

**RHODE ISLAND PUBLIC UTILITIES COMMISSION**

**DEPRECIATION STUDY**

**DIRECT TESTIMONY**

**OF**

**JOHN J. SPANOS**

**ON BEHALF OF**

**SUEZ WATER RHODE ISLAND**

## TABLE OF CONTENTS

|  | <b>Page</b> |
|--|-------------|
| I. INTRODUCTION AND WITNESS QUALIFICATIONS ..... | 1           |
| II. PURPOSE AND IDENTIFICATION OF EXHIBITS ..... | 2           |
| III. BACKGROUND .....                            | 2           |
| IV. SUMMARY OF CONCLUSIONS .....                 | 3           |
| V. DEPRECIATION STUDY .....                      | 3           |
| VI. CONCLUSION .....                             | 10          |

**SUEZ WATER RHODE ISLAND**

**DIRECT TESTIMONY OF**

**JOHN J. SPANOS**

**I. INTRODUCTION AND WITNESS QUALIFICATIONS**

**Q. Please state your name and business address.**

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

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

**A.** I am employed with the firm of Gannett Fleming Valuation and Rate Consultants, LLC ("Gannett Fleming"). I am the Senior Vice President.

**Q. How long have you been associated with Gannett Fleming?**

**A.** I have been associated with the firm since June 1986.

**Q. What is your educational background?**

**A.** I have Bachelor of Science degrees in Industrial Management and Mathematics from Carnegie-Mellon University and a Master of Business Administration from York College. Additional information regarding coursework I have completed relating to utility plant depreciation, as well as my membership in professional societies and professional certifications, is provided in Appendix A.

**Q. Please state your qualifications.**

**A.** I have 32 years of depreciation experience, which includes giving expert testimony in over 260 cases before 40 regulatory commissions. Please refer to Appendix A for my qualifications.

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

**A.** I am testifying on behalf of SUEZ Water Rhode Island ("SWRI" or the "Company").

1 **II. PURPOSE AND IDENTIFICATION OF EXHIBITS**

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

3 **A.** The purpose of my testimony is to set forth the results of my review and analyses of the  
4 plant in service of SUEZ Water Rhode Island ("SWRI"), which was conducted in the  
5 process of preparing the depreciation study of the Company's water plant assets as of  
6 December 31, 2016. A report of my review and analyses are contained in SWRI Exhibit  
7 JJS-1, titled "2016 Depreciation Study – Calculated Annual Depreciation Accruals  
8 Related to Water Plant as of December 31, 2016".

9 **Q. Are you sponsoring an exhibit in support of your direct testimony?**

10 **A.** Yes. I am sponsoring the Depreciation Study as SWRI Exhibit JJS-1. SWRI Exhibit  
11 JJS-1 is a true and accurate copy of the report setting forth the results of my  
12 depreciation study for SWRI.

13 **III. BACKGROUND**

14 **Q. Please define the concept of depreciation.**

15 **A.** "Depreciation, as applied to depreciable public utility plant, means the loss in service  
16 value not restored by current maintenance, incurred in connection with the consumption  
17 or prospective retirement of utility plant in the course of service from causes which can  
18 be reasonably anticipated or contemplated, against which the Company is not protected  
19 by insurance. Among the causes to be given consideration are wear and tear, decay,  
20 action of the elements, inadequacy, obsolescence, changes in the art, changes in  
21 demand, and the requirements of public authorities."

22 **Q. What are the primary causes for changes in depreciation rates?**

23 **A.** Depreciation rates are affected by service life and net salvage parameters. These  
24 parameters are determined based on a combined statistical analysis and informed

judgment of each asset class. Informed judgments of each asset class are developed based on field inspections and discussions with management with regard to plans and outlook of assets.

#### **IV. SUMMARY OF CONCLUSIONS**

**Q. What is the composite depreciation rate resulting from the Study?**

**A.** The composite rate for water assets is 2.46 percent as shown on page VI-5 of SWRI Exhibit JJS-1.

**Q. What is your professional opinion with regard to the results of the Study that you performed?**

**A.** In my opinion, the proposed depreciation rates resulting from the completed Depreciation Study are reasonable and appropriate given that they incorporate the service life and net salvage parameters currently anticipated for each of the Company's property group investments over their average remaining lives.

#### **V. DEPRECIATION STUDY**

**Q. Please summarize how you performed your Study.**

**A.** In the study that I performed and that are the basis for my testimony, I used the straight line remaining life method of depreciation, with the average service life procedure to develop recommended depreciation accrual rates. The total annual depreciation is based on a system of depreciation accounting which aims to distribute the cost of fixed capital assets over the estimated useful life of the unit, or group of assets, in a systematic and rational manner.

For General Plant Accounts 340.1, 340.2, 340.21, 340.3, 343, 346 and 347 for water assets, I used the straight line method of amortization. The annual amortization is based on amortization accounting which distributes the unrecovered cost of fixed

capital assets over the remaining amortization period selected for each account and vintage.

**Q. How did you determine the recommended annual depreciation accrual rates?**

**A.** The determination of annual depreciation accrual rates consists of two phases. In the first phase, service life and net salvage characteristics are estimated for each depreciable group, that is, each plant account or subaccount identified as having similar characteristics. In the second phase, the annual depreciation accrual rates are calculated based on the service life and net salvage estimates determined in the first phase.

**Q. Please describe the first phase of the study, that is, the manner in which you estimated the service life and net salvage characteristics for each depreciable group.**

**A.** The service life and net salvage study consisted of compiling historical data from records related to the Company's plant; analyzing these data to obtain historical trends of survivor and salvage characteristics; obtaining supplementary information from management and operating personnel concerning the Company's practices and plans as they relate to plant operations; and interpreting the above data to form judgments of average service life and net salvage characteristics.

**Q. What historical data did you analyze for the purpose of estimating the service life characteristics of the Company's plant?**

**A.** The data consisted of the entries made by the Company to record plant transactions through 2016. The transactions included additions, retirements, transfers and the related balances. The Company, in accordance with my instructions, classified the data

by depreciable group, type of transaction, the year in which the transaction took place, and the year in which the plant was installed.

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

**A.** I used the retirement rate method. That method is the most appropriate when aged retirement data are available, because it develops the average rates of retirement actually experienced during the period of study. Other methods of life analysis infer the rates of retirement based on a selected type survivor curve.

**Q. Please describe the results of your use of the retirement rate method.**

**A.** Each retirement rate analysis resulted in a life table which, when plotted, formed an original survivor curve. Each original survivor curve as plotted from the life table represents the average survivor pattern experienced by the several vintage groups during the experience band studied. Inasmuch as this survivor pattern does not necessarily describe the life characteristics of the property group, interpretation of the original curves is required in order to use them as valid considerations in service life estimation. Iowa type survivor curves were used in these interpretations.

**Q. Please explain briefly what an "Iowa-type survivor curve" is and how you use it in estimating service life characteristics for each depreciable group.**

**A.** The range of survivor characteristics usually experienced by utility and industrial properties is encompassed by a system of generalized survivor curves known as the Iowa type curves. The Iowa curves were developed at the Iowa State College Engineering Experiment Station through an extensive process of observation and classification of the ages at which industrial property had been retired.

Iowa type curves are used to smooth and extrapolate original survivor curves determined by the retirement rate method. The Iowa curves and truncated Iowa curves

1 were used in this study to describe the forecasted rates of retirement based on the  
2 observed rates of retirement and the outlook for future retirements.

3 The estimated survivor curve designations for each depreciable group indicate  
4 the average service life, the family within the Iowa system and the relative height of the  
5 mode. For example, the Iowa 50-R3 indicates an average service life of fifty years; a  
6 right-moded, or R, type curve (the mode occurs after average life for right-moded  
7 curves); and a moderate height, 3, for the mode (possible modes for R type curves  
8 range from 1 to 5).

9 **Q. What historical data did you analyze for the purpose of estimating net salvage**  
10 **characteristics?**

11 **A.** The data consisted of the entries made by the Company to record retirements, cost of  
12 removal and gross salvage during the period 2005 through 2016 for water assets

13 **Q. What method did you use to analyze this net salvage data?**

14 **A.** The net salvage data were analyzed by expressing the net salvage and its two  
15 components, cost of removal and gross salvage, as percents of the original cost retired  
16 on annual, three-year moving average and most recent five-year average bases. The  
17 use of averages smooths the annual fluctuations and assists in identifying underlying  
18 trends.

19 **Q. Please describe the manner in which you used the analyses of net salvage to**  
20 **estimate net salvage percents.**

21 **A.** The results of the net salvage analyses provided indications of historical net salvage  
22 levels. The judgments of net salvage incorporated these historical indications and  
23 consideration of estimates made for other water companies.



1 **Q. Please describe the second phase of the process that you used, that is, the**  
2 **calculation of annual depreciation accrual rates.**

3 **A.** After I estimated the service life and net salvage characteristics for each depreciable  
4 group, I calculated annual depreciation accrual rates for each group in accordance with  
5 the straight line remaining life method, using the average service life procedure.

6 **Q. What group procedure is being used in this proceeding for depreciable**  
7 **accounts?**

8 **A.** The average service life procedure is used in the current proceeding for all depreciable  
9 accounts and installation years.

10 **Q. Please describe briefly the amortization of certain General Plant accounts.**

11 **A.** General Plant Accounts 340.1, 340.2, 340.21, 340.3, 343, 346 and 347 for water assets  
12 include a very large number of units, but represent less than 5 percent of depreciable  
13 water plant. Depreciation accounting is difficult for these assets, inasmuch as periodic  
14 inventories are required to properly reflect plant in service. In amortization accounting,  
15 units of property are capitalized in the same manner as they are in depreciation  
16 accounting. However, retirements are recorded when a vintage is fully amortized rather  
17 than as the units are removed from service. That is, there is no dispersion of retirement.  
18 All units are retired when the age of the vintage reaches the amortization period.

19 **Q. Please outline the contents of your report.**

20 **A.** My report is presented in nine parts. Part I, Introduction, presents the scope and basis  
21 for the depreciation study. Part II, Estimation of Survivor Curves, includes descriptions  
22 of the methodology of estimating survivor curves. Parts III and IV set forth the analysis  
23 for determining life and net salvage estimates. Part V, Calculation of Annual and  
24 Accrued Depreciation, includes the concepts of depreciation and amortization using the

1 remaining life. Part VI, Results of Study, presents a description of the results of my  
2 analysis and a summary of the depreciation calculations. Parts VII, VIII and IX include  
3 graphs and tables that relate to the service life and net salvage analyses and the  
4 detailed depreciation calculations by account.

5 SWRI Exhibit JJS-1, Table 1 on pages VI-5 and VI-6 presents the estimated  
6 survivor curve, the net salvage percent, the original cost as of December 31, 2016, the  
7 calculated annual depreciation accrual amount and rate, book depreciation reserve,  
8 future accruals and the composite remaining life for each account or subaccount. The  
9 section beginning on page VII-2 presents the results of the retirement rate analyses  
10 prepared as the historical bases for the service life estimates. The section beginning  
11 on page VIII-2 presents the results of the analyses of historical net salvage data. The  
12 section beginning on page IX-2 presents the depreciation calculations related to  
13 surviving original cost as of December 31, 2016.

14 **Q. Please use an example to illustrate the manner in which the studies are presented**  
15 **for this report.**

16 **A.** I will use the analysis for Account 311.00, Pumping Equipment, of SWRI Exhibit JJS-1  
17 as an example because this is one of the largest depreciable mass account and  
18 represents approximately five percent of depreciable plant.

19 The retirement rate method was used to analyze the survivor characteristics of  
20 this property group. Aged plant accounting data was compiled from 2008 through 2016  
21 and analyzed in periods that best represent the overall service life of this property. The  
22 life table for the 2008-2016 experience band is presented on pages VII-14 and VII-15  
23 of the report. The life table displays the retirement and surviving ratios of the aged plant  
24 data exposed to retirement by age interval. For example, page VII-14 shows \$4,250

1 retired at age 12.5 with \$999,372 exposed to retirement. Consequently, the retirement  
2 ratio is 0.0043 and the surviving ratio is 0.9957. This life table, or original survivor curve,  
3 is plotted along with the estimated smooth survivor curve, the 45-R4 on page VII-13.

4 The net salvage percent is presented on page VIII-4. The percentage is based  
5 on the result of annual gross salvage minus the cost to remove plant assets as  
6 compared to the original cost of plant retired during the period 2012 through 2016. The  
7 5-year period experienced \$4,368 (\$0 - \$4,368) in net salvage for \$76,557 plant retired.  
8 The result is negative net salvage of 6 percent (\$4,368/\$76,557). Therefore, it was  
9 determined that based on industry ranges, historical indications and Company  
10 expectations, that negative 10 percent was the most appropriate estimate.

11 My calculation of the annual depreciation related to the original cost at December  
12 31, 2016, of water plant is presented on page IX-9 The calculations are based on the  
13 45-R4 survivor curve, 10 percent negative net salvage, the attained age, and the  
14 allocated book reserve. The tabulation sets forth the installation year, the original cost,  
15 calculated accrued depreciation, allocated book reserve, future accruals, remaining life  
16 and annual accrual. These totals are brought forward to the table on page VI-5.

17 **Q. What is your recommendation regarding annual depreciation accrual rates for**  
18 **the Company?**

19 **A.** I recommend that the proposed annual depreciation accrual rate for each account or  
20 subaccount set forth in SWRI Exhibit JJS-1 be adopted by the Commission for  
21 regulatory purposes as well as by the Company for accounting purposes. My  
22 recommended depreciation accrual rates, based on the depreciation study, are set forth  
23 for each account in column 8 of Table 1 on pages VI-5 and VI-6 of SWRI Exhibit JJS-

1           1. In my opinion, these are reasonable and appropriate depreciation accrual rates for  
2           the Company.

3   **Q.    Are your recommended depreciation accrual rates reasonable for plant added**  
4   **subsequent to December 31, 2016?**

5   **A.**    Yes. The annual depreciation accrual rates calculated as of December 31, 2016, can  
6           reasonably be applied to the total balance including new plant additions during the next  
7           several years.

8   **VI.   CONCLUSION**

9   **Q.    Does this conclude your direct testimony?**

10 **A.**    Yes, it does.

## **Appendix A**

## **JOHN SPANOS**

### **DEPRECIATION EXPERIENCE**

**Q. Please state your name.**

A. My name is John J. Spanos.

**Q. What is your educational background?**

A. I have Bachelor of Science degrees in Industrial Management and Mathematics from Carnegie-Mellon University and a Master of Business Administration from York College.

**Q. Do you belong to any professional societies?**

A. Yes. I am a member and past President of the Society of Depreciation Professionals and a member of the American Gas Association/Edison Electric Institute Industry Accounting Committee.

**Q. Do you hold any special certification as a depreciation expert?**

A. Yes. The Society of Depreciation Professionals has established national standards for depreciation professionals. The Society administers an examination to become certified in this field. I passed the certification exam in September 1997 and was recertified in August 2003, February 2008 and January 2013.

**Q. Please outline your experience in the field of depreciation.**

A. In June, 1986, I was employed by Gannett Fleming Valuation and Rate Consultants, Inc. as a Depreciation Analyst. During the period from June, 1986 through December, 1995, I helped prepare numerous depreciation and original cost studies for utility companies in various industries. I helped perform depreciation studies for the following telephone companies: United Telephone of

Pennsylvania, United Telephone of New Jersey, and Anchorage Telephone Utility.

I helped perform depreciation studies for the following companies in the railroad industry: Union Pacific Railroad, Burlington Northern Railroad, and Wisconsin Central Transportation Corporation.

I helped perform depreciation studies for the following organizations in the electric utility industry: Chugach Electric Association, The Cincinnati Gas and Electric Company (CG&E), The Union Light, Heat and Power Company (ULH&P), Northwest Territories Power Corporation, and the City of Calgary - Electric System.

I helped perform depreciation studies for the following pipeline companies: TransCanada Pipelines Limited, Trans Mountain Pipe Line Company Ltd., Interprovincial Pipe Line Inc., Nova Gas Transmission Limited and Lakehead Pipeline Company.

I helped perform depreciation studies for the following gas utility companies: Columbia Gas of Pennsylvania, Columbia Gas of Maryland, The Peoples Natural Gas Company, T. W. Phillips Gas & Oil Company, CG&E, ULH&P, Lawrenceburg Gas Company and Penn Fuel Gas, Inc.

I helped perform depreciation studies for the following water utility companies: Indiana-American Water Company, Consumers Pennsylvania Water Company and The York Water Company; and depreciation and original cost studies for Philadelphia Suburban Water Company and Pennsylvania-American Water Company.

In each of the above studies, I assembled and analyzed historical and simulated data, performed field reviews, developed preliminary estimates of service life and net salvage, calculated annual depreciation, and prepared reports

for submission to state public utility commissions or federal regulatory agencies. I performed these studies under the general direction of William M. Stout, P.E.

In January, 1996, I was assigned to the position of Supervisor of Depreciation Studies. In July, 1999, I was promoted to the position of Manager, Depreciation and Valuation Studies. In December, 2000, I was promoted to the position as Vice-President of Gannett Fleming Valuation and Rate Consultants, Inc. and in April 2012, I was promoted to my present position as Senior Vice President of the Valuation and Rate Division of Gannett Fleming Inc. (now doing business as Gannett Fleming Valuation and Rate Consultants, LLC). In my current position I am responsible for conducting all depreciation, valuation and original cost studies, including the preparation of final exhibits and responses to data requests for submission to the appropriate regulatory bodies.

Since January 1996, I have conducted depreciation studies similar to those previously listed including assignments for Pennsylvania-American Water Company; Aqua Pennsylvania; Kentucky-American Water Company; Virginia-American Water Company; Indiana-American Water Company; Iowa-American Water Company; New Jersey-American Water Company; Hampton Water Works Company; Omaha Public Power District; Enbridge Pipe Line Company; Inc.; Columbia Gas of Virginia, Inc.; Virginia Natural Gas Company National Fuel Gas Distribution Corporation - New York and Pennsylvania Divisions; The City of Bethlehem - Bureau of Water; The City of Coatesville Authority; The City of Lancaster - Bureau of Water; Peoples Energy Corporation; The York Water Company; Public Service Company of Colorado; Enbridge Pipelines; Enbridge Gas Distribution, Inc.; Reliant Energy-HLP; Massachusetts-American Water



Company; St. Louis County Water Company; Missouri-American Water Company; Chugach Electric Association; Alliant Energy; Oklahoma Gas & Electric Company; Nevada Power Company; Dominion Virginia Power; NUI-Virginia Gas Companies; Pacific Gas & Electric Company; PSI Energy; NUI - Elizabethtown Gas Company; Cinergy Corporation – CG&E; Cinergy Corporation – ULH&P; Columbia Gas of Kentucky; South Carolina Electric & Gas Company; Idaho Power Company; El Paso Electric Company; Aqua North Carolina; Aqua Ohio; Aqua Texas, Inc.; Ameren Missouri; Central Hudson Gas & Electric; Centennial Pipeline Company; CenterPoint Energy-Arkansas; CenterPoint Energy – Oklahoma; CenterPoint Energy – Entex; CenterPoint Energy - Louisiana; NSTAR – Boston Edison Company; Westar Energy, Inc.; United Water Pennsylvania; PPL Electric Utilities; PPL Gas Utilities; Wisconsin Power & Light Company; TransAlaska Pipeline; Avista Corporation; Northwest Natural Gas; Allegheny Energy Supply, Inc.; Public Service Company of North Carolina; South Jersey Gas Company; Duquesne Light Company; MidAmerican Energy Company; Laclede Gas; Duke Energy Company; E.ON U.S. Services Inc.; Elkton Gas Services; Anchorage Water and Wastewater Utility; Kansas City Power and Light; Duke Energy North Carolina; Duke Energy South Carolina; Monongahela Power Company; Potomac Edison Company; Duke Energy Ohio Gas; Duke Energy Kentucky; Duke Energy Indiana; Duke Energy Progress; Northern Indiana Public Service Company; Tennessee-American Water Company; Columbia Gas of Maryland; Bonneville Power Administration; NSTAR Electric and Gas Company; EPCOR Distribution, Inc.; B. C. Gas Utility, Ltd; Entergy Arkansas; Entergy Texas; Entergy Mississippi; Entergy Louisiana; Entergy Gulf States Louisiana; the Borough of Hanover; Louisville Gas and Electric

Company; Kentucky Utilities Company; Madison Gas and Electric; Central Maine Power; PEPCO; PacifiCorp; Minnesota Energy Resource Group; Jersey Central Power & Light Company; Cheyenne Light, Fuel and Power Company; United Water Arkansas; Central Vermont Public Service Corporation; Green Mountain Power; Portland General Electric Company; Atlantic City Electric; Nicor Gas Company; Black Hills Power; Black Hills Colorado Gas; Black Hills Kansas Gas; Black Hills Service Company; Black Hills Utility Holdings; Public Service Company of Oklahoma; City of Dubois; Peoples Gas Light and Coke Company; North Shore Gas Company; Connecticut Light and Power; New York State Electric and Gas Corporation; Rochester Gas and Electric Corporation; Greater Missouri Operations; Tennessee Valley Authority; Omaha Public Power District; Indianapolis Power & Light Company; Vermont Gas Systems, Inc.; Metropolitan Edison; Pennsylvania Electric; West Penn Power; Pennsylvania Power; PHI Service Company - Delmarva Power and Light; Atmos Energy Corporation; Citizens Energy Group; Alabama Gas Corporation; Mid-Atlantic Interstate Transmission, LLC; SUEZ Water; WEC Energy Group; Rocky Mountain Natural Gas, LLC; Illinois-American Water Company and Northern Illinois Gas Company.

