.97
13.5 - 14.5	\$6,186,792.03	\$0.00	0.00000	98.96
14.5 - 15.5	\$5,630,557.52	\$0.00	0.00000	98.96
15.5 - 16.5	\$5,283,870.83	\$0.00	0.00000	98.96
16.5 - 17.5	\$4,954,571.83	\$0.00	0.00000	98.96
17.5 - 18.5	\$4,557,085.89	\$2,114.32	0.00046	98.96
18.5 - 19.5	\$4,163,541.94	\$0.00	0.00000	98.92
19.5 - 20.5	\$3,646,484.11	\$0.00	0.00000	98.92
20.5 - 21.5	\$3,155,116.19	\$0.00	0.00000	98.92
21.5 - 22.5	\$2,752,876.13	\$0.00	0.00000	98.92
22.5 - 23.5	\$2,286,713.90	\$0.00	0.00000	98.92
23.5 - 24.5	\$1,956,778.67	\$0.00	0.00000	98.92
24.5 - 25.5	\$1,715,044.26	\$0.00	0.00000	98.92
25.5 - 26.5	\$1,482,455.07	\$0.00	0.00000	98.92
26.5 - 27.5	\$1,237,776.60	\$0.00	0.00000	98.92
27.5 - 28.5	\$1,146,588.05	\$0.00	0.00000	98.92
28.5 - 29.5	\$892,772.62	\$0.00	0.00000	98.92
29.5 - 30.5	\$663,167.30	\$0.00	0.00000	98.92
30.5 - 31.5	\$278,312.92	\$0.00	0.00000	98.92

Electric Division  
383.00 House Regulators  
Original And Smooth Survivor Curves





**ONG**  
**Electric Division**  
**385.00 Industrial Meas. And Reg. Equipment**

**Observed Life Table**  
**Retirement Expr. 2002 TO 2014**  
**Placement Years 1941 TO 2014**

<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
0.0 - 0.5	\$1,875,353.24	\$0.00	0.00000	100.00
0.5 - 1.5	(\$965,694.70)	\$0.00	0.00000	100.00
1.5 - 2.5	\$1,649,174.46	\$4,002.69	0.00243	100.00
2.5 - 3.5	\$1,085,566.90	\$0.00	0.00000	99.76
3.5 - 4.5	\$1,185,452.03	\$0.00	0.00000	99.76
4.5 - 5.5	\$1,277,974.23	\$4,415.31	0.00345	99.76
5.5 - 6.5	\$1,270,570.56	\$2,909.85	0.00229	99.41
6.5 - 7.5	\$1,129,860.51	\$4,533.11	0.00401	99.18
7.5 - 8.5	\$994,202.62	\$0.00	0.00000	98.79
8.5 - 9.5	\$732,614.93	\$0.00	0.00000	98.79
9.5 - 10.5	\$686,066.47	\$0.00	0.00000	98.79
10.5 - 11.5	\$707,098.12	\$0.00	0.00000	98.79
11.5 - 12.5	\$3,648,723.07	\$0.00	0.00000	98.79
12.5 - 13.5	\$3,732,183.53	\$0.00	0.00000	98.79
13.5 - 14.5	\$3,477,516.43	\$0.00	0.00000	98.79
14.5 - 15.5	\$448,998.67	\$0.00	0.00000	98.79
15.5 - 16.5	\$191,126.88	\$0.00	0.00000	98.79
16.5 - 17.5	\$205,588.41	\$0.00	0.00000	98.79
17.5 - 18.5	\$85,066.04	\$0.00	0.00000	98.79
18.5 - 19.5	\$89,727.75	\$0.00	0.00000	98.79
19.5 - 20.5	\$249,957.54	\$0.00	0.00000	98.79
20.5 - 21.5	\$383,307.94	\$0.00	0.00000	98.79
21.5 - 22.5	\$489,529.95	\$0.00	0.00000	98.79
22.5 - 23.5	\$279,015.17	\$0.00	0.00000	98.79
23.5 - 24.5	\$11,685.98	\$0.00	0.00000	98.79
24.5 - 25.5	\$24,207.45	\$0.00	0.00000	98.79
25.5 - 26.5	(\$72,057.35)	\$0.00	0.00000	98.79
26.5 - 27.5	\$73,522.83	\$0.00	0.00000	98.79
27.5 - 28.5	\$74,251.41	\$0.00	0.00000	98.79
28.5 - 29.5	\$66,843.74	\$0.00	0.00000	98.79
29.5 - 30.5	\$7,787.10	\$0.00	0.00000	98.79
30.5 - 31.5	\$17,095.12	\$0.00	0.00000	98.79
31.5 - 32.5	\$9,308.02	\$0.00	0.00000	98.79
32.5 - 33.5	\$9,308.02	\$0.00	0.00000	98.79
33.5 - 34.5	\$0.00	\$0.00	0.00000	98.79
34.5 - 35.5	\$16,837.12	\$0.00	0.00000	98.79
35.5 - 36.5	\$17,176.25	\$0.00	0.00000	98.79

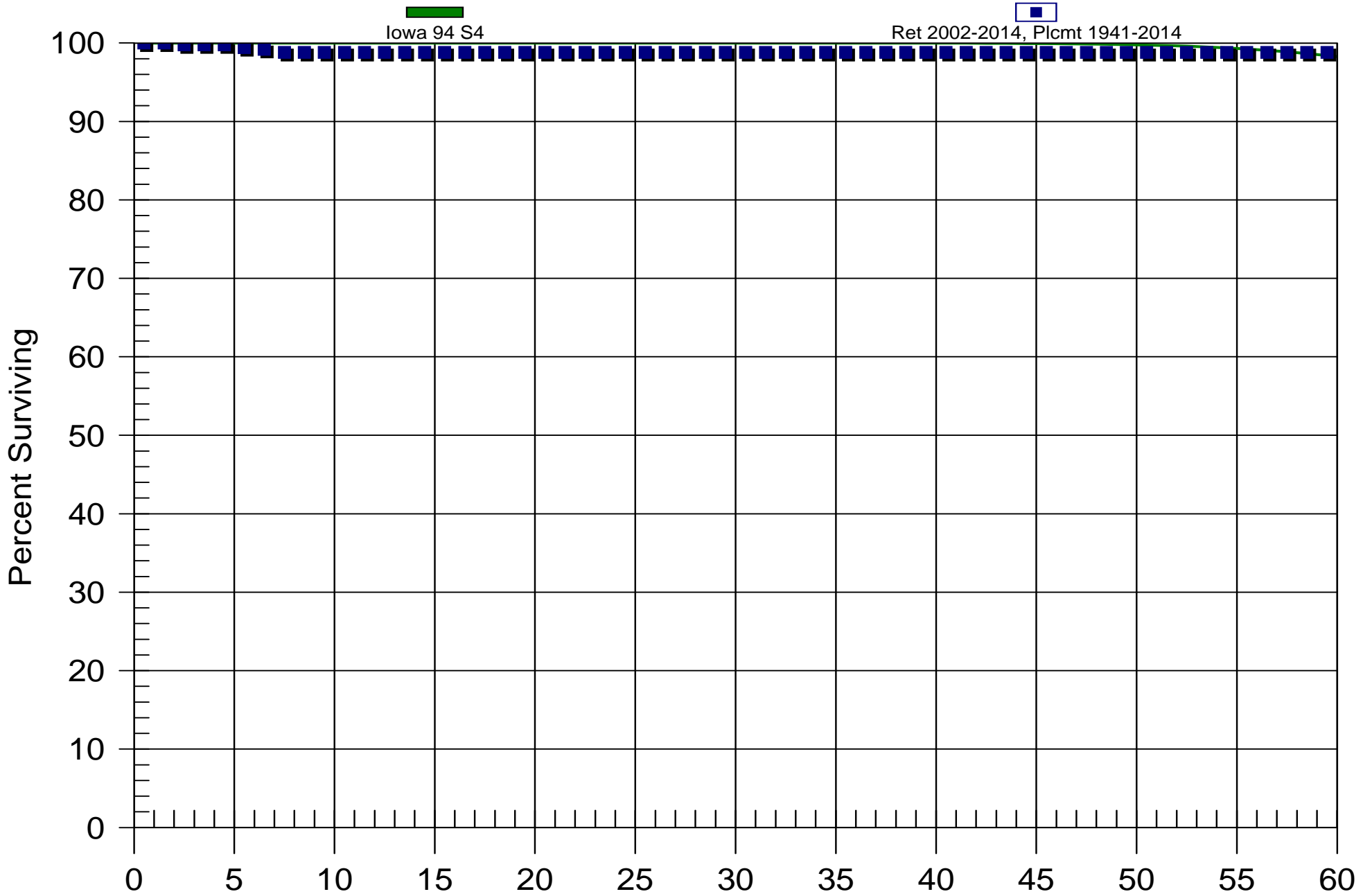
**ONG**  
**Electric Division**  
**385.00 Industrial Meas. And Reg. Equipment**