My additional duties include determining final life and salvage estimates, conducting field reviews, presenting recommended depreciation rates to management for its consideration and supporting such rates before regulatory bodies.

**Q. Have you submitted testimony to any state utility commission on the subject of utility plant depreciation?**

A. Yes. I have submitted testimony to the Pennsylvania Public Utility Commission; the Commonwealth of Kentucky Public Service Commission; the Public Utilities Commission of Ohio; the Nevada Public Utility Commission; the Public Utilities Board of New Jersey; the Missouri Public Service Commission; the Massachusetts Department of Telecommunications and Energy; the Alberta Energy & Utility Board; the Idaho Public Utility Commission; the Louisiana Public Service Commission; the State Corporation Commission of Kansas; the Oklahoma Corporate Commission; the Public Service Commission of South Carolina; Railroad Commission of Texas – Gas Services Division; the New York Public Service Commission; Illinois Commerce Commission; the Indiana Utility Regulatory Commission; the California Public Utilities Commission; the Federal Energy Regulatory Commission (“FERC”); the Arkansas Public Service Commission; the Public Utility Commission of Texas; Maryland Public Service Commission; Washington Utilities and Transportation Commission; The Tennessee Regulatory Commission; the Regulatory Commission of Alaska; Minnesota Public Utility Commission; Utah Public Service Commission; District of Columbia Public Service Commission; the Mississippi Public Service Commission; Delaware Public Service Commission; Virginia State Corporation Commission; Colorado Public Utility Commission; Oregon Public Utility Commission; South Dakota Public Utilities Commission; Wisconsin Public Service Commission; Wyoming Public Service Commission; Maine Public Utility Commission; Iowa Utility Board; Connecticut Public Utilities Regulatory Authority; New Mexico Public Regulation Commission and the North Carolina Utilities Commission.

**Q. Have you had any additional education relating to utility plant depreciation?**

A. Yes. I have completed the following courses conducted by Depreciation Programs, Inc.: "Techniques of Life Analysis," "Techniques of Salvage and Depreciation Analysis," "Forecasting Life and Salvage," "Modeling and Life Analysis Using Simulation," and "Managing a Depreciation Study." I have also completed the "Introduction to Public Utility Accounting" program conducted by the American Gas Association.

**Q. Does this conclude your qualification statement?**

A. Yes.

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY

|     | <u>Year</u> | <u>Jurisdiction</u> | <u>Docket No.</u> | <u>Client Utility</u>                               | <u>Subject</u>                 |
|-----|-------------|---------------------|-------------------|---|--------------------------------|
| 01. | 1998        | PA PUC              | R-00984375        | City of Bethlehem – Bureau of Water                 | Original Cost and Depreciation |
| 02. | 1998        | PA PUC              | R-00984567        | City of Lancaster                                   | Original Cost and Depreciation |
| 03. | 1999        | PA PUC              | R-00994605        | The York Water Company                              | Depreciation                   |
| 04. | 2000        | D.T.&E.             | DTE 00-105        | Massachusetts-American Water Company                | Depreciation                   |
| 05. | 2001        | PA PUC              | R-00016114        | City of Lancaster                                   | Original Cost and Depreciation |
| 06. | 2001        | PA PUC              | R-00017236        | The York Water Company                              | Depreciation                   |
| 07. | 2001        | PA PUC              | R-00016339        | Pennsylvania-American Water Company                 | Depreciation                   |
| 08. | 2001        | OH PUC              | 01-1228-GA-AIR    | Cinergy Corp – Cincinnati Gas & Elect Co.           | Depreciation                   |
| 09. | 2001        | KY PSC              | 2001-092          | Cinergy Corp – Union Light, Heat & Power Co.        | Depreciation                   |
| 10. | 2002        | PA PUC              | R-00016750        | Philadelphia Suburban Water Company                 | Depreciation                   |
| 11. | 2002        | KY PSC              | 2002-00145        | Columbia Gas of Kentucky                            | Depreciation                   |
| 12. | 2002        | NJ BPU              | GF02040245        | NUI Corporation/Elizabethtown Gas Co.               | Depreciation                   |
| 13. | 2002        | ID PUC              | IPC-E-03-7        | Idaho Power Company                                 | Depreciation                   |
| 14. | 2003        | PA PUC              | R-0027975         | The York Water Company                              | Depreciation                   |
| 15. | 2003        | IN URC              | R-0027975         | Cinergy Corp – PSI Energy, Inc.                     | Depreciation                   |
| 16. | 2003        | PA PUC              | R-00038304        | Pennsylvania-American Water Co.                     | Depreciation                   |
| 17. | 2003        | MO PSC              | WR-2003-0500      | Missouri-American Water Co.                         | Depreciation                   |
| 18. | 2003        | FERC                | ER-03-1274-000    | NSTAR-Boston Edison Company                         | Depreciation                   |
| 19. | 2003        | NJ BPU              | BPU 03080683      | South Jersey Gas Company                            | Depreciation                   |
| 20. | 2003        | NV PUC              | 03-10001          | Nevada Power Company                                | Depreciation                   |
| 21. | 2003        | LA PSC              | U-27676           | CenterPoint Energy – Arkla                          | Depreciation                   |
| 22. | 2003        | PA PUC              | R-00038805        | Pennsylvania Suburban Water Company                 | Depreciation                   |
| 23. | 2004        | AB En/Util Bd       | 1306821           | EPCOR Distribution, Inc.                            | Depreciation                   |
| 24. | 2004        | PA PUC              | R-00038168        | National Fuel Gas Distribution Corp (PA)            | Depreciation                   |
| 25. | 2004        | PA PUC              | R-00049255        | PPL Electric Utilities                              | Depreciation                   |
| 26. | 2004        | PA PUC              | R-00049165        | The York Water Company                              | Depreciation                   |
| 27. | 2004        | OK Corp Cm          | PUC 200400187     | CenterPoint Energy – Arkla                          | Depreciation                   |
| 28. | 2004        | OH PUC              | 04-680-EI-AIR     | Cinergy Corp. – Cincinnati Gas and Electric Company | Depreciation                   |
| 29. | 2004        | RR Com of TX        | GUD#              | CenterPoint Energy – Entex Gas Services Div.        | Depreciation                   |
| 30. | 2004        | NY PUC              | 04-G-1047         | National Fuel Gas Distribution Gas (NY)             | Depreciation                   |
| 31. | 2004        | AR PSC              | 04-121-U          | CenterPoint Energy – Arkla                          | Depreciation                   |
| 32. | 2005        | IL CC               | 05-               | North Shore Gas Company                             | Depreciation                   |
| 33. | 2005        | IL CC               | 05-               | Peoples Gas Light and Coke Company                  | Depreciation                   |
| 34. | 2005        | KY PSC              | 2005-00042        | Union Light Heat & Power                            | Depreciation                   |

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

|     | <u>Year</u> | <u>Jurisdiction</u>         | <u>Docket No.</u>  | <u>Client Utility</u>                        | <u>Subject</u> |
|-----|-------------|-----------------------------|--------------------|--|----------------|
| 35. | 2005        | IL CC                       | 05-0308            | MidAmerican Energy Company                   | Depreciation   |
| 36. | 2005        | MO PSC                      | GF-2005            | Laclede Gas Company                          | Depreciation   |
| 37. | 2005        | KS CC                       | 05-WSEE-981-RTS    | Westar Energy                                | Depreciation   |
| 38. | 2005        | RR Com of TX                | GUD #              | CenterPoint Energy – Entex Gas Services Div. | Depreciation   |
| 39. | 2005        | FERC                        |                    | Cinergy Corporation                          | Accounting     |
| 40. | 2005        | OK CC                       | PUD 200500151      | Oklahoma Gas and Electric Co.                | Depreciation   |
| 41. | 2005        | MA Dept Tele-<br>com & Ergy | DTE 05-85          | NSTAR  | Depreciation   |
| 42. | 2005        | NY PUC                      | 05-E-934/05-G-0935 | Central Hudson Gas & Electric Co.            | Depreciation   |
| 43. | 2005        | AK Reg Com                  | U-04-102           | Chugach Electric Association                 | Depreciation   |
| 44. | 2005        | CA PUC                      | A05-12-002         | Pacific Gas & Electric                       | Depreciation   |
| 45. | 2006        | PA PUC                      | R-00051030         | Aqua Pennsylvania, Inc.                      | Depreciation   |
| 46. | 2006        | PA PUC                      | R-00051178         | T.W. Phillips Gas and Oil Co.                | Depreciation   |
| 47. | 2006        | NC Util Cm.                 |                    | Pub. Service Co. of North Carolina           | Depreciation   |
| 48. | 2006        | PA PUC                      | R-00051167         | City of Lancaster                            | Depreciation   |
| 49. | 2006        | PA PUC                      | R00061346          | Duquesne Light Company                       | Depreciation   |
| 50. | 2006        | PA PUC                      | R-00061322         | The York Water Company                       | Depreciation   |
| 51. | 2006        | PA PUC                      | R-00051298         | PPL GAS Utilities                            | Depreciation   |
| 52. | 2006        | PUC of TX                   | 32093              | CenterPoint Energy – Houston Electric        | Depreciation   |
| 53. | 2006        | KY PSC                      | 2006-00172         | Duke Energy Kentucky                         | Depreciation   |
| 54. | 2006        | SC PSC                      |                    | SCANA  |                |
| 55. | 2006        | AK Reg Com                  | U-06-6             | Municipal Light and Power                    | Depreciation   |
| 56. | 2006        | DE PSC                      | 06-284             | Delmarva Power and Light                     | Depreciation   |
| 57. | 2006        | IN URC                      | IURC43081          | Indiana American Water Company               | Depreciation   |
| 58. | 2006        | AK Reg Com                  | U-06-134           | Chugach Electric Association                 | Depreciation   |
| 59. | 2006        | MO PSC                      | WR-2007-0216       | Missouri American Water Company              | Depreciation   |
| 60. | 2006        | FERC                        | ISO82, ETC. AL     | TransAlaska Pipeline                         | Depreciation   |
| 61. | 2006        | PA PUC                      | R-00061493         | National Fuel Gas Distribution Corp. (PA)    | Depreciation   |
| 62. | 2007        | NC Util Com.                | E-7 SUB 828        | Duke Energy Carolinas, LLC                   | Depreciation   |
| 63. | 2007        | OH PSC                      | 08-709-EL-AIR      | Duke Energy Ohio Gas                         | Depreciation   |
| 64. | 2007        | PA PUC                      | R-00072155         | PPL Electric Utilities Corporation           | Depreciation   |
| 65. | 2007        | KY PSC                      | 2007-00143         | Kentucky American Water Company              | Depreciation   |

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

|     | <u>Year</u> | <u>Jurisdiction</u> | <u>Docket No.</u>    | <u>Client Utility</u>                      | <u>Subject</u> |
|-----|-------------|---------------------|----------------------|--|----------------|
| 66. | 2007        | PA PUC              | R-00072229           | Pennsylvania American Water Company        | Depreciation   |
| 67. | 2007        | KY PSC              | 2007-0008            | NiSource – Columbia Gas of Kentucky        | Depreciation   |
| 68. | 2007        | NY PSC              | 07-G-0141            | National Fuel Gas Distribution Corp (NY)   | Depreciation   |
| 69. | 2008        | AK PSC              | U-08-004             | Anchorage Water & Wastewater Utility       | Depreciation   |
| 70. | 2008        | TN Reg Auth         | 08-00039             | Tennessee-American Water Company           | Depreciation   |
| 71. | 2008        | DE PSC              | 08-96                | Artesian Water Company                     | Depreciation   |
| 72. | 2008        | PA PUC              | R-2008-2023067       | The York Water Company                     | Depreciation   |
| 73. | 2008        | KS CC               | 08-WSEE1-RTS         | Westar Energy                              | Depreciation   |
| 74. | 2008        | IN URC              | 43526                | Northern Indiana Public Service Co.        | Depreciation   |
| 75. | 2008        | IN URC              | 43501                | Duke Energy Indiana                        | Depreciation   |
| 76. | 2008        | MD PSC              | 9159                 | NiSource – Columbia Gas of Maryland        | Depreciation   |
| 77. | 2008        | KY PSC              | 2008-000251          | Kentucky Utilities                         | Depreciation   |
| 78. | 2008        | KY PSC              | 2008-000252          | Louisville Gas & Electric                  | Depreciation   |
| 79. | 2008        | PA PUC              | 2008-20322689        | Pennsylvania American Water Co.-Wastewater | Depreciation   |
| 80. | 2008        | NY PSC              | 08-E887/08-00888     | Central Hudson                             | Depreciation   |
| 81. | 2008        | WV TC               | VE-080416/VG-8080417 | Avista Corporation                         | Depreciation   |
| 82. | 2008        | IL CC               | ICC-09-166           | Peoples Gas, Light and Coke Co.            | Depreciation   |
| 83. | 2009        | IL CC               | ICC-09-167           | North Shore Gas Company                    | Depreciation   |
| 84. | 2009        | DC PSC              | 1076                 | Potomac Electric Power Company             | Depreciation   |
| 85. | 2009        | KY PSC              | 2009-00141           | NiSource – Columbia Gas of Kentucky        | Depreciation   |
| 86. | 2009        | FERC                | ER08-1056-002        | Entergy Services                           | Depreciation   |
| 87. | 2009        | PA PUC              | R-2009-2097323       | Pennsylvania American Water Co.            | Depreciation   |
| 88. | 2009        | NC Util Cm          | E-7, Sub 090         | Duke Energy Carolinas, LLC                 | Depreciation   |
| 89. | 2009        | KY PSC              | 2009-00202           | Duke Energy Kentucky                       | Depreciation   |
| 90. | 2009        | VA St. CC           | PUE-2009-00059       | Aqua Virginia, Inc.                        | Depreciation   |
| 91. | 2009        | PA PUC              | 2009-2132019         | Aqua Pennsylvania, Inc.                    | Depreciation   |
| 92. | 2009        | MS PSC              | 09-                  | Entergy Mississippi                        | Depreciation   |
| 93. | 2009        | AK PSC              | 09-08-U              | Entergy Arkansas                           | Depreciation   |
| 94. | 2009        | TX PUC              | 37744                | Entergy Texas                              | Depreciation   |
| 95. | 2009        | TX PUC              | 37690                | El Paso Electric Company                   | Depreciation   |
| 96. | 2009        | PA PUC              | R-2009-2106908       | The Borough of Hanover                     | Depreciation   |
| 97. | 2009        | KS CC               | 10-KCPE-415-RTS      | Kansas City Power & Light                  | Depreciation   |
| 98. | 2009        | PA PUC              | R-2009-              | United Water Pennsylvania                  | Depreciation   |

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

|      | <u>Year</u> | <u>Jurisdiction</u> | <u>Docket No.</u> | <u>Client Utility</u>                      | <u>Subject</u> |
|------|-------------|---------------------|-------------------|--|----------------|
| 99.  | 2009        | OH PUC              |                   | Aqua Ohio Water Company                    | Depreciation   |
| 100. | 2009        | WI PSC              | 3270-DU-103       | Madison Gas & Electric Co.                 | Depreciation   |
| 101. | 2009        | MO PSC              | WR-2010           | Missouri American Water Co.                | Depreciation   |
| 102. | 2009        | AK Reg Cm           | U-09-097          | Chugach Electric Association               | Depreciation   |
| 103. | 2010        | IN URC              | 43969             | Northern Indiana Public Service Co.        | Depreciation   |
| 104. | 2010        | WI PSC              | 6690-DU-104       | Wisconsin Public Service Corp.             | Depreciation   |
| 105. | 2010        | PA PUC              | R-2010-2161694    | PPL Electric Utilities Corp.               | Depreciation   |
| 106. | 2010        | KY PSC              | 2010-00036        | Kentucky American Water Company            | Depreciation   |
| 107. | 2010        | PA PUC              | R-2009-2149262    | Columbia Gas of Pennsylvania               | Depreciation   |
| 108. | 2010        | MO PSC              | GR-2010-0171      | Laclede Gas Company                        | Depreciation   |
| 109. | 2010        | SC PSC              | 2009-489-E        | South Carolina Electric & Gas Co.          | Depreciation   |
| 110. | 2010        | NJ BD OF PU         | ER09080664        | Atlantic City Electric                     | Depreciation   |
| 111. | 2010        | VA St. CC           | PUE-2010-00001    | Virginia American Water Company            | Depreciation   |
| 112. | 2010        | PA PUC              | R-2010-2157140    | The York Water Company                     | Depreciation   |
| 113. | 2010        | MO PSC              | ER-2010-0356      | Greater Missouri Operations Co.            | Depreciation   |
| 114. | 2010        | MO PSC              | ER-2010-0355      | Kansas City Power and Light                | Depreciation   |
| 115. | 2010        | PA PUC              | R-2010-2167797    | T.W. Phillips Gas and Oil Co.              | Depreciation   |
| 116. | 2010        | PSC SC              | 2009-489-E        | SCANA – Electric                           | Depreciation   |
| 117. | 2010        | PA PUC              | R-2010-22010702   | Peoples Natural Gas, LLC                   | Depreciation   |
| 118. | 2010        | AK PSC              | 10-067-U          | Oklahoma Gas and Electric Co.              | Depreciation   |
| 119. | 2010        | IN URC              |                   | Northern Indiana Public Serv. Co. - NIFL   | Depreciation   |
| 120. | 2010        | IN URC              |                   | Northern Indiana Public Serv. Co. - Kokomo | Depreciation   |
| 121. | 2010        | PA PUC              | R-2010-2166212    | Pennsylvania American Water Co - WW        | Depreciation   |
| 122. | 2010        | NC Util Cn.         | W-218,SUB310      | Aqua North Carolina, Inc.                  | Depreciation   |
| 123. | 2011        | OH PUC              | 11-4161-WS-AIR    | Ohio American Water Company                | Depreciation   |
| 124. | 2011        | MS PSC              | EC-123-0082-00    | Entergy Mississippi                        | Depreciation   |
| 125. | 2011        | CO PUC              | 11AL-387E         | Black Hills Colorado                       | Depreciation   |
| 126. | 2011        | PA PUC              | R-2010-2215623    | Columbia Gas of Pennsylvania               | Depreciation   |
| 127. | 2011        | PA PUC              | R-2010-2179103    | Lancaster, City of – Bureau of Water       | Depreciation   |
| 128. | 2011        | IN URC              | 43114 IGCC 4S     | Duke Energy Indiana                        | Depreciation   |
| 129. | 2011        | FERC                | IS11-146-000      | Enbridge Pipelines (Southern Lights)       | Depreciation   |
| 130. | 2011        | IL CC               | 11-0217           | MidAmerican Energy Corporation             | Depreciation   |
| 131. | 2011        | OK CC               | 201100087         | Oklahoma Gas & Electric Co.                | Depreciation   |
| 132. | 2011        | PA PUC              | 2011-2232243      | Pennsylvania American Water Company        | Depreciation   |



LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

|      | <u>Year</u> | <u>Jurisdiction</u> | <u>Docket No.</u>                  | <u>Client Utility</u>                   | <u>Subject</u> |
|------|-------------|---------------------|------------------------------------|---|----------------|
| 133. | 2011        | FERC                | 2011-2232243                       | Carolina Gas Transmission               | Depreciation   |
| 134. | 2012        | WA UTC              | UE-120436/UG-120437                | Avista Corporation                      | Depreciation   |
| 135. | 2012        | AK Reg Cm           | U-12-009                           | Chugach Electric Association            | Depreciation   |
| 136. | 2012        | MA PUC              | DPU 12-25                          | Columbia Gas of Massachusetts           | Depreciation   |
| 137. | 2012        | TX PUC              | 40094                              | El Paso Electric Company                | Depreciation   |
| 138. | 2012        | ID PUC              | IPC-E-12                           | Idaho Power Company                     | Depreciation   |
| 139. | 2012        | PA PUC              | R-2012-2290597                     | PPL Electric Utilities                  | Depreciation   |
| 140. | 2012        | PA PUC              | R-2012-2311725                     | Hanover, Borough of – Bureau of Water   | Depreciation   |
| 141. | 2012        | KY PSC              | 2012-00222                         | Louisville Gas and Electric Company     | Depreciation   |
| 142. | 2012        | KY PSC              | 2012-00221                         | Kentucky Utilities Company              | Depreciation   |
| 143. | 2012        | PA PUC              | R-2012-2285985                     | Peoples Natural Gas Company             | Depreciation   |
| 144. | 2012        | DC PSC              | Case 1087                          | Potomac Electric Power Company          | Depreciation   |
| 145. | 2012        | OH PSC              | 12-1682-EL-AIR                     | Duke Energy Ohio (Electric)             | Depreciation   |
| 146. | 2012        | OH PSC              | 12-1685-GA-AIR                     | Duke Energy Ohio (Gas)                  | Depreciation   |
| 147. | 2012        | PA PUC              | R-2012-2310366                     | Lancaster, City of – Sewer Fund         | Depreciation   |
| 148. | 2012        | PA PUC              | R-2012-2321748                     | Columbia Gas of Pennsylvania            | Depreciation   |
| 149. | 2012        | FERC                | ER-12-2681-000                     | ITC Holdings                            | Depreciation   |
| 150. | 2012        | MO PSC              | ER-2012-0174                       | Kansas City Power and Light             | Depreciation   |
| 151. | 2012        | MO PSC              | ER-2012-0175                       | KCPL Greater Missouri Operations Co.    | Depreciation   |
| 152. | 2012        | MO PSC              | GO-2012-0363                       | Laclede Gas Company                     | Depreciation   |
| 153. | 2012        | MN PUC              | G007,001/D-12-533                  | Integrus – MN Energy Resource Group     | Depreciation   |
| 153. | 2012        | TX PUC              |                                    | Aqua Texas                              | Depreciation   |
| 155. | 2012        | PA PUC              | 2012-2336379                       | York Water Company                      | Depreciation   |
| 156. | 2013        | NJ BPU              | ER12121071                         | PHI Service Co.– Atlantic City Electric | Depreciation   |
| 157. | 2013        | KY PSC              | 2013-00167                         | Columbia Gas of Kentucky                | Depreciation   |
| 158. | 2013        | VA St CC            | 2013-00020                         | Virginia Electric and Power Co.         | Depreciation   |
| 159. | 2013        | IA Util Bd          | 2013-0004                          | MidAmerican Energy Corporation          | Depreciation   |
| 160. | 2013        | PA PUC              | 2013-2355276                       | Pennsylvania American Water Co.         | Depreciation   |
| 161. | 2013        | NY PSC              | 13-E-0030, 13-G-0031,<br>13-S-0032 | Consolidated Edison of New York         | Depreciation   |
| 162. | 2013        | PA PUC              | 2013-2355886                       | Peoples TWP LLC                         | Depreciation   |
| 163. | 2013        | TN Reg Auth         | 12-0504                            | Tennessee American Water                | Depreciation   |
| 164. | 2013        | ME PUC              | 2013-168                           | Central Maine Power Company             | Depreciation   |
| 165. | 2013        | DC PSC              | Case 1103                          | PHI Service Co. – PEPCO                 | Depreciation   |

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

|      | <u>Year</u> | <u>Jurisdiction</u> | <u>Docket No.</u> | <u>Client Utility</u>                       | <u>Subject</u> |
|------|-------------|---------------------|-------------------|---|----------------|
| 166. | 2013        | WY PSC              | 2003-ER-13        | Cheyenne Light, Fuel and Power Co.          | Depreciation   |
| 167. | 2013        | FERC                | ER13- -0000       | Kentucky Utilities                          | Depreciation   |
| 168. | 2013        | FERC                | ER13- -0000       | MidAmerican Energy Company                  | Depreciation   |
| 169. | 2013        | FERC                | ER13- -0000       | PPL Utilities                               | Depreciation   |
| 170. | 2013        | PA PUC              | R-2013-2372129    | Duquesne Light Company                      | Depreciation   |
| 171. | 2013        | NJ BPU              | ER12111052        | Jersey Central Power and Light Co.          | Depreciation   |
| 172. | 2013        | PA PUC              | R-2013-2390244    | Bethlehem, City of – Bureau of Water        | Depreciation   |
| 173. | 2013        | OK CC               | UM 1679           | Oklahoma, Public Service Company of         | Depreciation   |
| 174. | 2013        | IL CC               | 13-0500           | Nicor Gas Company                           | Depreciation   |
| 175. | 2013        | WY PSC              | 20000-427-EA-13   | PacifiCorp                                  | Depreciation   |
| 176. | 2013        | UT PSC              | 13-035-02         | PacifiCorp                                  | Depreciation   |
| 177. | 2013        | OR PUC              | UM 1647           | PacifiCorp                                  | Depreciation   |
| 178. | 2013        | PA PUC              | 2013-2350509      | Dubois, City of                             | Depreciation   |
| 179. | 2014        | IL CC               | 14-0224           | North Shore Gas Company                     | Depreciation   |
| 180. | 2014        | FERC                | ER14-             | Duquesne Light Company                      | Depreciation   |
| 181. | 2014        | SD PUC              | EL14-026          | Black Hills Power Company                   | Depreciation   |
| 182. | 2014        | WY PSC              | 20002-91-ER-14    | Black Hills Power Company                   | Depreciation   |
| 183. | 2014        | PA PUC              | 2014-2428304      | Hanover, Borough of – Municipal Water Works | Depreciation   |
| 184. | 2014        | PA PUC              | 2014-2406274      | Columbia Gas of Pennsylvania                | Depreciation   |
| 185. | 2014        | IL CC               | 14-0225           | Peoples Gas Light and Coke Company          | Depreciation   |
| 186. | 2014        | MO PSC              | ER-2014-0258      | Ameren Missouri                             | Depreciation   |
| 187. | 2014        | KS CC               | 14-BHCG-502-RTS   | Black Hills Service Company                 | Depreciation   |
| 188. | 2014        | KS CC               | 14-BHCG-502-RTS   | Black Hills Utility Holdings                | Depreciation   |
| 189. | 2014        | KS CC               | 14-BHCG-502-RTS   | Black Hills Kansas Gas                      | Depreciation   |
| 190. | 2014        | PA PUC              | 2014-2418872      | Lancaster, City of – Bureau of Water        | Depreciation   |
| 191. | 2014        | WV PSC              | 14-0701-E-D       | First Energy – MonPower/PotomacEdison       | Depreciation   |
| 192. | 2014        | VA St CC            | PUC-2014-00045    | Aqua Virginia                               | Depreciation   |
| 193. | 2014        | VA St CC            | PUE-2013          | Virginia American                           | Depreciation   |
| 194. | 2014        | OK CC               | PUD201400229      | Oklahoma Gas and Electric                   | Depreciation   |
| 195. | 2014        | OR PUC              | UM1679            | Portland General Electric                   | Depreciation   |
| 196. | 2014        | IN URC              | Cause No. 44576   | Indianapolis Power & Light                  | Depreciation   |
| 197. | 2014        | MA DPU              | DPU. 14-150       | NSTAR Gas                                   | Depreciation   |
| 198. | 2014        | CT PURA             | 14-05-06          | Connecticut Light and Power                 | Depreciation   |
| 199. | 2014        | MO PSC              | ER-2014-0370      | Kansas City Power & Light                   | Depreciation   |

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

|      | <u>Year</u> | <u>Jurisdiction</u> | <u>Docket No.</u>           | <u>Client Utility</u>   | <u>Subject</u> |
|------|-------------|---------------------|-----------------------------|---|----------------|
| 200. | 2014        | KY PSC              | 2014-00371                  | Kentucky Utilities Company                                    | Depreciation   |
| 201. | 2014        | KY PSC              | 2014-00372                  | Louisville Gas and Electric Company                           | Depreciation   |
| 202. | 2015        | PA PUC              | R-2015-2462723              | United Water Pennsylvania Inc.                                | Depreciation   |
| 203. | 2015        | PA PUC              | R-2015-2468056              | Columbia Gas of Pennsylvania                                  | Depreciation   |
| 204. | 2015        | NY PSC              | 15-E-0283/15-G-0284         | New York State Electric and Gas Corporation                   | Depreciation   |
| 205. | 2015        | NY PSC              | 15-E-0285/15-G-0286         | Rochester Gas and Electric Corporation                        | Depreciation   |
| 206. | 2015        | MO PSC              | WR-2015-0301/SR-2015-0302   | Missouri American Water Company                               | Depreciation   |
| 207. | 2015        | OK CC               | PUD 201500208               | Oklahoma, Public Service Company of                           | Depreciation   |
| 208. | 2015        | WV PSC              | 15-0676-W-42T               | West Virginia American Water Company                          | Depreciation   |
| 209. | 2015        | PA PUC              | 2015-2469275                | PPL Electric Utilities  | Depreciation   |
| 210. | 2015        | IN URC              | Cause No. 44688             | Northern Indiana Public Service Company                       | Depreciation   |
| 211. | 2015        | OH PSC              | 14-1929-EL-RDR              | First Energy-Ohio Edison/Cleveland Electric/<br>Toledo Edison | Depreciation   |
| 212. | 2015        | NM PRC              | 15-00127-UT                 | El Paso Electric  | Depreciation   |
| 213. | 2015        | TX PUC              | PUC-44941; SOAH 473-15-5257 | El Paso Electric  | Depreciation   |
| 214. | 2015        | WI PSC              | 3370-DU-104                 | Madison Gas and Electric Company                              | Depreciation   |
| 215. | 2015        | OK CC               | PUD 201500273               | Oklahoma Gas and Electric                                     | Depreciation   |
| 216. | 2015        | KY PSC              | Doc. No. 2015-00418         | Kentucky American Water Company                               | Depreciation   |
| 217. | 2015        | NC UC               | Doc. No. G-5, Sub 565       | Public Service Company of North Carolina                      | Depreciation   |
| 218. | 2016        | WA UTC              | Docket UE-17                | Puget Sound Energy  | Depreciation   |
| 219. | 2016        | NY PSC              | Case No. 16-W-0130          | Suez Water New York, Inc.                                     | Depreciation   |
| 220. | 2016        | MO PSC              | ER-2016-0156                | KCPL – Greater Missouri                                       | Depreciation   |
| 221. | 2016        | WI PSC              |                             | Wisconsin Public Service Commission                           | Depreciation   |
| 222. | 2016        | KY PSC              | Case No. 2016-00026         | Kentucky Utilities Company                                    | Depreciation   |
| 223. | 2016        | KY PSC              | Case No. 2016-00027         | Louisville Gas and Electric Company                           | Depreciation   |
| 224. | 2016        | OH PUC              |                             | Aqua Ohio   | Depreciation   |
| 225. | 2016        | MD PSC              | Case 9417                   | Columbia Gas of Maryland                                      | Depreciation   |
| 226. | 2016        | KY PSC              | 2016-00162                  | Columbia Gas of Kentucky                                      | Depreciation   |
| 227. | 2016        | DE PSC              | 16-0649                     | Delmarva Power and Light Co. – Electric                       | Depreciation   |
| 228. | 2016        | DE PSC              | 16-0650                     | Delmarva Power and Light Co. – Gas                            | Depreciation   |
| 229. | 2016        | NY PSC              | Case 16-G-0257              | National Fuel Gas Distribution Corp – NY Div                  | Depreciation   |
| 230. | 2016        | PA PUC              | R-2016-2537349              | Metropolitan Edison Company                                   | Depreciation   |
| 231. | 2016        | PA PUC              | R-2016-2537352              | Pennsylvania Electric Company                                 | Depreciation   |
| 232. | 2016        | PA PUC              | R-2016-2537355              | Pennsylvania Power Company                                    | Depreciation   |

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

|      | <u>Year</u> | <u>Jurisdiction</u> | <u>Docket No.</u>         | <u>Client Utility</u>  | <u>Subject</u> |
|------|-------------|---------------------|---------------------------|--|----------------|
| 233. | 2016        | PA PUC              | R-2016-2537359            | West Penn Power Company  | Depreciation   |
| 234. | 2016        | PA PUC              | R-2016-2529660            | Columbia Gas of PA   | Depreciation   |
| 235. | 2016        | KY PSC              | Case No. 2016-00063       | Kentucky Utilities / Louisville Gas & Electric Co                    | Depreciation   |
| 236. | 2016        | MO PSC              | ER-2016-0285              | KCPL Missouri  | Depreciation   |
| 237. | 2016        | AR PSC              | 16-052-U                  | Oklahoma Gas & Electric Co   | Depreciation   |
| 238. | 2016        | PSCW                | 6680-DU-104               | Wisconsin Power and Light  | Depreciation   |
| 239. | 2016        | ID PUC              | IPC-E-16-23               | Idaho Power Company  | Depreciation   |
| 240. | 2016        | OR PUC              | UM1801                    | Idaho Power Company  | Depreciation   |
| 241. | 2016        | ILL CC              | 16-                       | MidAmerican Energy Company   | Depreciation   |
| 242. | 2016        | KY PSC              | Case No. 2016-00370       | Kentucky Utilities Company   | Depreciation   |
| 243. | 2016        | KY PSC              | Case No. 2016-00371       | Louisville Gas and Electric Company                                  | Depreciation   |
| 244. | 2016        | IN URC              |                           | Indianapolis Power & Light   | Depreciation   |
| 245. | 2016        | AL RC               | U-16-081                  | Chugach Electric Association   | Depreciation   |
| 246. | 2017        | MA DPU              | D.P.U. 17-05              | NSTAR Electric Company and Western<br>Massachusetts Electric Company | Depreciation   |
| 247. | 2017        | TX PUC              |                           | EL Paso Electric Company   | Depreciation   |
| 248. | 2017        | WA UT&C             | UE-17033 and UG-170034    | Puget Sound Energy   | Depreciation   |
| 249. | 2017        | OH PUC              | Case No. 17-0032-EL-AIR   | Duke Energy Ohio   | Depreciation   |
| 250. | 2017        | VA SCC              | Case No. PUE-2016-00413   | Virginia Natural Gas, Inc.   | Depreciation   |
| 251. | 2017        | OK CC               | Case No. PUD201700151     | Oklahoma, Public Service Company of                                  | Depreciation   |
| 252. | 2017        | MD PSC              | Case No. 9447             | Columbia Gas of Maryland   | Depreciation   |
| 253. | 2017        | NC UC               | Docket No. E-2, Sub 1142  | Duke Energy Progress   | Depreciation   |
| 254. | 2017        | PA PUC              | R-2017-2595853            | Pennsylvania American Water Company                                  | Depreciation   |
| 255. | 2017        | OR PUC              | UM1809                    | Portland General Electric  | Depreciation   |
| 256. | 2017        | FERC                | ER17-217                  | Jersey Central Power & Light   | Depreciation   |
| 257. | 2017        | FERC                | ER17-211                  | Mid-Atlantic Interstate Transmission, LLC                            | Depreciation   |
| 258. | 2017        | MN PUC              | Docket No. GOH/D-17-      | Minnesota Energy Resources Corporation                               | Depreciation   |
| 259. | 2017        | IL CC               | Docket No. 17-0124        | Northern Illinois Gas Company  | Depreciation   |
| 260. | 2017        | OR PUC              | UM1808                    | Northwest Natural Gas Company  | Depreciation   |
| 261. | 2017        | NY PSC              | Case No. 17-W-0528        | SUEZ Water Owego-Nichols   | Depreciation   |
| 262. | 2017        | ILL CC              | Docket No. 17-0337        | Illinois-American Water Company                                      | Depreciation   |
| 263. | 2017        | PA PUC              | Docket No. ER17-____      | PPL Electric Utilities Corporation                                   | Depreciation   |
| 264. | 2017        | IN URC              | Cause No.                 | Northern Indiana Public Service Company                              | Depreciation   |
| 265. | 2017        | NJ BPU              | BPU Docket No. WR1709____ | New Jersey American Water Company, Inc.                              | Depreciation   |

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

|      | <u>Year</u> | <u>Jurisdiction</u> | <u>Docket No.</u> | <u>Client Utility</u>          | <u>Subject</u> |
|------|-------------|---------------------|-------------------|--------------------------------|----------------|
| 266. | 2017        | IN URC              | Cause No.         | Indiana-American Water Company | Depreciation   |



*Excellence Delivered As Promised*

January 22, 2018

SUEZ Water Rhode Island  
200 Old Hook Road  
Harrington Park, NJ 07640

Attention            Mr. James C. Cagle  
                         Vice President, Regulatory

Dear Ladies and Gentlemen:

Pursuant to your request, we have conducted a depreciation study related to the water plant of SUEZ Water Rhode Island as of December 31, 2016. The attached report presents a description of the methods used in the estimation of depreciation, the summary of annual depreciation accrual rates, the statistical support for the life and net salvage estimates and the detailed tabulations of annual depreciation.

Respectfully submitted,

GANNETT FLEMING VALUATION  
AND RATE CONSULTANTS, LLC

A handwritten signature in black ink, reading "John J. Spanos".