**Observed Life Table**  
**Retirement Expr. 2002 TO 2014**  
**Placement Years 1941 TO 2014**

<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
36.5 - 37.5	\$106,409.08	\$0.00	0.00000	98.79
37.5 - 38.5	\$93,173.21	\$0.00	0.00000	98.79
38.5 - 39.5	\$78,216.68	\$0.00	0.00000	98.79
39.5 - 40.5	\$5,379.55	\$0.00	0.00000	98.79
40.5 - 41.5	\$1,626.21	\$0.00	0.00000	98.79
41.5 - 42.5	\$1,626.21	\$0.00	0.00000	98.79
42.5 - 43.5	\$0.00	\$0.00	0.00000	98.79
43.5 - 44.5	(\$1,326.14)	\$0.00	0.00000	98.79
44.5 - 45.5	\$0.00	\$0.00	0.00000	98.79
45.5 - 46.5	\$339.13	\$0.00	0.00000	98.79
46.5 - 47.5	\$339.13	\$0.00	0.00000	98.79
47.5 - 48.5	\$526.17	\$0.00	0.00000	98.79
48.5 - 49.5	\$187.04	\$0.00	0.00000	98.79
49.5 - 50.5	\$15,143.57	\$0.00	0.00000	98.79
50.5 - 51.5	\$14,956.53	\$0.00	0.00000	98.79
51.5 - 52.5	\$14,956.53	\$0.00	0.00000	98.79
52.5 - 53.5	\$0.00	\$0.00	0.00000	98.79
53.5 - 54.5	\$0.00	\$0.00	0.00000	98.79
54.5 - 55.5	\$1,326.14	\$0.00	0.00000	98.79
55.5 - 56.5	\$1,326.14	\$0.00	0.00000	98.79
56.5 - 57.5	\$1,326.14	\$0.00	0.00000	98.79
57.5 - 58.5	\$0.00	\$0.00	0.00000	98.79
58.5 - 59.5	\$0.00	\$0.00	0.00000	98.79
59.5 - 60.5	(\$3,645.24)	\$0.00	0.00000	98.79
60.5 - 61.5	\$0.00	\$0.00	0.00000	98.79
61.5 - 62.5	\$0.00	\$0.00	0.00000	98.79
62.5 - 63.5	\$0.00	\$0.00	0.00000	98.79
63.5 - 64.5	\$0.00	\$0.00	0.00000	98.79
64.5 - 65.5	\$0.00	\$0.00	0.00000	98.79
65.5 - 66.5	\$0.00	\$0.00	0.00000	98.79
66.5 - 67.5	\$0.00	\$0.00	0.00000	98.79
67.5 - 68.5	\$0.00	\$0.00	0.00000	98.79
68.5 - 69.5	\$0.00	\$0.00	0.00000	98.79
69.5 - 70.5	\$0.00	\$0.00	0.00000	98.79
70.5 - 71.5	\$3,645.24	\$0.00	0.00000	98.79
71.5 - 72.5	\$3,645.24	\$0.00	0.00000	98.79
72.5 - 73.5	\$3,645.24	\$0.00	0.00000	98.79