JOHN J. SPANOS  
Sr. Vice President

JJS:mle

062375.000

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## **2016 DEPRECIATION STUDY**

**CALCULATED ANNUAL DEPRECIATION  
ACCRUALS RELATED TO WATER PLANT  
AS OF DECEMBER 31, 2016**

*Prepared by:*



***Gannett Fleming***

*Excellence Delivered **As Promised***

SUEZ WATER RHODE ISLAND  
South Kingstown, Rhode Island

2016 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION  
ACCRUALS RELATED TO WATER PLANT  
AS OF DECEMBER 31, 2016

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



## TABLE OF CONTENTS

|   |              |
|---|--------------|
| <b>EXECUTIVE SUMMARY .....</b>                                      | <b>iii</b>   |
| <b>PART I. INTRODUCTION .....</b>                                   | <b>I-1</b>   |
| Scope .....   | I-2          |
| Plan of Report .....  | I-2          |
| Basis of the Study .....  | I-3          |
| Depreciation .....  | I-3          |
| Service Life and Net Salvage Estimates.....                         | I-4          |
| <b>PART II. ESTIMATION OF SURVIVOR CURVES .....</b>                 | <b>II-1</b>  |
| Survivor Curves.....  | II-2         |
| Iowa Type Curves.....   | II-3         |
| Retirement Rate Method of Analysis .....                            | II-9         |
| Schedules of Annual Transactions in Plant Records .....             | II-10        |
| Schedule of Plant Exposed to Retirement .....                       | II-13        |
| Original Life Table .....   | II-15        |
| Smoothing the Original Survivor Curve.....                          | II-17        |
| <b>PART III. SERVICE LIFE CONSIDERATIONS .....</b>                  | <b>III-1</b> |
| Field Trips .....   | III-2        |
| Service Life Analysis .....   | III-2        |
| <b>PART IV. NET SALVAGE CONSIDERATIONS .....</b>                    | <b>IV-1</b>  |
| Salvage Analysis .....  | IV-2         |
| Net Salvage Considerations .....                                    | IV-2         |
| <b>PART V. CALCULATION OF ANNUAL AND ACCRUED DEPRECIATION .....</b> | <b>V-1</b>   |
| Group Depreciation Procedures .....                                 | V-2          |
| Single Unit of Property.....  | V-2          |
| Group Depreciation Procedures .....                                 | V-3          |
| Remaining Life Annual Accruals.....                                 | V-3          |
| Average Service Life Procedure .....                                | V-3          |
| Calculation of Annual and Accrued Amortization.....                 | V-4          |
| <b>PART VI. RESULTS OF STUDY .....</b>                              | <b>VI-1</b>  |
| Qualification of Results.....                                       | VI-2         |
| Description of Detailed Tabulations.....                            | VI-2         |

## **TABLE OF CONTENTS, cont.**

|  |   |               |
|--|---|---------------|
| Table 1.   | Summary of Estimated Survivor Curve, Net Salvage, Original Cost,<br>Book Reserve, and Calculated Annual Depreciation Accruals<br>Related to Water Plant as of December 31, 2016 ..... | VI-5          |
| <b>PART VII. SERVICE LIFE STATISTICS .....</b>           |   | <b>VII-1</b>  |
| <b>PART VIII. NET SALVAGE STATISTICS .....</b>           |   | <b>VIII-1</b> |
| <b>PART IX. DETAILED DEPRECIATION CALCULATIONS .....</b> |   | <b>IX-1</b>   |

## EXECUTIVE SUMMARY

Pursuant to SUEZ Water Rhode Island's ("SWRI") request, Gannett Fleming Valuation and Rate Consultants, LLC ("Gannett Fleming") has conducted a depreciation study related to SWRI plant as of December 31, 2016. The purpose of this study was to determine the annual depreciation accrual rates and amounts for book and ratemaking purposes.

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

SWRI's accounting policy has not changed since the previous depreciation study was prepared. However, some net salvage and average service life estimates proposed in this study have changed from the currently approved estimates. The overall composite depreciation accrual rate has increased as compared to current rates.

Gannett Fleming recommends the calculated annual depreciation accrual rates proposed herein apply specifically to SWRI's plant in service as of December 31, 2016 as summarized in Table 1 of the study. The study sets forth a total annual depreciation expense of \$738,397 as applied to the depreciable original cost of \$30 million as of December 31, 2016.

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## PART I. INTRODUCTION

# **SUEZ WATER RHODE ISLAND DEPRECIATION STUDY**

## **PART I. INTRODUCTION**

### **SCOPE**

This report presents the results of the depreciation study prepared for SUEZ Water Rhode Island as applied to water plant in service as of December 31, 2016. It relates to the concepts, methods, and basic judgments which underlie recommended annual depreciation accrual rates related to current utility plant in service.

The service life and net salvage estimates resulting from the study were based on informed judgment which incorporated analyses of historical plant retirement data as recorded through 2016; a review of Company practice and outlook as they relate to plant operation and retirement; and consideration of current practice in the water industry, including knowledge of service life and salvage estimates used for other water properties.

### **PLAN OF REPORT**

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

## **BASIS OF THE STUDY**

### **Depreciation**

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

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

For most accounts, the annual depreciation was calculated by the straight-line method using the average service life procedure and the remaining life basis. For certain General Plant accounts, the annual depreciation is based on amortization accounting. Both types of calculations were based on original cost, attained ages, and estimates of service lives and net salvage.

The straight-line method, average service life procedure is a commonly used depreciation calculation procedure that has been widely accepted in jurisdictions throughout North America. Amortization accounting is used for certain General Plant accounts because of the disproportionate plant accounting effort required when

compared to the minimal original cost of the large number of items in these accounts. An explanation of the calculation of annual and accrued amortization is presented beginning on page V-4 of the report.

#### **Service Life and Net Salvage Estimates**

The service life and net salvage estimates used in the depreciation and amortization calculations were based on informed judgment which incorporated a review of management's plans, policies and outlook, a general knowledge of the water utility industry, and comparisons of the service life and net salvage estimates from our studies of other water utilities. The use of survivor curves to reflect the expected dispersion of retirement provides a consistent method of estimating depreciation for water plant. Iowa type survivor curves were used to depict the estimated survivor curves for the plant accounts not subject to amortization accounting.

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

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## **PART II. ESTIMATION OF SURVIVOR CURVES**



## **PART II. ESTIMATION OF SURVIVOR CURVES**

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

### **SURVIVOR CURVES**

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

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

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

### **Iowa Type Curves**

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

The Iowa curves were developed at the Iowa State College Engineering Experiment Station through an extensive process of observation and classification of the ages at which industrial property had been retired. A report of the study which resulted in the classification of property survivor characteristics into 18 type curves,