# ONG

## Electric Division 385.00 Industrial Meas. And Reg. Equipment Original And Smooth Survivor Curves



Percent Surviving

Age in Years

**ONG**  
**Electric Division**  
**390.10 Structures and Improvements**

**Observed Life Table**  
**Retirement Expr. 1985 TO 2014**  
**Placement Years 1952 TO 2014**

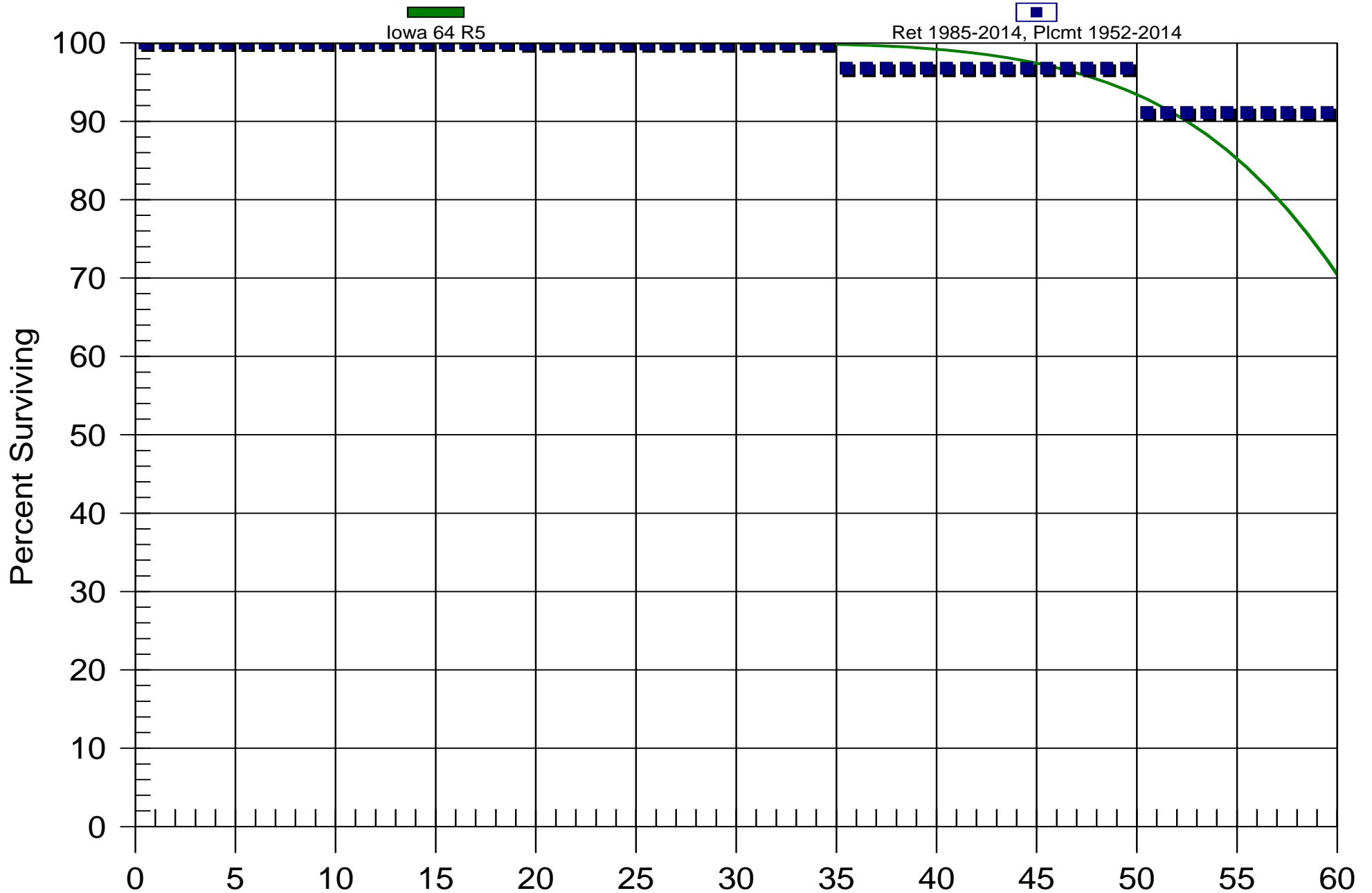
<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
0.0 - 0.5	\$958,760.04	\$0.00	0.00000	100.00
0.5 - 1.5	\$928,756.25	\$0.00	0.00000	100.00
1.5 - 2.5	\$859,124.26	\$0.00	0.00000	100.00
2.5 - 3.5	\$680,538.39	\$0.00	0.00000	100.00
3.5 - 4.5	\$650,932.11	\$0.00	0.00000	100.00
4.5 - 5.5	\$444,673.73	\$0.00	0.00000	100.00
5.5 - 6.5	\$449,884.87	\$0.00	0.00000	100.00
6.5 - 7.5	\$433,705.87	\$0.00	0.00000	100.00
7.5 - 8.5	\$466,159.04	\$0.00	0.00000	100.00
8.5 - 9.5	\$429,602.79	\$0.00	0.00000	100.00
9.5 - 10.5	\$422,456.22	\$0.00	0.00000	100.00
10.5 - 11.5	\$392,391.06	\$0.00	0.00000	100.00
11.5 - 12.5	\$389,874.98	\$0.00	0.00000	100.00
12.5 - 13.5	\$378,895.02	\$0.00	0.00000	100.00
13.5 - 14.5	\$378,895.02	\$0.00	0.00000	100.00
14.5 - 15.5	\$378,895.02	\$0.00	0.00000	100.00
15.5 - 16.5	\$368,502.78	\$0.00	0.00000	100.00
16.5 - 17.5	\$369,248.21	\$0.00	0.00000	100.00
17.5 - 18.5	\$370,688.71	\$0.00	0.00000	100.00
18.5 - 19.5	\$370,688.71	\$502.36	0.00136	100.00
19.5 - 20.5	\$370,186.35	\$0.00	0.00000	99.86
20.5 - 21.5	\$304,551.21	\$0.00	0.00000	99.86
21.5 - 22.5	\$304,551.21	\$0.00	0.00000	99.86
22.5 - 23.5	\$304,551.21	\$0.00	0.00000	99.86
23.5 - 24.5	\$324,036.01	\$0.00	0.00000	99.86
24.5 - 25.5	\$317,165.12	\$0.00	0.00000	99.86
25.5 - 26.5	\$311,953.98	\$0.00	0.00000	99.86
26.5 - 27.5	\$260,889.75	\$0.00	0.00000	99.86
27.5 - 28.5	\$257,670.55	\$0.00	0.00000	99.86
28.5 - 29.5	\$254,885.44	\$0.00	0.00000	99.86
29.5 - 30.5	\$256,793.24	\$0.00	0.00000	99.86
30.5 - 31.5	\$258,570.24	\$0.00	0.00000	99.86
31.5 - 32.5	\$258,570.24	\$0.00	0.00000	99.86
32.5 - 33.5	\$267,836.97	\$0.00	0.00000	99.86
33.5 - 34.5	\$261,410.41	\$0.00	0.00000	99.86
34.5 - 35.5	\$35,728.52	\$1,106.26	0.03096	99.86
35.5 - 36.5	\$34,622.26	\$0.00	0.00000	96.77

**ONG**  
**Electric Division**  
**390.10 Structures and Improvements**

**Observed Life Table**  
**Retirement Expr. 1985 TO 2014**  
**Placement Years 1952 TO 2014**

<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
36.5 - 37.5	\$34,622.26	\$0.00	0.00000	96.77
37.5 - 38.5	\$33,181.76	\$0.00	0.00000	96.77
38.5 - 39.5	\$33,181.76	\$0.00	0.00000	96.77
39.5 - 40.5	\$33,181.76	\$0.00	0.00000	96.77
40.5 - 41.5	\$33,181.76	\$0.00	0.00000	96.77
41.5 - 42.5	\$33,181.76	\$0.00	0.00000	96.77
42.5 - 43.5	\$33,181.76	\$0.00	0.00000	96.77
43.5 - 44.5	\$33,181.76	\$0.00	0.00000	96.77
44.5 - 45.5	\$33,181.76	\$0.00	0.00000	96.77
45.5 - 46.5	\$33,181.76	\$0.00	0.00000	96.77
46.5 - 47.5	\$32,436.33	\$0.00	0.00000	96.77
47.5 - 48.5	\$32,436.33	\$0.00	0.00000	96.77
48.5 - 49.5	\$32,436.33	\$0.00	0.00000	96.77
49.5 - 50.5	\$30,528.53	\$1,777.00	0.05821	96.77
50.5 - 51.5	\$28,751.53	\$0.00	0.00000	91.14
51.5 - 52.5	\$28,751.53	\$0.00	0.00000	91.14
52.5 - 53.5	\$28,751.53	\$0.00	0.00000	91.14
53.5 - 54.5	\$9,266.73	\$0.00	0.00000	91.14
54.5 - 55.5	\$9,266.73	\$0.00	0.00000	91.14
55.5 - 56.5	\$9,266.73	\$0.00	0.00000	91.14
56.5 - 57.5	\$9,266.73	\$0.00	0.00000	91.14
57.5 - 58.5	\$9,266.73	\$0.00	0.00000	91.14
58.5 - 59.5	\$9,266.73	\$0.00	0.00000	91.14
59.5 - 60.5	\$9,266.73	\$0.00	0.00000	91.14
60.5 - 61.5	\$9,266.73	\$0.00	0.00000	91.14
61.5 - 62.5	\$9,266.73	\$0.00	0.00000	91.14

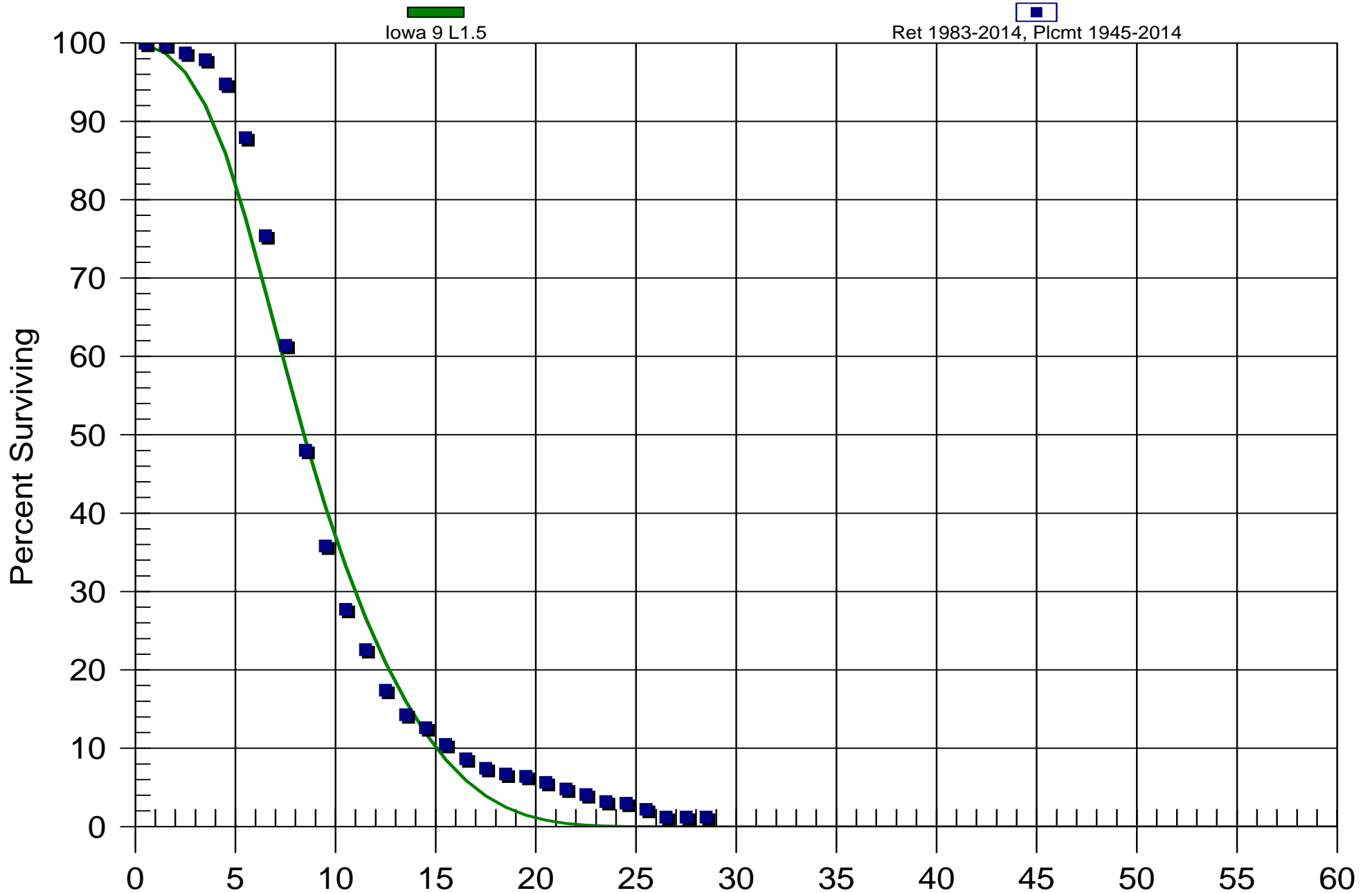
Electric Division  
390.10 Structures and Improvements  
Original And Smooth Survivor Curves



**ONG**  
**Electric Division**  
**392.02 Trucks and Vans**  
**Observed Life Table**  
**Retirement Expr. 1983 TO 2014**  
**Placement Years 1945 TO 2014**

<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
0.0 - 0.5	\$68,037,875.43	\$21,433.60	0.00032	100.00
0.5 - 1.5	\$69,609,323.59	\$149,642.63	0.00215	99.97
1.5 - 2.5	\$65,264,802.64	\$678,752.60	0.01040	99.75
2.5 - 3.5	\$61,156,650.28	\$537,982.97	0.00880	98.72
3.5 - 4.5	\$58,292,879.89	\$1,847,995.64	0.03170	97.85
4.5 - 5.5	\$52,404,420.78	\$3,775,779.09	0.07205	94.75
5.5 - 6.5	\$43,447,744.71	\$6,179,709.37	0.14223	87.92
6.5 - 7.5	\$36,017,542.96	\$6,689,476.07	0.18573	75.41
7.5 - 8.5	\$28,659,936.60	\$6,245,628.89	0.21792	61.41
8.5 - 9.5	\$22,447,168.74	\$5,715,196.99	0.25461	48.03
9.5 - 10.5	\$16,897,663.64	\$3,812,331.93	0.22561	35.80
10.5 - 11.5	\$13,003,508.03	\$2,412,418.88	0.18552	27.72
11.5 - 12.5	\$10,587,545.41	\$2,433,333.11	0.22983	22.58
12.5 - 13.5	\$8,186,059.38	\$1,463,964.34	0.17884	17.39
13.5 - 14.5	\$6,579,214.98	\$762,595.97	0.11591	14.28
14.5 - 15.5	\$5,319,801.19	\$908,903.18	0.17085	12.62
15.5 - 16.5	\$3,640,214.31	\$633,680.49	0.17408	10.47
16.5 - 17.5	\$2,543,340.41	\$356,854.82	0.14031	8.65
17.5 - 18.5	\$1,829,098.76	\$178,749.79	0.09773	7.43
18.5 - 19.5	\$1,607,655.10	\$68,922.35	0.04287	6.71
19.5 - 20.5	\$1,327,386.77	\$160,086.79	0.12060	6.42
20.5 - 21.5	\$999,685.57	\$149,116.76	0.14916	5.64
21.5 - 22.5	\$816,168.47	\$123,445.60	0.15125	4.80
22.5 - 23.5	\$532,029.53	\$113,036.43	0.21246	4.08
23.5 - 24.5	\$271,096.57	\$19,206.67	0.07085	3.21
24.5 - 25.5	\$133,038.01	\$34,680.27	0.26068	2.98
25.5 - 26.5	\$62,495.73	\$28,526.00	0.45645	2.21
26.5 - 27.5	\$14,856.28	\$0.00	0.00000	1.20
27.5 - 28.5	\$14,856.28	\$0.00	0.00000	1.20