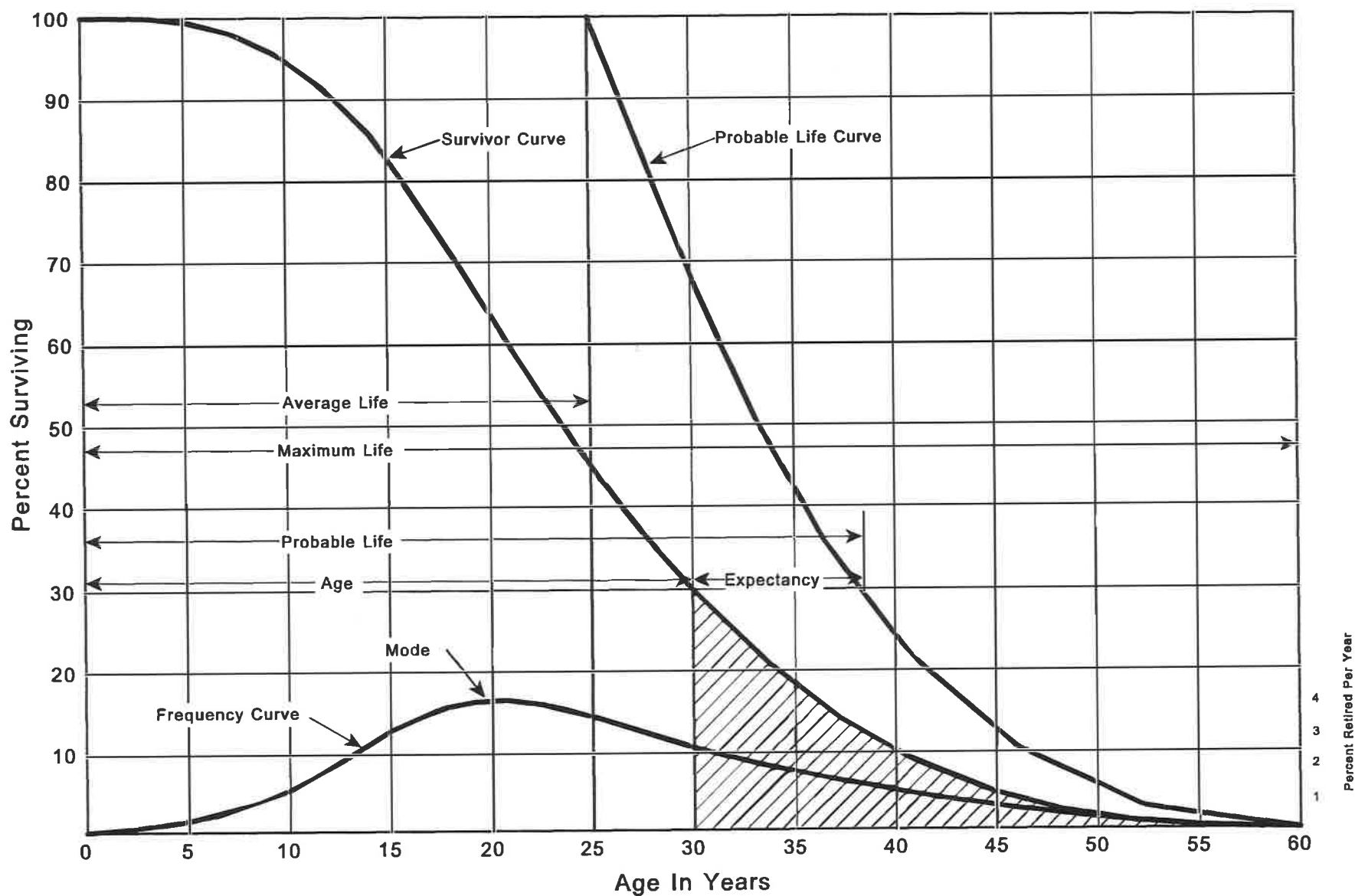


Figure 1. A Typical Survivor Curve and Derived Curves

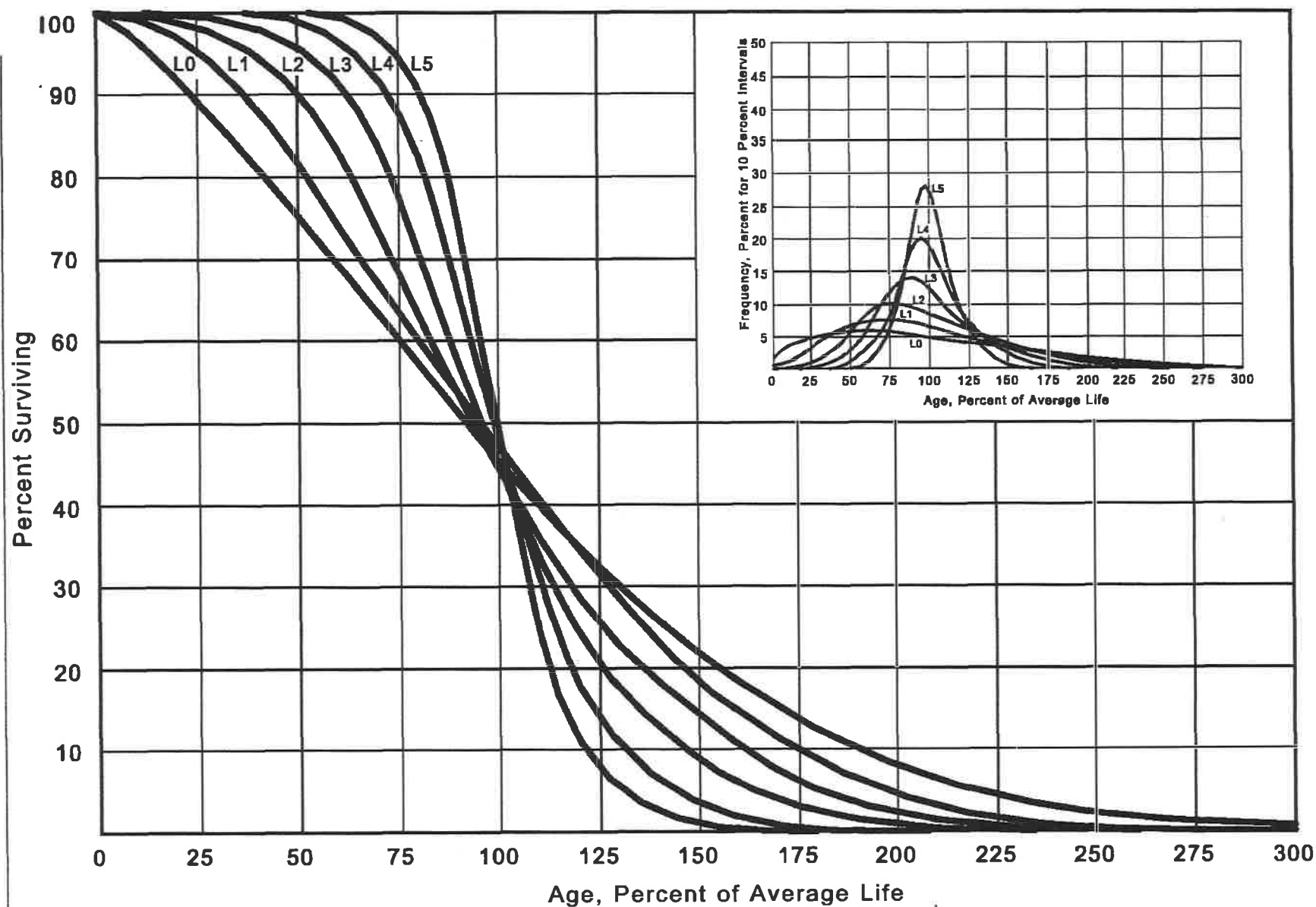


Figure 2. Left Modal or "L" Iowa Type Survivor Curves

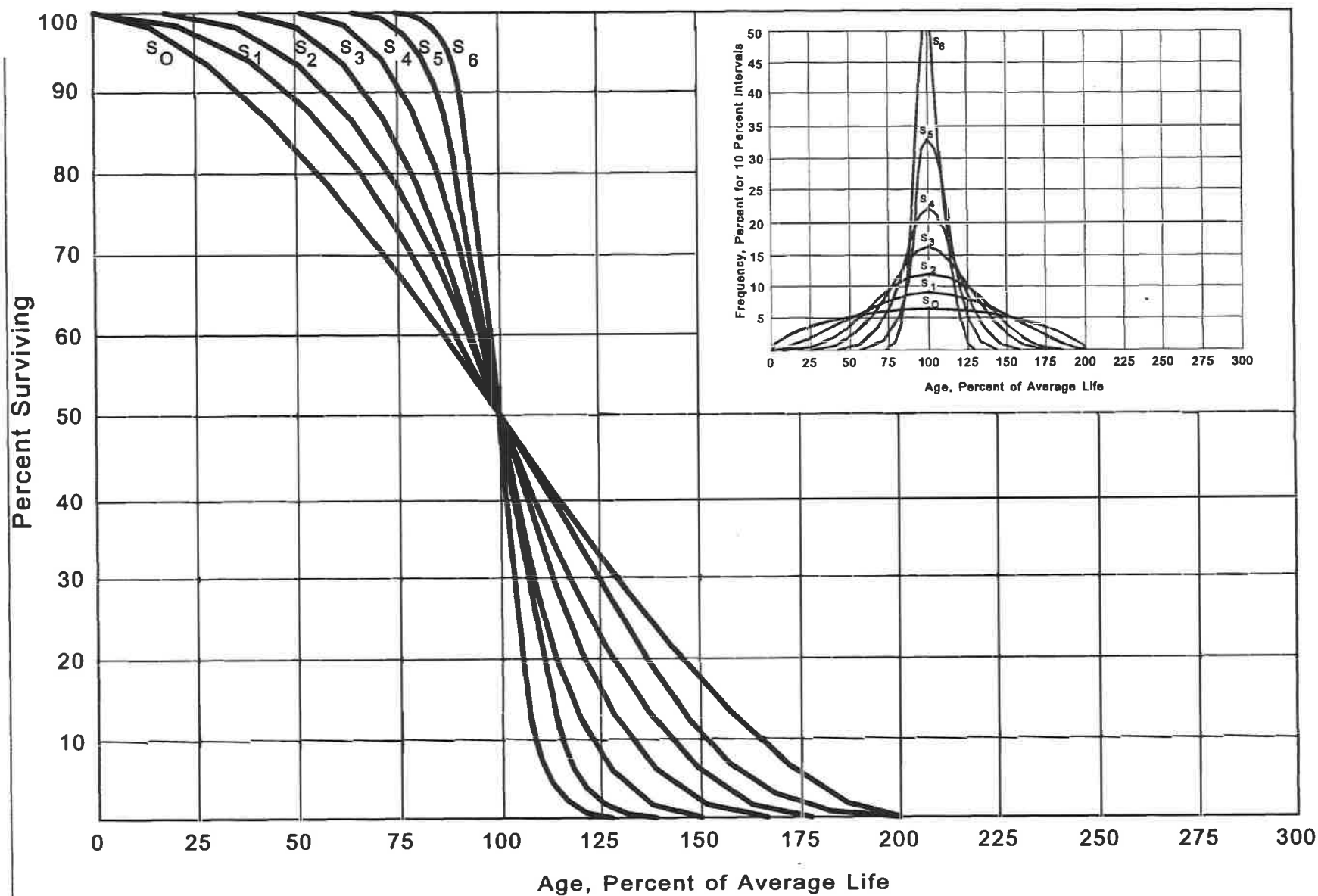


Figure 3. Symmetrical or "S" Iowa Type Survivor Curves

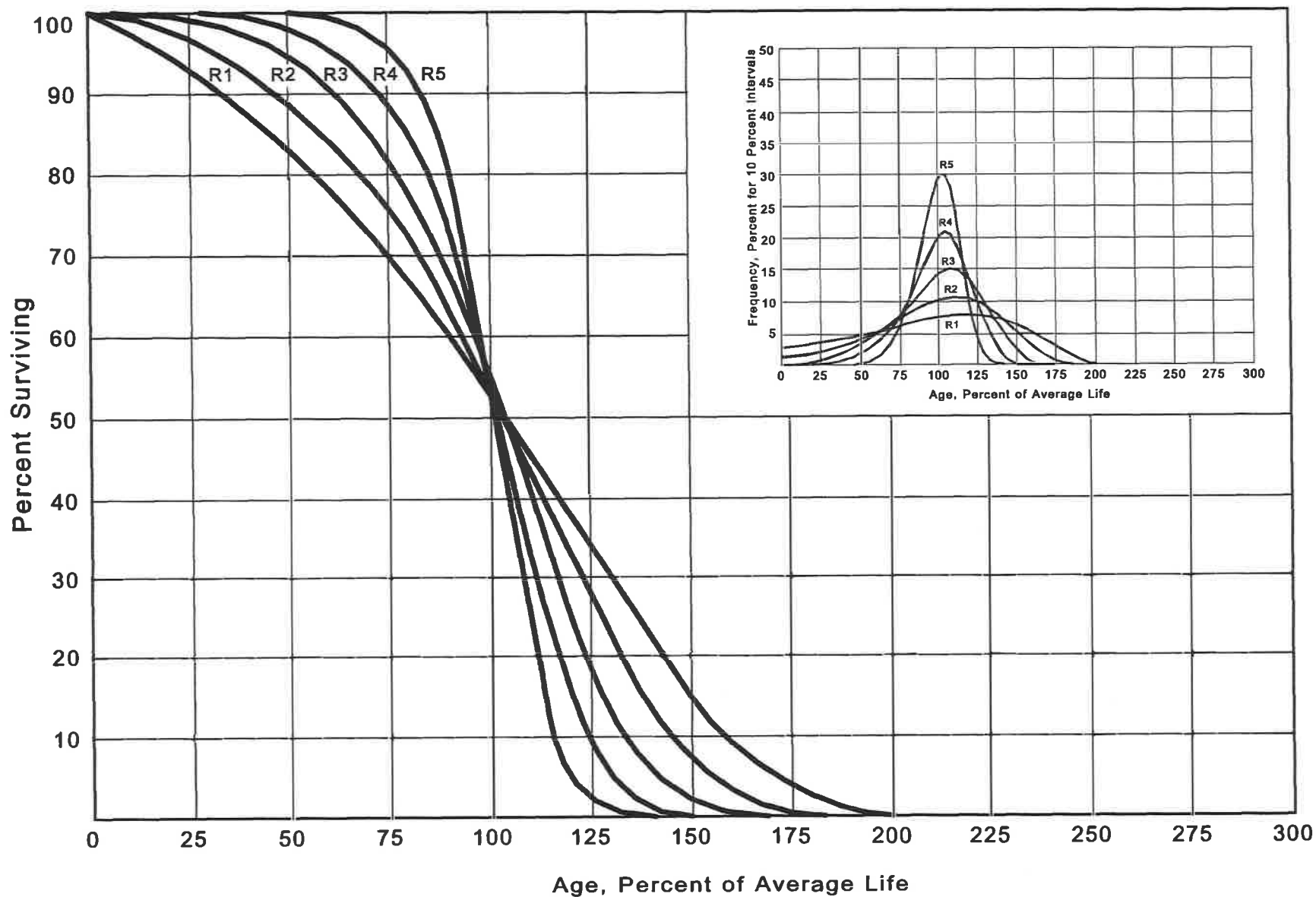


Figure 4. Right Modal or "R" Iowa Type Survivor Curves

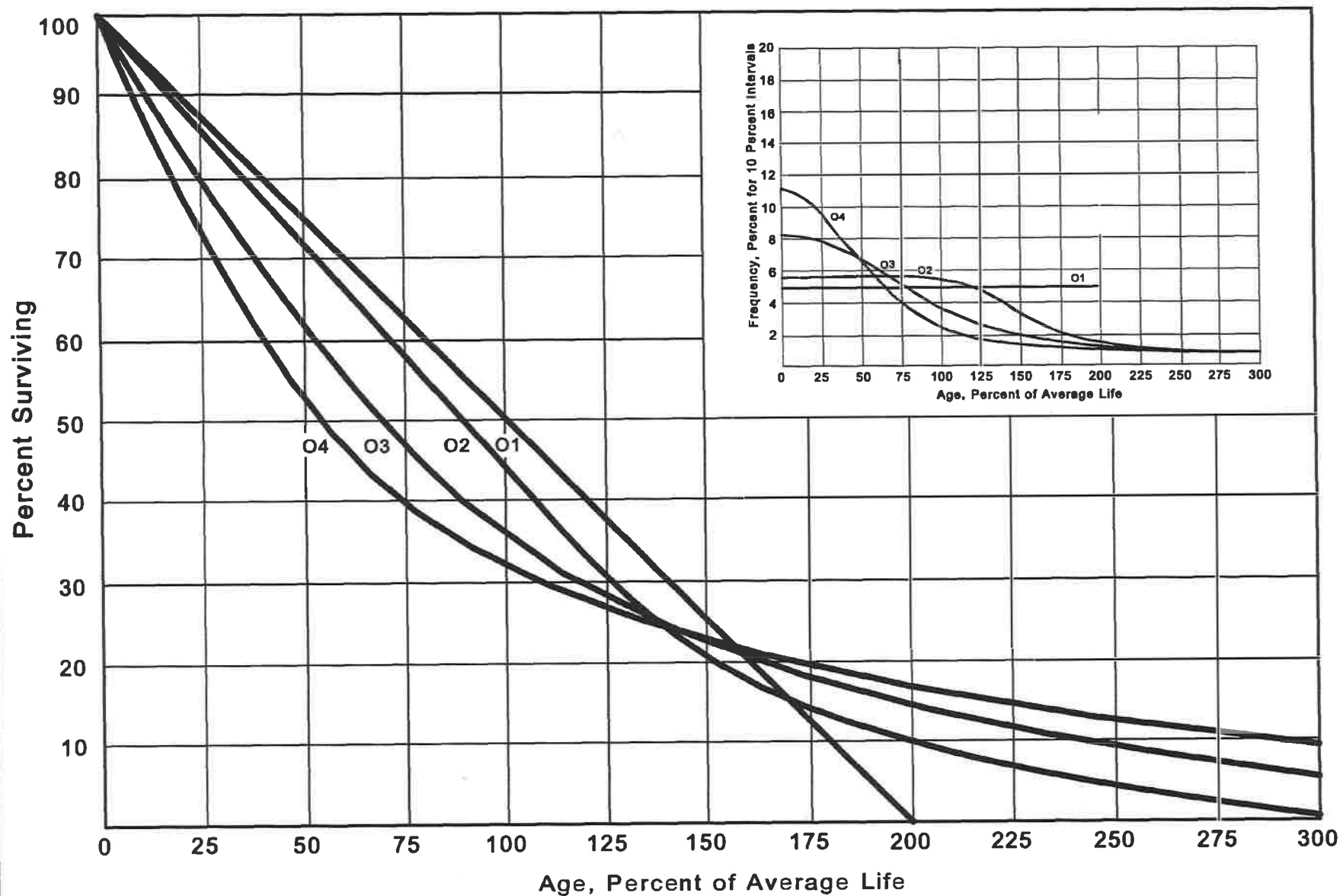


Figure 5. Origin Modal or "O" Iowa Type Survivor Curves

which constitute three of the four families, was published in 1935 in the form of the Experiment Station's Bulletin 125. These curve types have also been presented in subsequent Experiment Station bulletins and in the text, "Engineering Valuation and Depreciation."<sup>1</sup> In 1957, Frank V. B. Couch, Jr., an Iowa State College graduate student submitted a thesis presenting his development of the fourth family consisting of the four O type survivor curves.

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

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

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

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

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

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

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



aged property transactions, a schedule of plant exposed to retirement, a life table and illustrations of smoothing the stub survivor curve.

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

The property group used to illustrate the retirement rate method is observed for the experience band 2007-2016 during which there were placements during the years 2002-2016. In order to illustrate the summation of the aged data by age interval, the data were compiled in the manner presented in Schedules 1 and 2 on pages II-11 and II-12. In Schedule 1, the year of installation (year placed) and the year of retirement are shown. The age interval during which a retirement occurred is determined from this information. In the example which follows, \$10,000 of the dollars invested in 2002 were retired in 2007. The \$10,000 retirement occurred during the age interval between 4½ and 5½ years on the basis that approximately one-half of the amount of property was installed prior to and subsequent to July 1 of each year. That is, on the average, property installed during a year is placed in service at the midpoint of the year for the purpose of the analysis. All retirements also are stated as occurring at the midpoint of a one-year age interval of time, except the first age interval which encompasses only one-half year.

The total retirements occurring in each age interval in a band are determined by summing the amounts for each transaction year-installation year combination for that age interval. For example, the total of \$143,000 retired for age interval 4½-5½ is the sum of the retirements entered on Schedule 1 immediately above the stair step line drawn on the table beginning with the 2007 retirements of 2002 installations and ending with the 2016 retirements of the 2011 installations. Thus, the total amount of 143 for age interval 4½-5½ equals the sum of:

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

**SCHEDULE 1. RETIREMENTS FOR EACH YEAR 2007-2016  
SUMMARIZED BY AGE INTERVAL**

Experience Band 2007-2016

Placement Band 2002-2016

| Year<br>Placed<br>(1) | Retirements, Thousands of Dollars |             |             |             |             |             |             |             |              |              | Total During<br>Age Interval<br>(12) | Age<br>Interval<br>(13) |
|-----------------------|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------------------------------|-------------------------|
|                       | 2007<br>(2)                       | 2008<br>(3) | 2009<br>(4) | 2010<br>(5) | 2011<br>(6) | 2012<br>(7) | 2013<br>(8) | 2014<br>(9) | 2015<br>(10) | 2016<br>(11) |                                      |                         |
| 2002                  | 10                                | 11          | 12          | 13          | 14          | 16          | 23          | 24          | 25           | 26           | 26                                   | 13½-14½                 |
| 2003                  | 11                                | 12          | 13          | 15          | 16          | 18          | 20          | 21          | 22           | 19           | 44                                   | 12½-13½                 |
| 2004                  | 11                                | 12          | 13          | 14          | 16          | 17          | 19          | 21          | 22           | 18           | 64                                   | 11½-12½                 |
| 2005                  | 8                                 | 9           | 10          | 11          | 11          | 13          | 14          | 15          | 16           | 17           | 83                                   | 10½-11½                 |
| 2006                  | 9                                 | 10          | 11          | 12          | 13          | 14          | 16          | 17          | 19           | 20           | 93                                   | 9½-10½                  |
| 2007                  | 4                                 | 9           | 10          | 11          | 12          | 13          | 14          | 15          | 16           | 20           | 105                                  | 8½-9½                   |
| 2008                  |                                   | 5           | 11          | 12          | 13          | 14          | 15          | 16          | 18           | 20           | 113                                  | 7½-8½                   |
| 2009                  |                                   |             | 6           | 12          | 13          | 15          | 16          | 17          | 19           | 19           | 124                                  | 6½-7½                   |
| 2010                  |                                   |             |             | 6           | 13          | 15          | 16          | 17          | 19           | 19           | 131                                  | 5½-6½                   |
| 2011                  |                                   |             |             |             | 7           | 14          | 16          | 17          | 19           | 20           | 143                                  | 4½-5½                   |
| 2012                  |                                   |             |             |             |             | 8           | 18          | 20          | 22           | 23           | 146                                  | 3½-4½                   |
| 2013                  |                                   |             |             |             |             |             | 9           | 20          | 22           | 25           | 150                                  | 2½-3½                   |
| 2014                  |                                   |             |             |             |             |             |             | 11          | 23           | 25           | 151                                  | 1½-2½                   |
| 2015                  |                                   |             |             |             |             |             |             |             | 11           | 24           | 153                                  | ½-1½                    |
| 2016                  |                                   |             |             |             |             |             |             |             |              | 13           | 80                                   | 0-½                     |
| Total                 | 53                                | 68          | 86          | 106         | 128         | 157         | 196         | 231         | 273          | 308          | 1,606                                |                         |



**SCHEDULE 2. OTHER TRANSACTIONS FOR EACH YEAR 2007-2016  
SUMMARIZED BY AGE INTERVAL**

Experience Band 2007-2016

Placement Band 2002-2016

| Year<br>Placed | Acquisitions, Transfers and Sales, Thousands of Dollars |      |      |      |      |      |                 |                   |                 |                    | Total During<br>Age Interval | Age<br>Interval |
|----------------|---|------|------|------|------|------|-----------------|-------------------|-----------------|--------------------|------------------------------|-----------------|
|                | During Year   |      |      |      |      |      |                 |                   |                 |                    |                              |                 |
|                | 2007  | 2008 | 2009 | 2010 | 2011 | 2012 | 2013            | 2014              | 2015            | 2016               |                              |                 |
| (1)            | (2)   | (3)  | (4)  | (5)  | (6)  | (7)  | (8)             | (9)               | (10)            | (11)               | (12)                         | (13)            |
| 2002           | -   | -    | -    | -    | -    | -    | 60 <sup>a</sup> | -                 | -               | -                  | -                            | 13½-14½         |
| 2003           | -   | -    | -    | -    | -    | -    | -               | -                 | -               | -                  | -                            | 12½-13½         |
| 2004           | -   | -    | -    | -    | -    | -    | -               | -                 | -               | -                  | -                            | 11½-12½         |
| 2005           | -   | -    | -    | -    | -    | -    | -               | (5) <sup>b</sup>  | -               | -                  | 60                           | 10½-11½         |
| 2006           | -   | -    | -    | -    | -    | -    | -               | 6 <sup>a</sup>    | -               | -                  | -                            | 9½-10½          |
| 2007           | -   | -    | -    | -    | -    | -    | -               | -                 | -               | -                  | (5)                          | 8½-9½           |
| 2008           | -   | -    | -    | -    | -    | -    | -               | -                 | -               | -                  | 6                            | 7½-8½           |
| 2009           | -   | -    | -    | -    | -    | -    | -               | -                 | -               | -                  | -                            | 6½-7½           |
| 2010           | -   | -    | -    | -    | -    | -    | -               | (12) <sup>b</sup> | -               | -                  | -                            | 5½-6½           |
| 2011           | -   | -    | -    | -    | -    | -    | -               | -                 | 22 <sup>a</sup> | -                  | -                            | 4½-5½           |
| 2012           | -   | -    | -    | -    | -    | -    | -               | (19) <sup>b</sup> | -               | -                  | 10                           | 3½-4½           |
| 2013           | -   | -    | -    | -    | -    | -    | -               | -                 | -               | -                  | -                            | 2½-3½           |
| 2014           | -   | -    | -    | -    | -    | -    | -               | -                 | -               | (102) <sup>c</sup> | (121)                        | 1½-2½           |
| 2015           | -   | -    | -    | -    | -    | -    | -               | -                 | -               | -                  | -                            | ½-1½            |
| 2016           | -   | -    | -    | -    | -    | -    | -               | -                 | -               | -                  | -                            | 0-½             |
| Total          | -   | -    | -    | -    | -    | -    | 60              | (30)              | 22              | (102)              | (50)                         |                 |

<sup>a</sup> Transfer Affecting Exposures at Beginning of Year<sup>b</sup> Transfer Affecting Exposures at End of Year<sup>c</sup> Sale with Continued Use

Parentheses Denote Credit Amount.

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

### **Schedule of Plant Exposed to Retirement**

The development of the amount of plant exposed to retirement at the beginning of each age interval is illustrated in Schedule 3 on page II-14.

The surviving plant at the beginning of each year from 2007 through 2016 is recorded by year in the portion of the table headed "Annual Survivors at the Beginning of the Year." The last amount entered in each column is the amount of new plant added to the group during the year. The amounts entered in Schedule 3 for each successive year following the beginning balance or addition are obtained by adding or subtracting the net entries shown on Schedules 1 and 2. For the purpose of determining the plant exposed to retirement, transfers-in are considered as being exposed to retirement in this group at the beginning of the year in which they occurred, and the sales and transfers-out are considered to be removed from the plant exposed to retirement at the beginning of the following year. Thus, the amounts of plant shown at the beginning of each year are the amounts of plant from each placement year considered to be exposed to retirement at the beginning of each successive transaction year. For example, the exposures for the installation year 2012 are calculated in the following manner:

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



**SCHEDULE 3. PLANT EXPOSED TO RETIREMENT  
JANUARY 1 OF EACH YEAR 2007-2016  
SUMMARIZED BY AGE INTERVAL**

Experience Band 2007-2016

Placement Band 2002-2016

| Year<br>Placed<br>(1) | Exposures, Thousands of Dollars<br>Annual Survivors at the Beginning of the Year |                  |                  |                  |                  |                  |                  |                  |                    |                    | Total at<br>Beginning of<br>Age Interval<br>(12) | Age<br>Interval<br>(13) |
|-----------------------|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|--------------------|--------------------|--|-------------------------|
|                       | 2007<br>(2)  | 2008<br>(3)      | 2009<br>(4)      | 2010<br>(5)      | 2011<br>(6)      | 2012<br>(7)      | 2013<br>(8)      | 2014<br>(9)      | 2015<br>(10)       | 2016<br>(11)       |  |                         |
| 2002                  | 255  | 245              | 234              | 222              | 209              | 195              | 239              | 216              | 192                | 167                | 167  | 13½-14½                 |
| 2003                  | 279  | 268              | 256              | 243              | 228              | 212              | 194              | 174              | 153                | 131                | 323  | 12½-13½                 |
| 2004                  | 307  | 296              | 284              | 271              | 257              | 241              | 224              | 205              | 184                | 162                | 531  | 11½-12½                 |
| 2005                  | 338  | 330              | 321              | 311              | 300              | 289              | 276              | 262              | 242                | 226                | 823  | 10½-11½                 |
| 2006                  | 376  | 367              | 357              | 346              | 334              | 321              | 307              | 297              | 280                | 261                | 1,097  | 9½-10½                  |
| 2007                  | 420 <sup>a</sup>   | 416              | 407              | 397              | 386              | 374              | 361              | 347              | 332                | 316                | 1,503  | 8½-9½                   |
| 2008                  |  | 460 <sup>a</sup> | 455              | 444              | 432              | 419              | 405              | 390              | 374                | 356                | 1,952  | 7½-8½                   |
| 2009                  |  |                  | 510 <sup>a</sup> | 504              | 492              | 479              | 464              | 448              | 431                | 412                | 2,463  | 6½-7½                   |
| 2010                  |  |                  |                  | 580 <sup>a</sup> | 574              | 561              | 546              | 530              | 501                | 482                | 3,057  | 5½-6½                   |
| 2011                  |  |                  |                  |                  | 660 <sup>a</sup> | 653              | 639              | 623              | 628                | 609                | 3,789  | 4½-5½                   |
| 2012                  |  |                  |                  |                  |                  | 750 <sup>a</sup> | 742              | 724              | 685                | 663                | 4,332  | 3½-4½                   |
| 2013                  |  |                  |                  |                  |                  |                  | 850 <sup>a</sup> | 841              | 821                | 799                | 4,955  | 2½-3½                   |
| 2014                  |  |                  |                  |                  |                  |                  |                  | 960 <sup>a</sup> | 949                | 926                | 5,719  | 1½-2½                   |
| 2015                  |  |                  |                  |                  |                  |                  |                  |                  | 1,080 <sup>a</sup> | 1,069              | 6,579  | ½-1½                    |
| 2016                  |  |                  |                  |                  |                  |                  |                  |                  |                    | 1,220 <sup>a</sup> | 7,490  | 0-½                     |
| Total                 | 1,975  | 2,382            | 2,824            | 3,318            | 3,872            | 4,494            | 5,247            | 6,017            | 6,852              | 7,799              | 44,780   |                         |

<sup>a</sup>Additions during the year

For the entire experience band 2007-2016, the total exposures at the beginning of an age interval are obtained by summing diagonally in a manner similar to the summing of the retirements during an age interval (Schedule 1). For example, the figure of 3,789, shown as the total exposures at the beginning of age interval 4½-5½, is obtained by summing:

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

### Original Life Table

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

|                               |   |                     |          |
|-------------------------------|---|---------------------|----------|
| Percent surviving at age 4½   | = | 88.15               |          |
| Exposures at age 4½           | = | 3,789,000           |          |
| Retirements from age 4½ to 5½ | = | 143,000             |          |
| Retirement Ratio              | = | 143,000 ÷ 3,789,000 | = 0.0377 |
| Survivor Ratio                | = | 1.000 - 0.0377      | = 0.9623 |
| Percent surviving at age 5½   | = | (88.15) x (0.9623)  | = 84.83  |

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

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

Experience Band 2007-2016

Placement Band 2002-2016

(Exposure and Retirement Amounts are in Thousands of Dollars)

| Age at<br>Beginning of<br>Interval | Exposures at<br>Beginning of<br>Age Interval | Retirements<br>During Age<br>Interval | Retirement<br>Ratio | Survivor<br>Ratio | Percent<br>Surviving at<br>Beginning of<br>Age Interval |
|------------------------------------|--|---------------------------------------|---------------------|-------------------|---|
| (1)                                | (2)  | (3)                                   | (4)                 | (5)               | (6)   |
| 0.0                                | 7,490  | 80                                    | 0.0107              | 0.9893            | 100.00  |
| 0.5                                | 6,579  | 153                                   | 0.0233              | 0.9767            | 98.93   |
| 1.5                                | 5,719  | 151                                   | 0.0264              | 0.9736            | 96.62   |
| 2.5                                | 4,955  | 150                                   | 0.0303              | 0.9697            | 94.07   |
| 3.5                                | 4,332  | 146                                   | 0.0337              | 0.9663            | 91.22   |
| 4.5                                | 3,789  | 143                                   | 0.0377              | 0.9623            | 88.15   |
| 5.5                                | 3,057  | 131                                   | 0.0429              | 0.9571            | 84.83   |
| 6.5                                | 2,463  | 124                                   | 0.0503              | 0.9497            | 81.19   |
| 7.5                                | 1,952  | 113                                   | 0.0579              | 0.9421            | 77.11   |
| 8.5                                | 1,503  | 105                                   | 0.0699              | 0.9301            | 72.65   |
| 9.5                                | 1,097  | 93                                    | 0.0848              | 0.9152            | 67.57   |
| 10.5                               | 823  | 83                                    | 0.1009              | 0.8991            | 61.84   |
| 11.5                               | 531  | 64                                    | 0.1205              | 0.8795            | 55.60   |
| 12.5                               | 323  | 44                                    | 0.1362              | 0.8638            | 48.90   |
| 13.5                               | <u>167</u>                                   | <u>26</u>                             | 0.1557              | 0.8443            | 42.24   |
|                                    |  |                                       |                     |                   | 35.66   |
| Total                              | <u>44,780</u>                                | <u>1,606</u>                          |                     |                   |   |

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

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

Column 4 = Column 3 Divided by Column 2.

Column 5 = 1.0000 Minus Column 4.