## Electric Division 392.02 Trucks and Vans Original And Smooth Survivor Curves

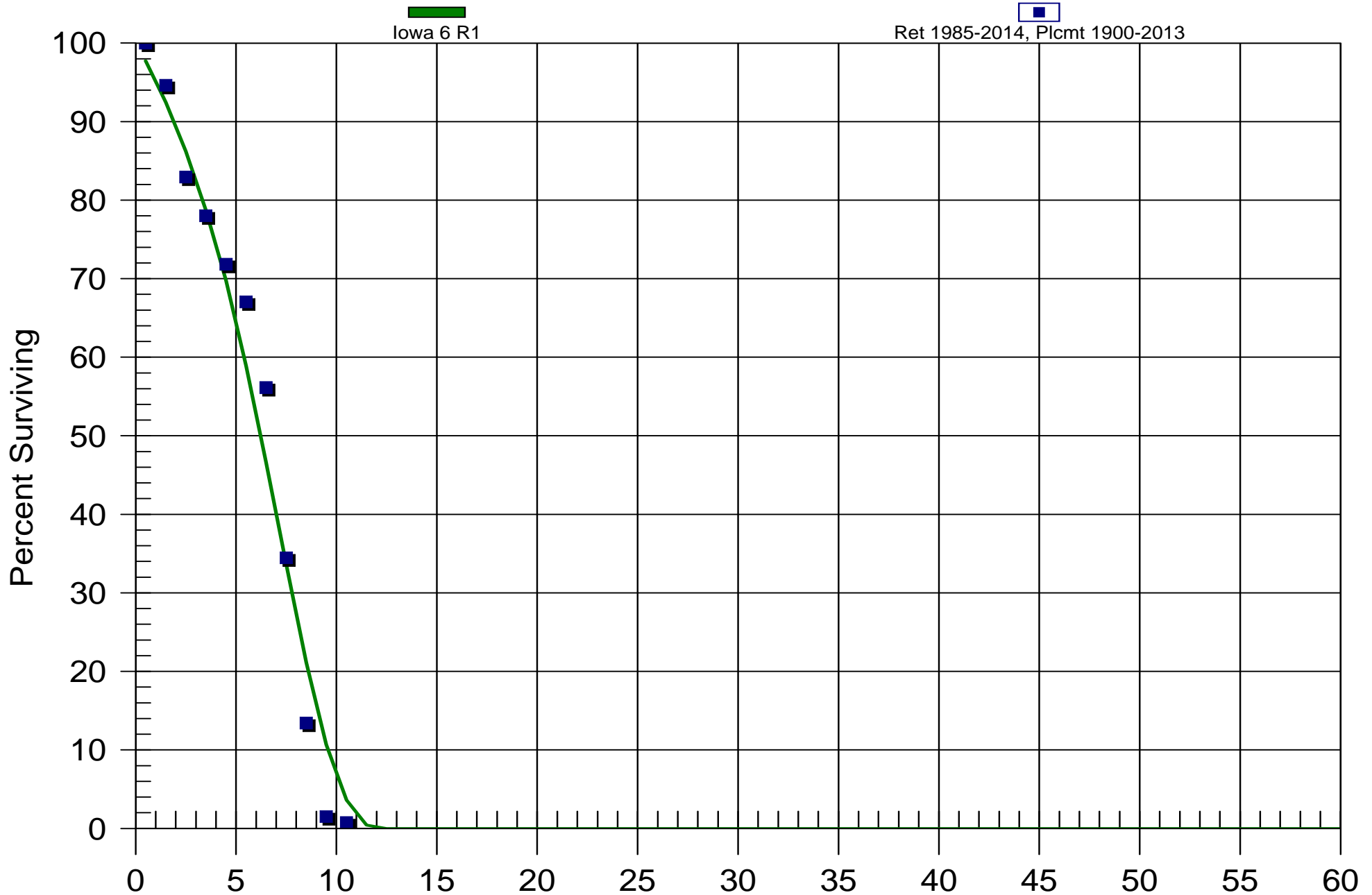




**ONG**  
**Electric Division**  
**392.10 Autos**  
**Observed Life Table**  
**Retirement Expr. 1985 TO 2014**  
**Placement Years 1900 TO 2013**

<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
0.0 - 0.5	\$3,736,650.51	\$0.00	0.00000	100.00
0.5 - 1.5	\$3,736,650.51	\$201,246.34	0.05386	100.00
1.5 - 2.5	\$3,535,404.17	\$436,347.42	0.12342	94.61
2.5 - 3.5	\$3,010,050.14	\$179,090.00	0.05950	82.94
3.5 - 4.5	\$2,830,960.14	\$223,725.27	0.07903	78.00
4.5 - 5.5	\$2,607,234.87	\$174,451.61	0.06691	71.84
5.5 - 6.5	\$2,432,783.26	\$395,904.57	0.16274	67.03
6.5 - 7.5	\$2,036,878.69	\$786,767.35	0.38626	56.12
7.5 - 8.5	\$1,250,111.34	\$763,337.65	0.61062	34.44
8.5 - 9.5	\$486,773.69	\$431,727.02	0.88692	13.41
9.5 - 10.5	\$55,046.67	\$28,841.60	0.52395	1.52

Electric Division  
392.10 Autos  
Original And Smooth Survivor Curves



**ONG**  
**Electric Division**  
**392.50 Trailers**  
**Observed Life Table**  
**Retirement Expr. 1983 TO 2014**  
**Placement Years 1926 TO 2014**

<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
0.0 - 0.5	\$1,965,906.36	\$0.00	0.00000	100.00
0.5 - 1.5	\$2,008,907.60	\$3,433.64	0.00171	100.00
1.5 - 2.5	\$2,039,430.30	\$6,860.55	0.00336	99.83
2.5 - 3.5	\$2,074,785.21	\$7,219.80	0.00348	99.49
3.5 - 4.5	\$1,917,150.54	\$22,303.12	0.01163	99.15
4.5 - 5.5	\$1,841,010.33	\$23,581.71	0.01281	97.99
5.5 - 6.5	\$1,814,893.20	\$57,731.16	0.03181	96.74
6.5 - 7.5	\$1,687,663.30	\$45,431.74	0.02692	93.66
7.5 - 8.5	\$1,682,135.08	\$88,673.96	0.05272	91.14
8.5 - 9.5	\$1,605,434.82	\$88,567.60	0.05517	86.34
9.5 - 10.5	\$1,530,625.13	\$62,340.46	0.04073	81.57
10.5 - 11.5	\$1,420,748.73	\$63,865.00	0.04495	78.25
11.5 - 12.5	\$1,244,817.18	\$93,029.83	0.07473	74.73
12.5 - 13.5	\$1,143,425.89	\$46,160.65	0.04037	69.15
13.5 - 14.5	\$1,083,907.62	\$114,857.16	0.10597	66.36
14.5 - 15.5	\$907,650.26	\$95,625.32	0.10535	59.32
15.5 - 16.5	\$773,013.03	\$30,883.49	0.03995	53.07
16.5 - 17.5	\$733,767.13	\$54,604.57	0.07442	50.95
17.5 - 18.5	\$663,870.23	\$17,040.39	0.02567	47.16
18.5 - 19.5	\$635,751.31	\$31,962.10	0.05027	45.95
19.5 - 20.5	\$595,245.78	\$36,235.79	0.06088	43.64
20.5 - 21.5	\$544,159.22	\$72,177.80	0.13264	40.98
21.5 - 22.5	\$435,358.49	\$72,383.83	0.16626	35.55
22.5 - 23.5	\$355,368.34	\$77,501.75	0.21809	29.64
23.5 - 24.5	\$222,982.20	\$15,944.70	0.07151	23.17
24.5 - 25.5	\$202,368.60	\$5,115.60	0.02528	21.52
25.5 - 26.5	\$193,286.40	\$19,474.25	0.10075	20.97
26.5 - 27.5	\$173,812.15	\$10,369.77	0.05966	18.86
27.5 - 28.5	\$148,863.76	\$15,748.65	0.10579	17.73
28.5 - 29.5	\$131,039.03	\$14,770.86	0.11272	15.86
29.5 - 30.5	\$116,268.17	\$6,209.45	0.05341	14.07
30.5 - 31.5	\$106,945.77	\$6,703.08	0.06268	13.32
31.5 - 32.5	\$95,029.62	\$1,917.60	0.02018	12.48
32.5 - 33.5	\$96,206.62	\$14,525.57	0.15098	12.23
33.5 - 34.5	\$98,559.85	\$308.70	0.00313	10.39
34.5 - 35.5	\$86,422.81	\$6,335.40	0.07331	10.35
35.5 - 36.5	\$81,820.91	\$5,440.74	0.06650	9.59

**ONG**  
**Electric Division**  
**392.50 Trailers**  
**Observed Life Table**  
**Retirement Expr. 1983 TO 2014**  
**Placement Years 1926 TO 2014**

<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
36.5 - 37.5	\$56,096.85	\$1,438.13	0.02564	8.96
37.5 - 38.5	\$53,866.60	\$5,770.91	0.10713	8.73
38.5 - 39.5	\$47,159.69	\$12,486.65	0.26477	7.79
39.5 - 40.5	\$28,216.92	\$3,718.42	0.13178	5.73
40.5 - 41.5	\$24,498.50	\$0.00	0.00000	4.97
41.5 - 42.5	\$24,498.50	\$2,586.47	0.10558	4.97
42.5 - 43.5	\$21,912.03	\$1,468.03	0.06700	4.45
43.5 - 44.5	\$20,444.00	\$355.60	0.01739	4.15
44.5 - 45.5	\$20,088.40	\$688.70	0.03428	4.08
45.5 - 46.5	\$19,399.70	\$2,203.02	0.11356	3.94
46.5 - 47.5	\$17,196.68	\$471.90	0.02744	3.49
47.5 - 48.5	\$16,724.78	\$0.00	0.00000	3.40
48.5 - 49.5	\$16,724.78	\$1,436.70	0.08590	3.40
49.5 - 50.5	\$15,288.08	\$1,261.60	0.08252	3.10
50.5 - 51.5	\$14,026.48	\$0.00	0.00000	2.85
51.5 - 52.5	\$14,855.68	\$5,023.20	0.33813	2.85
52.5 - 53.5	\$9,832.48	\$6,463.20	0.65733	1.88
53.5 - 54.5	\$3,369.28	\$0.00	0.00000	0.65
54.5 - 55.5	\$3,369.28	\$0.00	0.00000	0.65
55.5 - 56.5	\$3,369.28	\$0.00	0.00000	0.65
56.5 - 57.5	\$4,454.37	\$1,217.00	0.27321	0.65
57.5 - 58.5	\$3,237.37	\$1,323.08	0.40869	0.47
58.5 - 59.5	\$1,914.29	\$0.00	0.00000	0.28
59.5 - 60.5	\$1,914.29	\$0.00	0.00000	0.28
60.5 - 61.5	\$1,914.29	\$0.00	0.00000	0.28
61.5 - 62.5	\$1,914.29	\$0.00	0.00000	0.28
62.5 - 63.5	\$1,914.29	\$0.00	0.00000	0.28
63.5 - 64.5	\$1,914.29	\$0.00	0.00000	0.28
64.5 - 65.5	\$1,914.29	\$0.00	0.00000	0.28
65.5 - 66.5	\$1,914.29	\$829.20	0.43316	0.28
66.5 - 67.5	\$1,085.09	\$0.00	0.00000	0.16
67.5 - 68.5	\$1,085.09	\$0.00	0.00000	0.16
68.5 - 69.5	\$1,085.09	\$0.00	0.00000	0.16
69.5 - 70.5	\$1,085.09	\$0.00	0.00000	0.16
70.5 - 71.5	\$1,085.09	\$0.00	0.00000	0.16
71.5 - 72.5	\$1,085.09	\$0.00	0.00000	0.16
72.5 - 73.5	\$1,085.09	\$0.00	0.00000	0.16

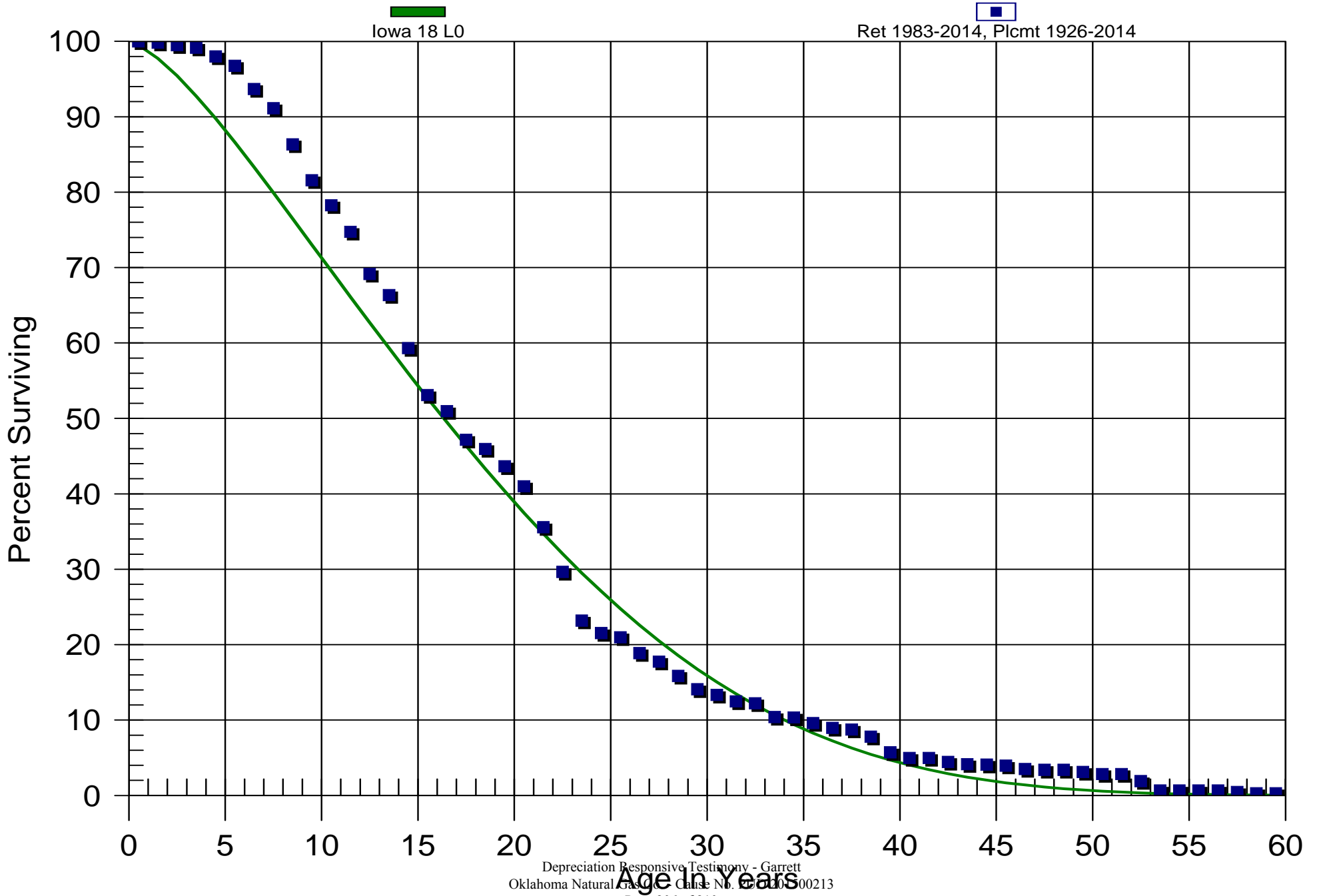
**ONG**  
**Electric Division**  
**392.50 Trailers**  
**Observed Life Table**  
**Retirement Expr. 1983 TO 2014**  
**Placement Years 1926 TO 2014**