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

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

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

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

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

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





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

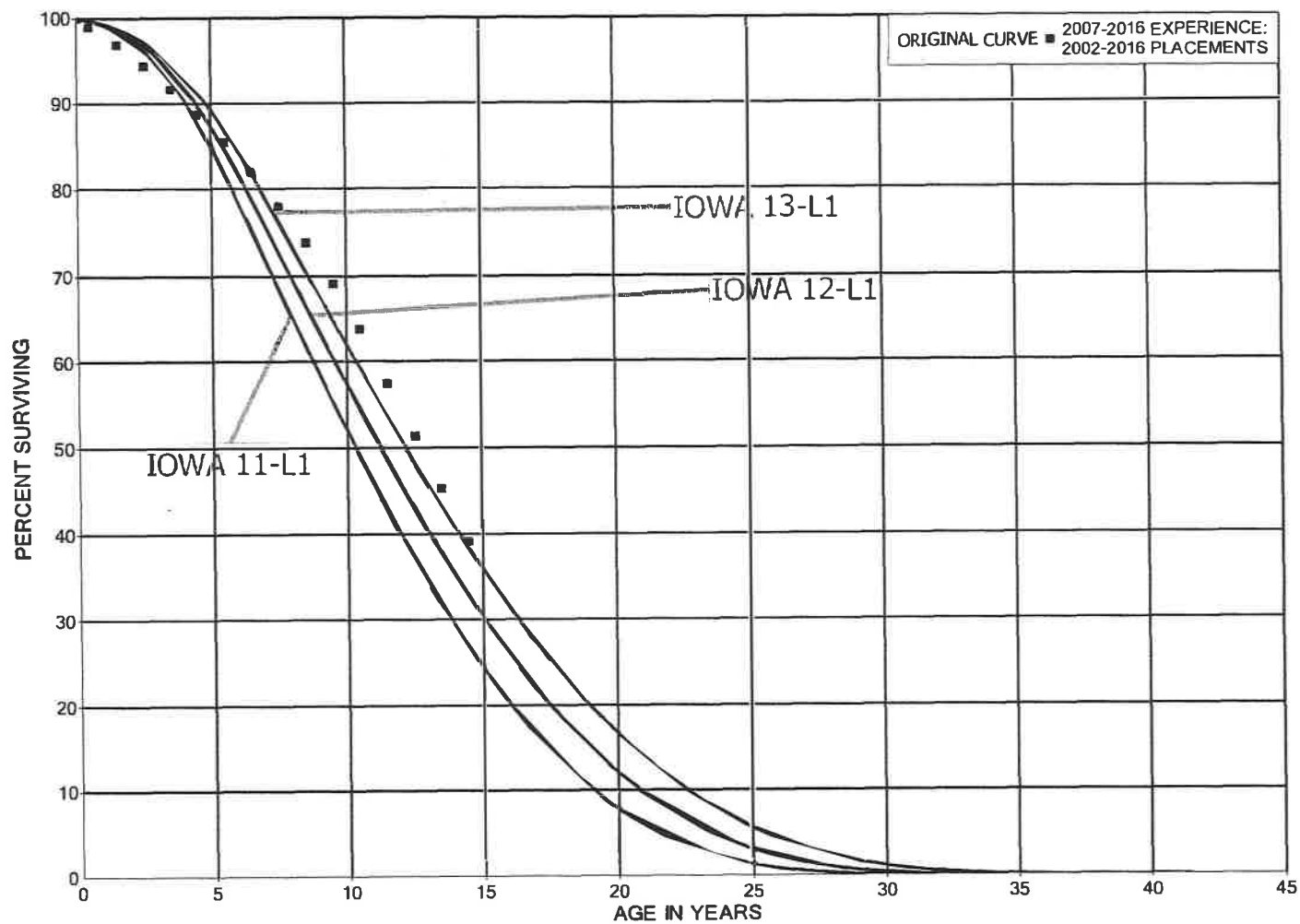




FIGURE 7. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN S0 IOWA TYPE CURVE  
ORIGINAL AND SMOOTH SURVIVOR CURVES

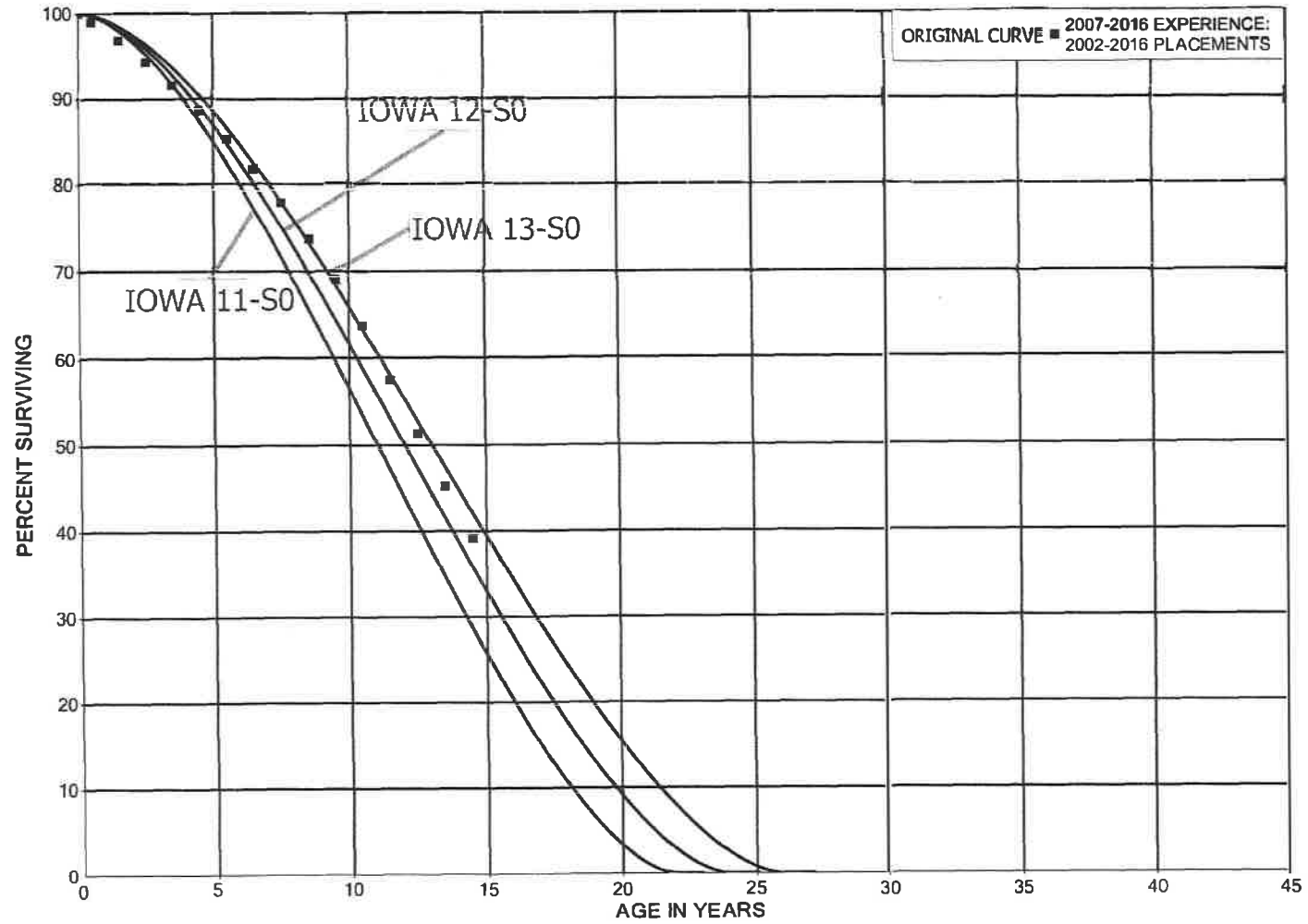




FIGURE 8. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN R1 IOWA TYPE CURVE  
ORIGINAL AND SMOOTH SURVIVOR CURVES

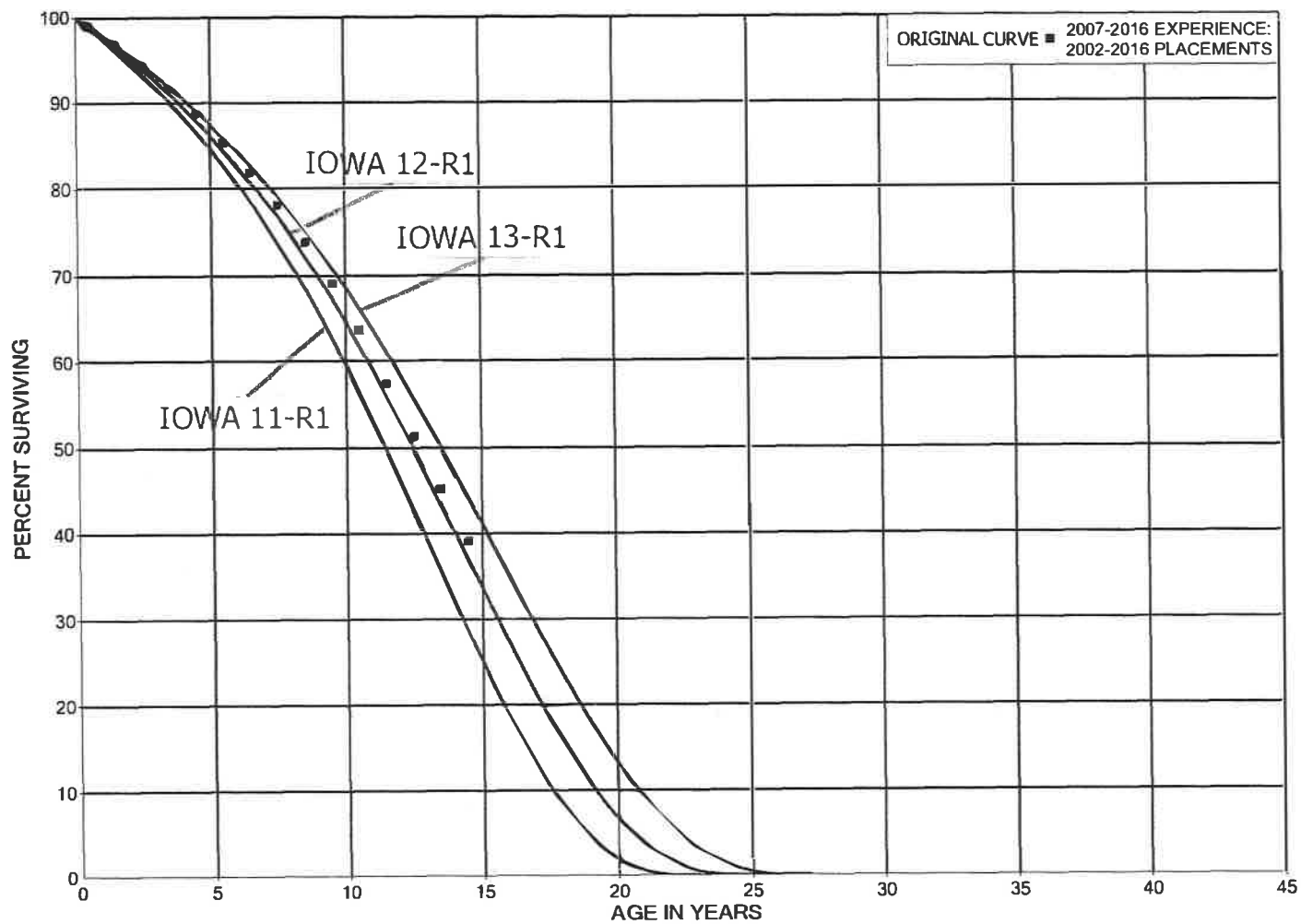
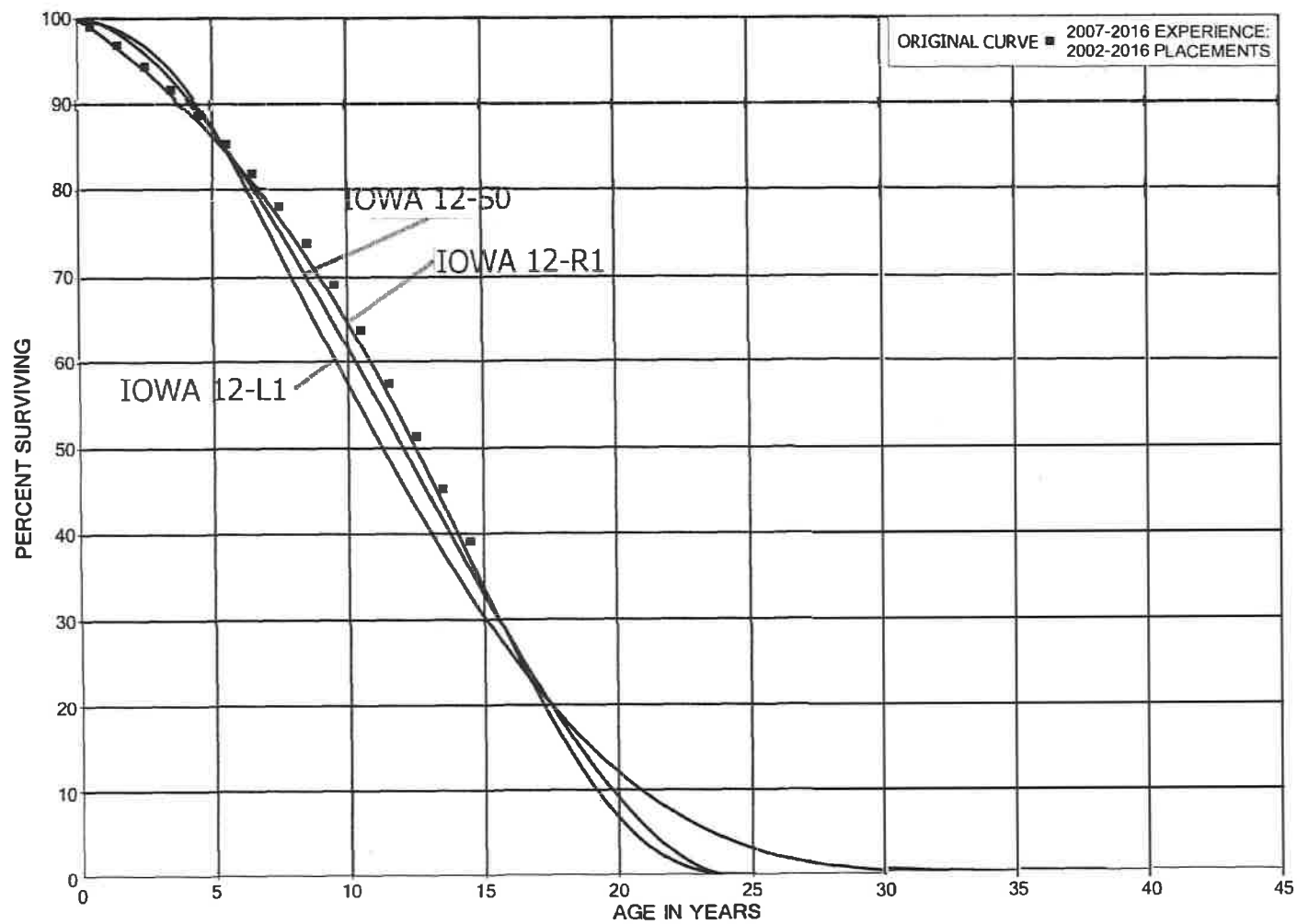




FIGURE 9. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN L1, S0 AND R1 IOWA TYPE CURVE  
ORIGINAL AND SMOOTH SURVIVOR CURVES



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## **PART III. SERVICE LIFE CONSIDERATIONS**

## **PART III. SERVICE LIFE CONSIDERATIONS**

### **FIELD TRIPS**

In order to be familiar with the operation of the Company and observe representative portions of the plant, field trips were conducted for the study. A general understanding of the function of the plant and information with respect to the reasons for past retirements and the expected future causes of retirements are obtained during field trips. This knowledge and information were incorporated in the interpretation and extrapolation of the statistical analyses.

The following is a list of the locations visited during the recent field trip.

#### November 7-8, 2017

- Howland Treatment Plant
- Well House #6
- Tuckertown Treatment Plant
- Well House #4
- Sherman Tank
- Tower Hill Tank
- Boston Neck Tank
- Route 1 (Indian Lake) Booster Station
- Saugatucket Road Booster Station
- Strathmore Pump Station

### **Service Life Analysis**

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

For some of the mass plant accounts and subaccounts, the statistical analyses resulted in good to excellent indications of significant survivor patterns. Generally, the

information external to the statistics led to no significant departure from the indicated survivor curves for the accounts listed below.

| <u>Account No.</u> | <u>Account Description</u>                                  |
|--------------------|---|
| 304.10             | Structures and Improvements – Source of Supply              |
| 304.20             | Structures and Improvements – Pumping                       |
| 304.30             | Structures and Improvements – Treatment                     |
| 304.40             | Structures and Improvements – Transmission and Distribution |
| 304.50             | Structures and Improvements – General                       |
| 311.00             | Pumping Equipment   |
| 320.00             | Water Treatment Equipment                                   |
| 330.00             | Distribution Reservoirs and Standpipes                      |
| 334.00             | Meters and Meter Installations                              |
| 335.00             | Hydrants  |

Account 334.00, Meters and Meter Installations, is used to illustrate the manner in which the study was conducted for the accounts in the preceding list. Aged plant accounting data have been compiled for the years through 2016. These data have been coded according to account or property group, type of transaction, year in which the transaction took place, and year in which the utility plant was placed in service. The retirements, other plant transactions and plant additions were analyzed by the retirement rate method.

The survivor curve estimate for this account is the 37-R3 and is based on the statistical indication for the period 2008-2016. The 37-R3 is an excellent fit of the significant portion of the original survivor curve as set forth on page VII-32, is consistent with management outlook for a continuation of the historical experience, and is within the typical service life range of 30 to 40 years for standard meters and meter installations.

Amortization accounting is proposed for certain General Plant accounts that represent numerous units of property, but a small portion of the depreciable plant in service. These accounts represent less than 5 percent of total water plant. A discussion

of the basis for the amortization periods is presented in the section "Calculation of Annual and Accrued Amortization".

Generally, the estimates for the remaining accounts of the total depreciable plant in service were based on judgments which considered the nature of the plant and equipment, the previous estimate for this company and a general knowledge of service lives for similar equipment in other water companies.



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## **PART IV. NET SALVAGE CONSIDERATIONS**

## **PART IV. NET SALVAGE CONSIDERATIONS**

### **SALVAGE ANALYSIS**

The estimates of net salvage by account were based in part on historical data compiled for the years 2005 through 2016. Cost of removal and salvage were expressed as percents of the original cost of plant retired, both on annual and three-year moving average bases. The most recent five-year average also was calculated for consideration. The net salvage estimates by account are expressed as a percent of the original cost of plant retired.

#### **Net Salvage Considerations**

The estimates of salvage were based primarily on judgment which considered a number of factors. The primary factors were the analyses of historical data; a knowledge of management's plans and operating policies; and net salvage estimates from previous studies of this company and other water companies.

Account 333.00 Services, is used to illustrate the manner in which the study was conducted for all accounts. Depreciation reserve accounting data were compiled for the years 2005 through 2016. These data include the retirements, cost of removal and gross salvage.

The net salvage estimate for this account is negative 45 percent and is based on the historical analyses and the trends in cost of removal and salvage percents as shown in the tabulation on page VIII-8. Cost of removal as a percent of the original cost retired has only been recorded in the last few years. The overall and most recent five-year bands averaged 43 and 100 percent removal cost, respectively. Gross salvage has been zero percent for the overall period. The negative 45 percent net salvage estimate is based on the overall cost of removal and gross salvage percent with a focus on the most recent

trend as well as the estimate of other water companies which ranges from negative 30 to negative 75 percent.

Amortization accounting is proposed for certain General Plant accounts which represent less than 5 percent of depreciable property. The estimate of net salvage for accounts subject to amortization is zero percent.

Generally, the net salvage estimates for the remaining accounts of the total depreciable plant in service, were based on judgments which considered the nature of the plant and equipment, reviews of available historical data, and a general knowledge of net salvage percents for similar equipment in other water companies.