<i>Age Interval</i>	<i>\$ Surviving At Beginning of Age Interval</i>	<i>\$ Retired During The Age Interval</i>	<i>Retirement Ratio</i>	<i>% Surviving At Beginning of Age Interval</i>
73.5 - 74.5	\$1,085.09	\$0.00	0.00000	0.16
74.5 - 75.5	\$1,085.09	\$0.00	0.00000	0.16
75.5 - 76.5	\$1,085.09	\$0.00	0.00000	0.16
76.5 - 77.5	\$1,085.09	\$0.00	0.00000	0.16

# ONG

Electric Division  
392.50 Trailers

## Original And Smooth Survivor Curves



**ONG**  
**Electric Division**  
**396.00 Power Operated Equipment**  
**Observed Life Table**  
**Retirement Expr. 1983 TO 2014**  
**Placement Years 1922 TO 2013**

<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
0.0 - 0.5	\$13,966,803.38	\$0.00	0.00000	100.00
0.5 - 1.5	\$14,547,380.80	\$1,452.60	0.00010	100.00
1.5 - 2.5	\$15,292,948.83	\$3,037.40	0.00020	99.99
2.5 - 3.5	\$15,280,965.99	\$5,145.70	0.00034	99.97
3.5 - 4.5	\$15,152,996.99	\$14,212.04	0.00094	99.94
4.5 - 5.5	\$14,842,550.23	\$177,563.61	0.01196	99.84
5.5 - 6.5	\$14,295,274.57	\$131,176.73	0.00918	98.65
6.5 - 7.5	\$14,209,883.85	\$149,619.13	0.01053	97.74
7.5 - 8.5	\$13,932,734.79	\$296,327.62	0.02127	96.71
8.5 - 9.5	\$13,767,551.52	\$439,377.48	0.03191	94.66
9.5 - 10.5	\$13,184,108.43	\$796,157.68	0.06039	91.64
10.5 - 11.5	\$12,333,064.94	\$868,472.99	0.07042	86.10
11.5 - 12.5	\$11,387,574.00	\$674,560.71	0.05924	80.04
12.5 - 13.5	\$10,690,948.04	\$1,360,922.83	0.12730	75.30
13.5 - 14.5	\$9,353,501.63	\$1,032,793.69	0.11042	65.71
14.5 - 15.5	\$8,106,373.40	\$901,112.29	0.11116	58.46
15.5 - 16.5	\$7,052,021.99	\$534,375.41	0.07578	51.96
16.5 - 17.5	\$6,202,547.92	\$415,179.12	0.06694	48.02
17.5 - 18.5	\$5,527,322.79	\$626,936.60	0.11343	44.81
18.5 - 19.5	\$4,489,589.29	\$302,573.47	0.06739	39.72
19.5 - 20.5	\$3,721,980.47	\$261,650.82	0.07030	37.05
20.5 - 21.5	\$2,790,442.78	\$198,736.49	0.07122	34.44
21.5 - 22.5	\$2,340,741.29	\$146,445.75	0.06256	31.99
22.5 - 23.5	\$1,829,110.90	\$49,741.94	0.02719	29.99
23.5 - 24.5	\$1,586,409.25	\$132,923.19	0.08379	29.17
24.5 - 25.5	\$1,082,652.61	\$48,608.88	0.04490	26.73
25.5 - 26.5	\$1,011,587.79	\$162,730.39	0.16087	25.53
26.5 - 27.5	\$787,397.00	\$28,925.77	0.03674	21.42
27.5 - 28.5	\$742,519.45	\$45,672.62	0.06151	20.64
28.5 - 29.5	\$650,750.48	\$31,704.05	0.04872	19.37
29.5 - 30.5	\$587,431.44	\$19,833.56	0.03376	18.42
30.5 - 31.5	\$546,082.71	\$28,082.42	0.05143	17.80
31.5 - 32.5	\$474,308.01	\$4,869.30	0.01027	16.88
32.5 - 33.5	\$468,063.32	\$61,186.54	0.13072	16.71
33.5 - 34.5	\$387,674.28	\$19,765.43	0.05098	14.53
34.5 - 35.5	\$314,256.70	\$7,170.59	0.02282	13.79
35.5 - 36.5	\$287,589.04	\$49,014.64	0.17043	13.47

**ONG**  
**Electric Division**  
**396.00 Power Operated Equipment**  
**Observed Life Table**  
**Retirement Expr. 1983 TO 2014**  
**Placement Years 1922 TO 2013**

<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
36.5 - 37.5	\$222,029.35	\$7,907.15	0.03561	11.18
37.5 - 38.5	\$187,511.62	\$18,806.18	0.10029	10.78
38.5 - 39.5	\$90,318.43	\$13,057.21	0.14457	9.70
39.5 - 40.5	\$61,496.33	\$501.60	0.00816	8.29
40.5 - 41.5	\$57,370.69	\$3,602.90	0.06280	8.23
41.5 - 42.5	\$49,626.05	\$6,020.34	0.12131	7.71
42.5 - 43.5	\$43,605.71	\$7,707.65	0.17676	6.78
43.5 - 44.5	\$32,467.78	\$7,055.00	0.21729	5.58
44.5 - 45.5	\$25,412.78	\$1,120.05	0.04407	4.37
45.5 - 46.5	\$23,307.59	\$7,285.49	0.31258	4.17
46.5 - 47.5	\$13,600.50	\$0.00	0.00000	2.87
47.5 - 48.5	\$13,600.50	\$1,293.11	0.09508	2.87
48.5 - 49.5	\$12,307.39	\$711.09	0.05778	2.60
49.5 - 50.5	\$11,596.30	\$0.00	0.00000	2.45
50.5 - 51.5	\$9,836.00	\$0.00	0.00000	2.45
51.5 - 52.5	\$8,775.32	\$0.00	0.00000	2.45
52.5 - 53.5	\$8,775.32	\$0.00	0.00000	2.45
53.5 - 54.5	\$6,225.32	\$0.00	0.00000	2.45
54.5 - 55.5	\$6,225.32	\$667.69	0.10725	2.45
55.5 - 56.5	\$5,557.63	\$0.00	0.00000	2.18
56.5 - 57.5	\$5,557.63	\$0.00	0.00000	2.18
57.5 - 58.5	\$5,557.63	\$0.00	0.00000	2.18
58.5 - 59.5	\$5,557.63	\$0.00	0.00000	2.18
59.5 - 60.5	\$4,420.58	\$0.00	0.00000	2.18
60.5 - 61.5	\$14,743.78	\$0.00	0.00000	2.18
61.5 - 62.5	\$10,323.20	\$0.00	0.00000	2.18
62.5 - 63.5	\$10,323.20	\$0.00	0.00000	2.18
63.5 - 64.5	\$10,323.20	\$0.00	0.00000	2.18
64.5 - 65.5	\$10,323.20	\$0.00	0.00000	2.18
65.5 - 66.5	\$10,323.20	\$0.00	0.00000	2.18
66.5 - 67.5	\$10,323.20	\$0.00	0.00000	2.18
67.5 - 68.5	\$10,323.20	\$0.00	0.00000	2.18
68.5 - 69.5	\$10,323.20	\$0.00	0.00000	2.18
69.5 - 70.5	\$10,323.20	\$0.00	0.00000	2.18
70.5 - 71.5	\$10,323.20	\$0.00	0.00000	2.18
71.5 - 72.5	\$10,323.20	\$0.00	0.00000	2.18
72.5 - 73.5	\$10,323.20	\$0.00	0.00000	2.18



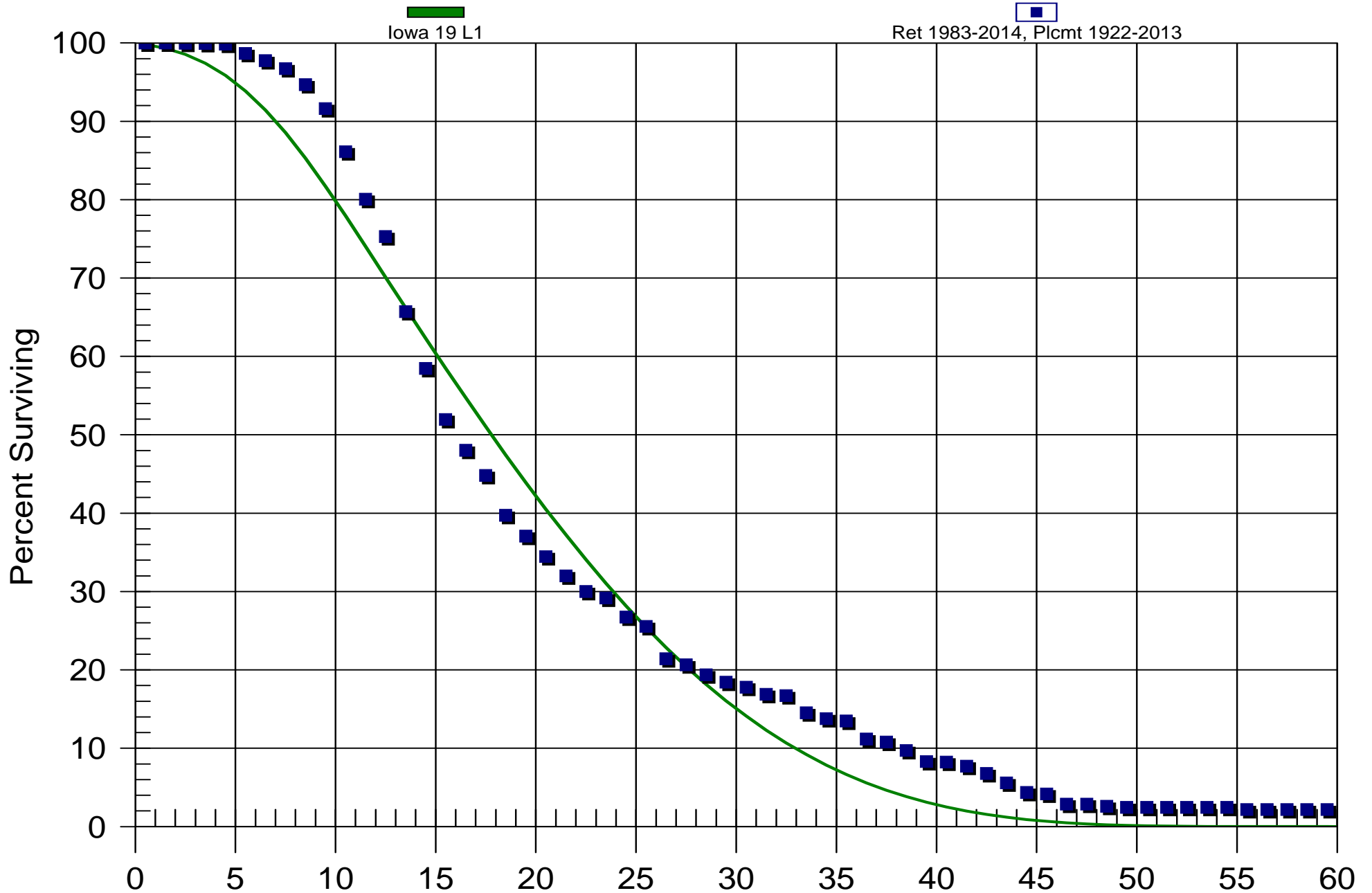
**ONG**  
**Electric Division**  
**396.00 Power Operated Equipment**

**Observed Life Table**  
**Retirement Expr. 1983 TO 2014**  
**Placement Years 1922 TO 2013**

<b>Age Interval</b>	<b>\$ Surviving At Beginning of Age Interval</b>	<b>\$ Retired During The Age Interval</b>	<b>Retirement Ratio</b>	<b>% Surviving At Beginning of Age Interval</b>
73.5 - 74.5	\$10,323.20	\$0.00	0.00000	2.18
74.5 - 75.5	\$10,323.20	\$0.00	0.00000	2.18
75.5 - 76.5	\$10,323.20	\$0.00	0.00000	2.18
76.5 - 77.5	\$10,323.20	\$0.00	0.00000	2.18

# ONG

## Electric Division 396.00 Power Operated Equipment Original And Smooth Survivor Curves



**CERTIFICATE OF SERVICE**

This is to certify that on October 19, 2015, a true and correct copy of the above and foregoing, was sent via electronic mail and/or United States Postal Service, postage fully prepaid thereon to the following interested parties:

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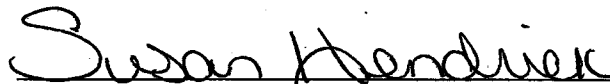
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