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**PART V. CALCULATION OF ANNUAL AND  
ACCRUED DEPRECIATION**

## **PART V. CALCULATION OF ANNUAL AND ACCRUED DEPRECIATION**

### **GROUP DEPRECIATION PROCEDURES**

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

#### **Single Unit of Property**

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

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

The accrued depreciation is:

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

### **Group Depreciation Procedures**

When more than a single item of property is under consideration, a group procedure for depreciation is appropriate because normally all of the items within a group do not have identical service lives, but have lives that are dispersed over a range of time. There are two primary group procedures, namely, average service life and equal life group.

### **Remaining Life Annual Accruals**

For the purpose of calculating remaining life accruals as of December 31, 2016, the depreciation reserve for each plant account is allocated among vintages in proportion to the calculated accrued depreciation for the account. Explanations of remaining life accruals and calculated accrued depreciation follow. The detailed calculations as of December 31, 2016, are set forth in the Results of Study section of the report.

### **Average Service Life Procedure**

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

The calculated accrued depreciation for each depreciable property group represents that portion of the depreciable cost of the group which would not be allocated to expense through future depreciation accruals, if current forecasts of life characteristics are used as the basis for such accruals. The accrued depreciation calculation consists of applying an appropriate ratio to the surviving original cost of each vintage of each

account, based upon the attained age and service life. The straight line accrued depreciation ratios are calculated as follows for the average service life procedure:

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

## **CALCULATION OF ANNUAL AND ACCRUED AMORTIZATION**

Amortization is the gradual extinguishment of an amount in an account by distributing such amount over a fixed period, over the life of the asset or liability to which it applies, or over the period during which it is anticipated the benefit will be realized. Normally, the distribution of the amount is in equal amounts to each year of the amortization period.

The calculation of annual and accrued amortization requires the selection of an amortization period. The amortization periods used in this report were based on judgment which incorporated a consideration of the period during which the assets will render most of their service, the amortization period and service lives used by other utilities, and the service life estimates previously used for the asset under depreciation accounting.

Amortization accounting is proposed for certain General Plant accounts that represent numerous units of property, but a very small portion of depreciable utility plant in service. The accounts and their amortization periods are as follows:

| <u>Account</u> |                                  | <u>Amortization<br/>Period,<br/>Years</u> |
|----------------|----------------------------------|---|
| 340.00         | Office Furniture and Equipment   |   |
|                | Hardware                         | 5   |
|                | Software                         | 5   |
|                | CC&B Lighthouse                  | 8   |
|                | Furniture and Equipment          | 15  |
| 343.00         | Tools, Shop and Garage Equipment | 25  |
| 346.00         | Communication Equipment          | 15  |
| 347.00         | Miscellaneous Equipment          | 25  |

The calculated accrued amortization is equal to the original cost multiplied by the ratio of the vintage's age to its amortization period. The annual amortization amount is determined by dividing the original cost by the period of amortization for the account.



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## PART VI. RESULTS OF STUDY

## **PART VI. RESULTS OF STUDY**

### **QUALIFICATION OF RESULTS**

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

The annual depreciation accrual rates are applicable specifically to the water plant in service as of December 31, 2016. For most plant accounts, the application of such rates to future balances that reflect additions subsequent to December 31, 2016, is reasonable for a period of three to five years.

### **DESCRIPTION OF DETAILED TABULATIONS**

A summary of the results of the study, as applied to the original cost of water plant in service at December 31, 2016, is presented on pages VI-5 and VI-6 of this report. The table sets forth the original cost, the book depreciation reserve, future accruals, the calculated annual depreciation rate and amount, and the composite remaining life related to water plant.

The service life estimates were based on judgment that incorporated statistical analysis of retirement data, discussions with management and consideration of estimates

made for other water utilities. The results of the statistical analysis of service life are presented in the section beginning on page VII-2, within the supporting documents of this report.

For each depreciable group analyzed by the retirement rate method, a chart depicting the original and estimated survivor curves followed by a tabular presentation of the original life table(s) plotted on the chart. The survivor curves estimated for the depreciable groups are shown as dark smooth curves on the charts. Each smooth survivor curve is denoted by a numeral followed by the curve type designation. The numeral used is the average life derived from the entire curve from 100 percent to zero percent surviving. The titles of the chart indicate the group, the symbol used to plot the points of the original life table, and the experience and placement bands of the life tables which were plotted. The experience band indicates the range of years for which retirements were used to develop the stub survivor curve. The placements indicate, for the related experience band, the range of years of installations which appear in the experience.

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

The tables of the calculated annual depreciation applicable to depreciable assets as of December 31, 2016 are presented in account sequence starting on page IX-2 of the supporting documents. The tables indicate the estimated survivor curve and net salvage percent for the account and set forth, for each installation year, the original cost, the

calculated accrued depreciation, the allocated book reserve, future accruals, the remaining life, and the calculated annual accrual amount.



## SUEZ WATER RHODE ISLAND

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, NET SALVAGE, ORIGINAL COST, BOOK RESERVE, AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WATER PLANT AS OF DECEMBER 31, 2016

| DEPRECIABLE GROUP                                |  | SURVIVOR | NET     | ORIGINAL COST     | BOOK      | FUTURE     | CALCULATED ANNUAL |             | COMPOSITE |
|--|--|----------|---------|-------------------|-----------|------------|-------------------|-------------|-----------|
|  |  | CURVE    | SALVAGE | AS OF             | RESERVE   | ACCRUALS   | ACCRUAL           | ACCRUAL     | REMAINING |
| (1)  |  | (2)      | (3)     | DECEMBER 31, 2016 | (5)       | (6)        | AMOUNT            | RATE        | LIFE      |
|  |  |          |         | (4)               |           |            | (7)               | (8)=(7)/(4) | (9)       |
| <b>DEPRECIABLE PLANT</b>                         |  |          |         |                   |           |            |                   |             |           |
| STRUCTURES AND IMPROVEMENTS                      |  |          |         |                   |           |            |                   |             |           |
| 304.10   | SOURCE OF SUPPLY                                 | 50-R3    | (5)     | 746,416.15        | 168,030   | 615,707    | 16,401            | 2.20        | 37.5      |
| 304.30   | TREATMENT  | 50-R3    | (5)     | 17,105.98         | 10,006    | 7,955      | 394               | 2.30        | 20.2      |
| 304.40   | TRANSMISSION AND DISTRIBUTION                    | 50-R3    | (5)     | 139,984.82        | 40,498    | 106,486    | 2,326             | 1.66        | 45.8      |
| 304.50   | GENERAL  | 50-R3    | (5)     | 205,020.99        | 90,293    | 124,979    | 2,969             | 1.45        | 42.1      |
| TOTAL STRUCTURES AND IMPROVEMENTS                |  |          |         | 1,108,527.94      | 308,828   | 855,127    | 22,090            | 1.99        | 38.7      |
| WELLS AND SPRINGS                                |  |          |         |                   |           |            |                   |             |           |
| 307.00   | WELLS AND SPRINGS                                | 35-S1    | (5)     | 452,460.84        | 138,455   | 336,629    | 18,022            | 3.98        | 18.7      |
| INFILTRATION GALLERIES AND TUNNELS               |  |          |         |                   |           |            |                   |             |           |
| 308.00   | INFILTRATION GALLERIES AND TUNNELS               | 55-R2.5  | 0       | 1,601.00          | 88        | 1,513      | 31                | 1.94        | 48.8      |
| SUPPLY MAINS                                     |  |          |         |                   |           |            |                   |             |           |
| 309.00   | SUPPLY MAINS                                     | 55-S2    | 0       | 51,099.08         | 13,317    | 37,782     | 1,468             | 2.87        | 25.7      |
| PUMPING EQUIPMENT                                |  |          |         |                   |           |            |                   |             |           |
| 311.00   | PUMPING EQUIPMENT                                | 45-R4    | (10)    | 1,533,833.72      | 819,534   | 867,684    | 29,092            | 1.90        | 29.8      |
| WATER TREATMENT EQUIPMENT                        |  |          |         |                   |           |            |                   |             |           |
| 320.00   | WATER TREATMENT EQUIPMENT                        | 40-S0.5  | (10)    | 540,063.16        | 243,064   | 351,005    | 11,213            | 2.08        | 31.3      |
| DISTRIBUTION RESERVOIRS AND STANDPIPES           |  |          |         |                   |           |            |                   |             |           |
| 330.00   | DISTRIBUTION RESERVOIRS AND STANDPIPES           | 50-R4    | (30)    | 4,335,552.03      | 263,873   | 5,372,345  | 127,209           | 2.93        | 42.2      |
| MAINS  |  |          |         |                   |           |            |                   |             |           |
| 331.00   | MAINS  | 110-R3   | (25)    | 12,379,419.72     | 2,422,420 | 13,051,855 | 160,212           | 1.29        | 81.5      |
| SERVICES   |  |          |         |                   |           |            |                   |             |           |
| 333.00   | SERVICES   | 80-R4    | (45)    | 3,816,707.71      | 1,221,315 | 4,312,911  | 67,267            | 1.76        | 64.1      |
| METERS AND METER INSTALLATIONS                   |  |          |         |                   |           |            |                   |             |           |
| 334.00   | METERS AND METER INSTALLATIONS                   | 37-R3    | 0       | 2,949,829.94      | 913,858   | 2,035,972  | 75,627            | 2.56        | 26.9      |
| HYDRANTS   |  |          |         |                   |           |            |                   |             |           |
| 335.00   | HYDRANTS   | 65-R4    | (20)    | 1,058,166.29      | 425,382   | 844,417    | 18,333            | 1.73        | 46.1      |
| MISCELLANEOUS INTANGIBLE PLANT                   |  |          |         |                   |           |            |                   |             |           |
| 339.10   | MISCELLANEOUS INTANGIBLE PLANT                   | 20-SQ    | 0       | 231,443.74        | 0         | 231,444    | 19,983            | 8.63        | 11.6      |
| MISCELLANEOUS INTANGIBLE PLANT - OTHER EQUIPMENT |  |          |         |                   |           |            |                   |             |           |
| 339.20   | MISCELLANEOUS INTANGIBLE PLANT - OTHER EQUIPMENT | 30-S2.5  | 0       | 108,066.72        | 60,823    | 47,244     | 2,214             | 2.05        | 21.3      |
| OFFICE FURNITURE AND EQUIPMENT                   |  |          |         |                   |           |            |                   |             |           |
| HARDWARE   |  |          |         |                   |           |            |                   |             |           |
| 340.00   | OFFICE FURNITURE AND EQUIPMENT                   | 5-SQ     | 0       | 103,384.74        | 71,118    | 32,267     | 20,698            | 20.02       | 1.6       |
| SOFTWARE   |  |          |         |                   |           |            |                   |             |           |
|  | SOFTWARE   | 5-SQ     | 0       | 223,845.68        | 142,743   | 81,103     | 57,429            | 25.66       | 1.4       |
| CC & B - LIGHTHOUSE                              |  |          |         |                   |           |            |                   |             |           |
|  | CC & B - LIGHTHOUSE                              | 8-SQ     | 0       | 552,855.90        | 395,586   | 157,270    | 62,908            | 11.38       | 2.5       |
| FURNITURE AND EQUIPMENT                          |  |          |         |                   |           |            |                   |             |           |
|  | FURNITURE AND EQUIPMENT                          | 15-SQ    | 0       | 62,632.47         | 7,441     | 55,191     | 7,881             | 12.58       | 7.0       |
| TOTAL OFFICE FURNITURE AND EQUIPMENT             |  |          |         | 942,718.79        | 616,888   | 325,831    | 148,916           | 15.80       | 2.2       |
| TRANSPORTATION EQUIPMENT                         |  |          |         |                   |           |            |                   |             |           |
| 341.00   | TRANSPORTATION EQUIPMENT                         | 12-L3    | 0       | 3,451.18          | 460       | 2,991      | 444               | 12.87       | 6.7       |
| TOOLS, SHOP AND GARAGE EQUIPMENT                 |  |          |         |                   |           |            |                   |             |           |
| 343.00   | TOOLS, SHOP AND GARAGE EQUIPMENT                 | 25-SQ    | 0       | 74,006.64         | 39,151    | 34,856     | 1,728             | 2.33        | 20.2      |
| POWER OPERATED EQUIPMENT                         |  |          |         |                   |           |            |                   |             |           |
| 345.00   | POWER OPERATED EQUIPMENT                         | 18-L2.5  | 0       | 15,685.42         | 8,210     | 7,475      | 679               | 4.33        | 11.0      |
| COMMUNICATION EQUIPMENT                          |  |          |         |                   |           |            |                   |             |           |
| 346.00   | COMMUNICATION EQUIPMENT                          | 15-SQ    | 0       | 290,972.23        | 55,799    | 235,174    | 29,246            | 10.05       | 8.0       |
| MISCELLANEOUS EQUIPMENT                          |  |          |         |                   |           |            |                   |             |           |
| 347.00   | MISCELLANEOUS EQUIPMENT                          | 25-SQ    | 0       | 79,677.36         | 16,881    | 62,797     | 4,623             | 5.80        | 13.6      |
| TOTAL DEPRECIABLE PLANT                          |  |          |         | 29,973,283.51     | 7,568,345 | 29,015,052 | 738,397           | 2.46        | 39.3      |



SUEZ WATER RHODE ISLAND

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, NET SALVAGE, ORIGINAL COST, BOOK RESERVE, AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WATER PLANT AS OF DECEMBER 31, 2016

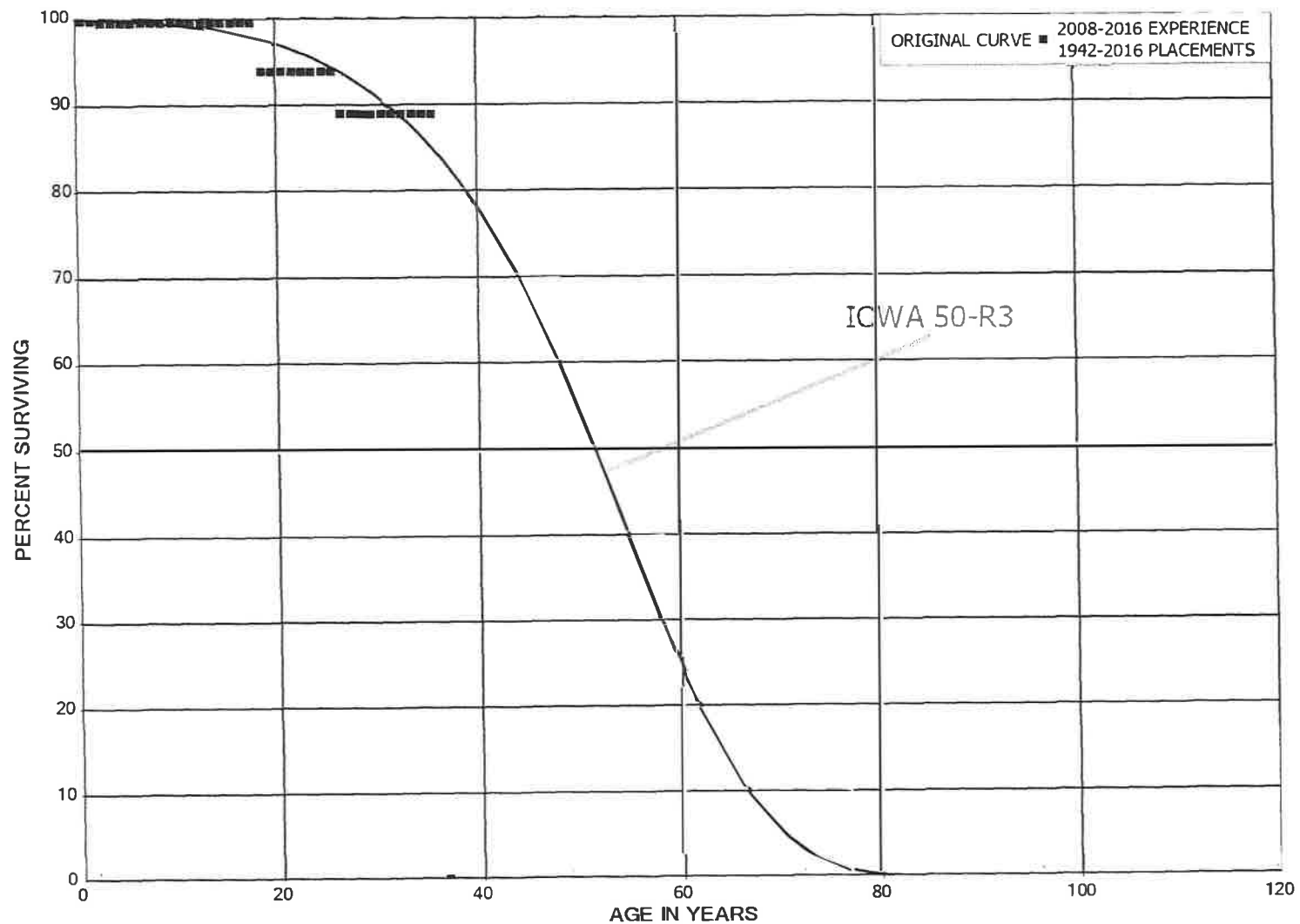
| DEPRECIABLE GROUP          |                      | SURVIVOR<br>CURVE | NET<br>SALVAGE | ORIGINAL COST<br>AS OF<br>DECEMBER 31, 2016 | BOOK<br>RESERVE | FUTURE<br>ACCRUALS | CALCULATED ANNUAL<br>ACCRUAL<br>AMOUNT |             | COMPOSITE<br>REMAINING<br>LIFE |
|----------------------------|----------------------|-------------------|----------------|---|-----------------|--------------------|--|-------------|--------------------------------|
| (1)                        |                      | (2)               | (3)            | (4)   | (5)             | (6)                | (7)                                    | (8)=(7)/(4) | (9)                            |
| NONDEPRECIABLE PLANT       |                      |                   |                |   |                 |                    |  |             |                                |
| 301.00                     | ORGANIZATION         |                   |                | 963.00                                      |                 |                    |  |             |                                |
| 303.10                     | LAND AND LAND RIGHTS |                   |                | 33,318.66                                   |                 |                    |  |             |                                |
| 303.20                     | LAND AND LAND RIGHTS |                   |                | 1,861.50                                    |                 |                    |  |             |                                |
| TOTAL NONDEPRECIABLE PLANT |                      |                   |                | 36,143.16                                   |                 |                    |  |             |                                |
| TOTAL WATER PLANT          |                      |                   |                | 30,009,426.67                               | 7,568,345       | 29,015,052         | 738,397                                |             |                                |

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## **PART VII. SERVICE LIFE STATISTICS**



SUEZ WATER RHODE ISLAND  
ACCOUNTS 304.1 THROUGH 304.5 STRUCTURES AND IMPROVEMENTS  
ORIGINAL AND SMOOTH SURVIVOR CURVES





SUEZ WATER RHODE ISLAND

ACCOUNTS 304.1 THROUGH 304.5 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE

| PLACEMENT BAND 1942-2016       |  |                                       | EXPERIENCE BAND 2008-2016 |               |                                  |
|--------------------------------|--|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 0.0                            | 867,625                                      | 2,165                                 | 0.0025                    | 0.9975        | 100.00                           |
| 0.5                            | 865,690                                      |                                       | 0.0000                    | 1.0000        | 99.75                            |
| 1.5                            | 883,576                                      | 2,172                                 | 0.0025                    | 0.9975        | 99.75                            |
| 2.5                            | 878,707                                      |                                       | 0.0000                    | 1.0000        | 99.51                            |
| 3.5                            | 760,389                                      |                                       | 0.0000                    | 1.0000        | 99.51                            |
| 4.5                            | 794,496                                      |                                       | 0.0000                    | 1.0000        | 99.51                            |
| 5.5                            | 780,341                                      |                                       | 0.0000                    | 1.0000        | 99.51                            |
| 6.5                            | 721,184                                      |                                       | 0.0000                    | 1.0000        | 99.51                            |
| 7.5                            | 246,977                                      |                                       | 0.0000                    | 1.0000        | 99.51                            |
| 8.5                            | 115,924                                      |                                       | 0.0000                    | 1.0000        | 99.51                            |
| 9.5                            | 115,924                                      |                                       | 0.0000                    | 1.0000        | 99.51                            |
| 10.5                           | 98,039                                       |                                       | 0.0000                    | 1.0000        | 99.51                            |
| 11.5                           | 129,241                                      |                                       | 0.0000                    | 1.0000        | 99.51                            |
| 12.5                           | 144,704                                      |                                       | 0.0000                    | 1.0000        | 99.51                            |
| 13.5                           | 110,597                                      |                                       | 0.0000                    | 1.0000        | 99.51                            |
| 14.5                           | 110,597                                      |                                       | 0.0000                    | 1.0000        | 99.51                            |
| 15.5                           | 99,184                                       |                                       | 0.0000                    | 1.0000        | 99.51                            |
| 16.5                           | 46,665                                       |                                       | 0.0000                    | 1.0000        | 99.51                            |
| 17.5                           | 66,716                                       | 3,967                                 | 0.0595                    | 0.9405        | 99.51                            |
| 18.5                           | 62,749                                       |                                       | 0.0000                    | 1.0000        | 93.59                            |
| 19.5                           | 62,749                                       |                                       | 0.0000                    | 1.0000        | 93.59                            |
| 20.5                           | 35,514                                       |                                       | 0.0000                    | 1.0000        | 93.59                            |
| 21.5                           | 20,051                                       |                                       | 0.0000                    | 1.0000        | 93.59                            |
| 22.5                           | 21,666                                       |                                       | 0.0000                    | 1.0000        | 93.59                            |
| 23.5                           | 21,666                                       |                                       | 0.0000                    | 1.0000        | 93.59                            |
| 24.5                           | 21,666                                       |                                       | 0.0000                    | 1.0000        | 93.59                            |
| 25.5                           | 21,666                                       | 1,126                                 | 0.0520                    | 0.9480        | 93.59                            |
| 26.5                           | 1,615  |                                       | 0.0000                    | 1.0000        | 88.72                            |
| 27.5                           | 2,023  |                                       | 0.0000                    | 1.0000        | 88.72                            |
| 28.5                           | 2,023  |                                       | 0.0000                    | 1.0000        | 88.72                            |
| 29.5                           | 2,023  |                                       | 0.0000                    | 1.0000        | 88.72                            |
| 30.5                           | 2,023  |                                       | 0.0000                    | 1.0000        | 88.72                            |
| 31.5                           | 408  |                                       | 0.0000                    | 1.0000        | 88.72                            |
| 32.5                           | 408  |                                       | 0.0000                    | 1.0000        | 88.72                            |
| 33.5                           | 408  |                                       | 0.0000                    | 1.0000        | 88.72                            |
| 34.5                           | 408  |                                       | 0.0000                    | 1.0000        | 88.72                            |
| 35.5                           | 408  | 408                                   | 1.0000                    |               | 88.72                            |
| 36.5                           | 38,536                                       |                                       | 0.0000                    | 1.0000        |                                  |
| 37.5                           | 38,536                                       |                                       | 0.0000                    |               |                                  |
| 38.5                           | 38,536                                       |                                       | 0.0000                    |               |                                  |

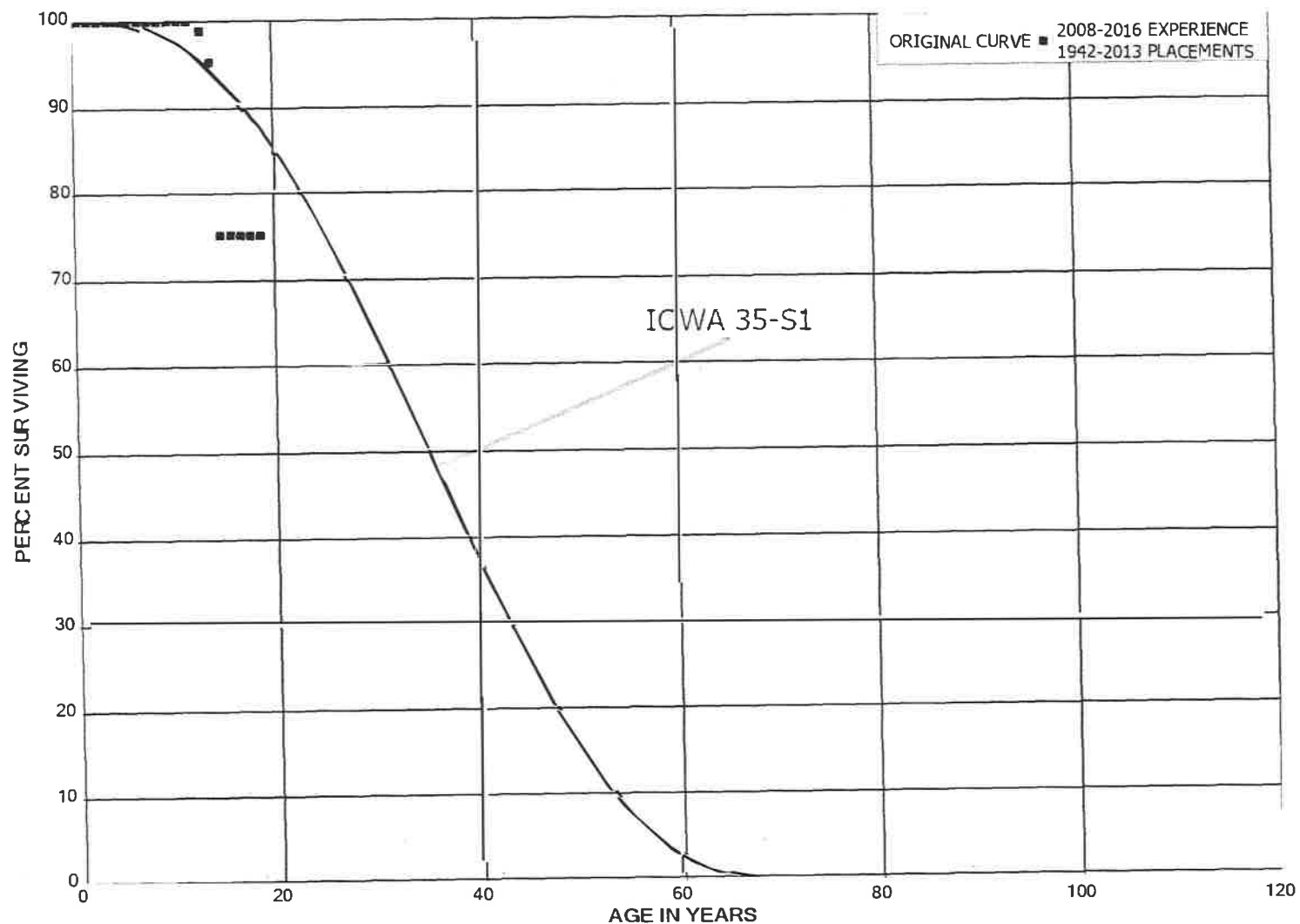
SUEZ WATER RHODE ISLAND

ACCOUNTS 304.1 THROUGH 304.5 STRUCTURES AND IMPROVEMENTS

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1942-2016       |  |                                       | EXPERIENCE BAND 2008-2016 |               |                                  |
|--------------------------------|--|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 39.5                           | 40,720                                       |                                       | 0.0000                    |               |                                  |
| 40.5                           | 40,720                                       | 1,500                                 | 0.0368                    |               |                                  |
| 41.5                           | 56,267                                       |                                       | 0.0000                    |               |                                  |
| 42.5                           | 56,267                                       |                                       | 0.0000                    |               |                                  |
| 43.5                           | 56,267                                       | 604                                   | 0.0107                    |               |                                  |
| 44.5                           | 55,663                                       | 29,235                                | 0.5252                    |               |                                  |
| 45.5                           | 17,731                                       |                                       | 0.0000                    |               |                                  |
| 46.5                           | 17,731                                       | 684                                   | 0.0386                    |               |                                  |
| 47.5                           | 17,047                                       |                                       | 0.0000                    |               |                                  |
| 48.5                           | 17,047                                       | 365                                   | 0.0214                    |               |                                  |
| 49.5                           | 16,682                                       | 3,290                                 | 0.1972                    |               |                                  |
| 50.5                           |  |                                       |                           |               |                                  |
| 51.5                           |  |                                       |                           |               |                                  |
| 52.5                           |  |                                       |                           |               |                                  |
| 53.5                           |  |                                       |                           |               |                                  |
| 54.5                           |  |                                       |                           |               |                                  |
| 55.5                           |  |                                       |                           |               |                                  |
| 56.5                           |  |                                       |                           |               |                                  |
| 57.5                           | 12,951                                       |                                       | 0.0000                    |               |                                  |
| 58.5                           | 27,286                                       |                                       | 0.0000                    |               |                                  |
| 59.5                           | 27,286                                       |                                       | 0.0000                    |               |                                  |
| 60.5                           | 27,286                                       |                                       | 0.0000                    |               |                                  |
| 61.5                           | 27,286                                       |                                       | 0.0000                    |               |                                  |
| 62.5                           | 27,286                                       |                                       | 0.0000                    |               |                                  |
| 63.5                           | 27,286                                       |                                       | 0.0000                    |               |                                  |
| 64.5                           | 27,286                                       | 732                                   | 0.0268                    |               |                                  |
| 65.5                           | 49,003                                       | 3,360                                 | 0.0686                    |               |                                  |
| 66.5                           | 36,087                                       | 390                                   | 0.0108                    |               |                                  |
| 67.5                           | 22,449                                       |                                       | 0.0000                    |               |                                  |
| 68.5                           | 22,449                                       |                                       | 0.0000                    |               |                                  |
| 69.5                           | 22,449                                       |                                       | 0.0000                    |               |                                  |
| 70.5                           | 22,449                                       |                                       | 0.0000                    |               |                                  |
| 71.5                           | 22,449                                       |                                       | 0.0000                    |               |                                  |
| 72.5                           | 22,449                                       | 986                                   | 0.0439                    |               |                                  |
| 73.5                           | 21,463                                       | 2,450                                 | 0.1141                    |               |                                  |
| 74.5                           |  |                                       |                           |               |                                  |

SUEZ WATER RHODE ISLAND  
ACCOUNT 307 WELLS AND SPRINGS  
ORIGINAL AND SMOOTH SURVIVOR CURVES



SUEZ WATER RHODE ISLAND  
ACCOUNT 307 WELLS AND SPRINGS  
ORIGINAL LIFE TABLE

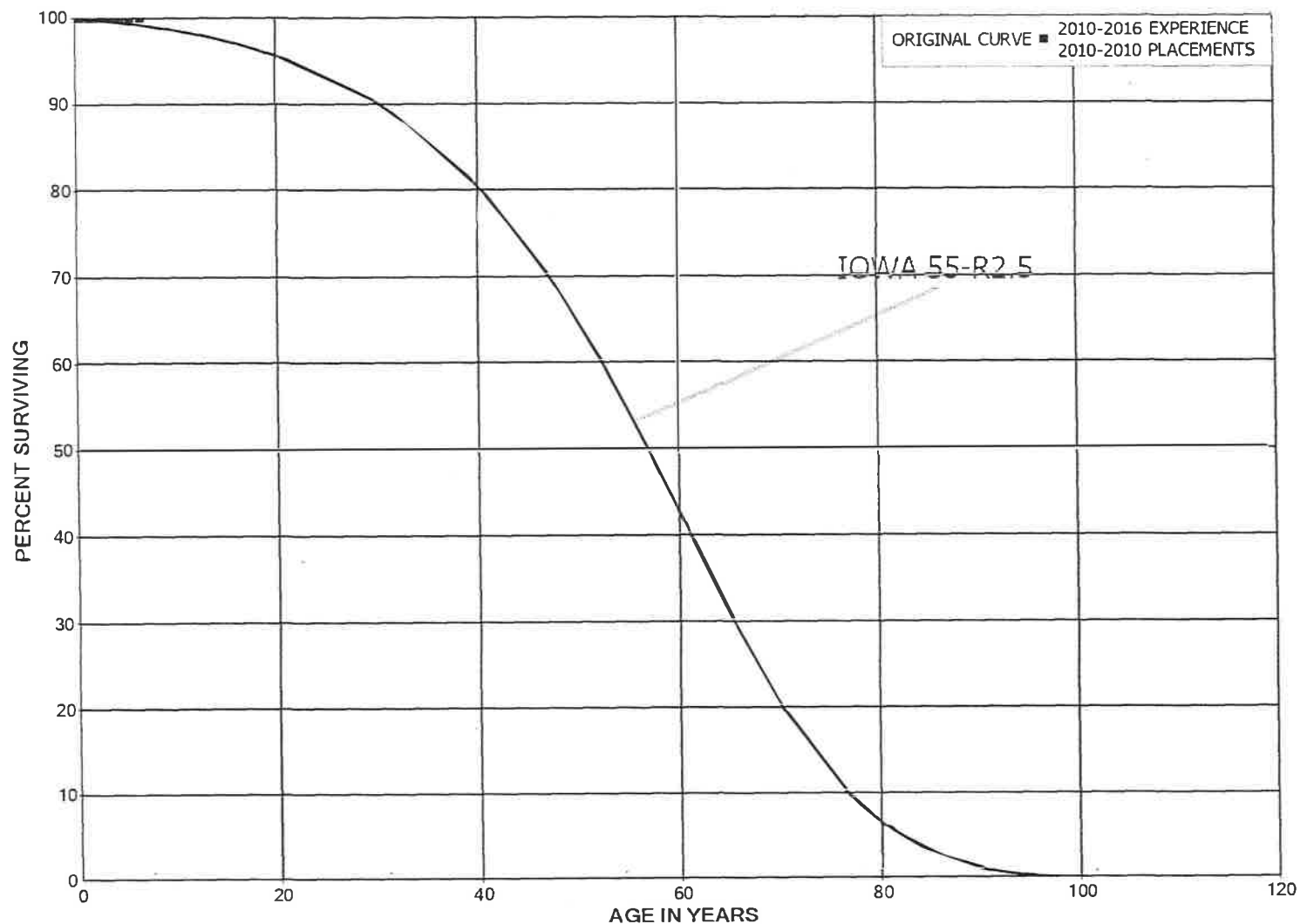
| PLACEMENT BAND 1942-2013       |  |                                       | EXPERIENCE BAND 2008-2016 |               |                                  |
|--------------------------------|--|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 0.0                            | 148,212                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 0.5                            | 167,352                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 1.5                            | 167,352                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 2.5                            | 167,352                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 3.5                            | 128,592                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 4.5                            | 46,972                                       |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 5.5                            | 46,972                                       |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 6.5                            | 312,792                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 7.5                            | 299,363                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 8.5                            | 287,931                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 9.5                            | 284,861                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 10.5                           | 284,861                                      |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 11.5                           | 284,861                                      | 4,250                                 | 0.0149                    | 0.9851        | 100.00                           |
| 12.5                           | 280,611                                      | 10,000                                | 0.0356                    | 0.9644        | 98.51                            |
| 13.5                           | 270,611                                      | 57,577                                | 0.2128                    | 0.7872        | 95.00                            |
| 14.5                           | 213,034                                      |                                       | 0.0000                    | 1.0000        | 74.79                            |
| 15.5                           | 19,041                                       |                                       | 0.0000                    | 1.0000        | 74.79                            |
| 16.5                           | 19,041                                       |                                       | 0.0000                    | 1.0000        | 74.79                            |
| 17.5                           | 16,070                                       |                                       | 0.0000                    | 1.0000        | 74.79                            |
| 18.5                           |  |                                       |                           |               | 74.79                            |
| 19.5                           |  |                                       |                           |               |                                  |
| 20.5                           |  |                                       |                           |               |                                  |
| 21.5                           |  |                                       |                           |               |                                  |
| 22.5                           |  |                                       |                           |               |                                  |
| 23.5                           |  |                                       |                           |               |                                  |
| 24.5                           | 18,584                                       |                                       | 0.0000                    |               |                                  |
| 25.5                           | 18,584                                       |                                       | 0.0000                    |               |                                  |
| 26.5                           | 18,584                                       |                                       | 0.0000                    |               |                                  |
| 27.5                           | 18,584                                       |                                       | 0.0000                    |               |                                  |
| 28.5                           | 18,584                                       |                                       | 0.0000                    |               |                                  |
| 29.5                           | 18,584                                       |                                       | 0.0000                    |               |                                  |
| 30.5                           | 18,584                                       |                                       | 0.0000                    |               |                                  |
| 31.5                           | 18,584                                       |                                       | 0.0000                    |               |                                  |
| 32.5                           | 18,584                                       |                                       | 0.0000                    |               |                                  |
| 33.5                           |  |                                       |                           |               |                                  |
| 34.5                           |  |                                       |                           |               |                                  |
| 35.5                           |  |                                       |                           |               |                                  |
| 36.5                           | 31,258                                       |                                       | 0.0000                    |               |                                  |
| 37.5                           | 31,258                                       |                                       | 0.0000                    |               |                                  |
| 38.5                           | 31,258                                       |                                       | 0.0000                    |               |                                  |

SUEZ WATER RHODE ISLAND  
ACCOUNT 307 WELLS AND SPRINGS  
ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1942-2013       |  |                                       | EXPERIENCE BAND 2008-2016 |               |                                  |
|--------------------------------|--|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 39.5                           | 31,258                                       |                                       | 0.0000                    |               |                                  |
| 40.5                           | 31,258                                       |                                       | 0.0000                    |               |                                  |
| 41.5                           | 59,054                                       |                                       | 0.0000                    |               |                                  |
| 42.5                           | 59,054                                       |                                       | 0.0000                    |               |                                  |
| 43.5                           | 59,054                                       |                                       | 0.0000                    |               |                                  |
| 44.5                           | 59,054                                       | 22,240                                | 0.3766                    |               |                                  |
| 45.5                           | 27,796                                       |                                       | 0.0000                    |               |                                  |
| 46.5                           | 27,796                                       |                                       | 0.0000                    |               |                                  |
| 47.5                           | 27,796                                       |                                       | 0.0000                    |               |                                  |
| 48.5                           | 27,796                                       |                                       | 0.0000                    |               |                                  |
| 49.5                           | 27,796                                       |                                       | 0.0000                    |               |                                  |
| 50.5                           |  |                                       |                           |               |                                  |
| 51.5                           |  |                                       |                           |               |                                  |
| 52.5                           |  |                                       |                           |               |                                  |
| 53.5                           |  |                                       |                           |               |                                  |
| 54.5                           |  |                                       |                           |               |                                  |
| 55.5                           |  |                                       |                           |               |                                  |
| 56.5                           |  |                                       |                           |               |                                  |
| 57.5                           | 5,321  |                                       | 0.0000                    |               |                                  |
| 58.5                           | 14,777                                       |                                       | 0.0000                    |               |                                  |
| 59.5                           | 14,777                                       |                                       | 0.0000                    |               |                                  |
| 60.5                           | 14,777                                       |                                       | 0.0000                    |               |                                  |
| 61.5                           | 14,777                                       |                                       | 0.0000                    |               |                                  |
| 62.5                           | 14,777                                       |                                       | 0.0000                    |               |                                  |
| 63.5                           | 14,777                                       |                                       | 0.0000                    |               |                                  |
| 64.5                           | 14,777                                       |                                       | 0.0000                    |               |                                  |
| 65.5                           | 33,400                                       |                                       | 0.0000                    |               |                                  |
| 66.5                           | 28,079                                       | 4,751                                 | 0.1692                    |               |                                  |
| 67.5                           | 18,623                                       |                                       | 0.0000                    |               |                                  |
| 68.5                           | 18,623                                       |                                       | 0.0000                    |               |                                  |
| 69.5                           | 18,623                                       |                                       | 0.0000                    |               |                                  |
| 70.5                           | 18,623                                       |                                       | 0.0000                    |               |                                  |
| 71.5                           | 18,623                                       |                                       | 0.0000                    |               |                                  |
| 72.5                           | 18,623                                       |                                       | 0.0000                    |               |                                  |
| 73.5                           | 18,623                                       | 11,972                                | 0.6429                    |               |                                  |
| 74.5                           |  |                                       |                           |               |                                  |



SUEZ WATER RHODE ISLAND  
ACCOUNT 308 INFILTRATION GALLERIES AND TUNNELS  
ORIGINAL AND SMOOTH SURVIVOR CURVES



SUEZ WATER RHODE ISLAND

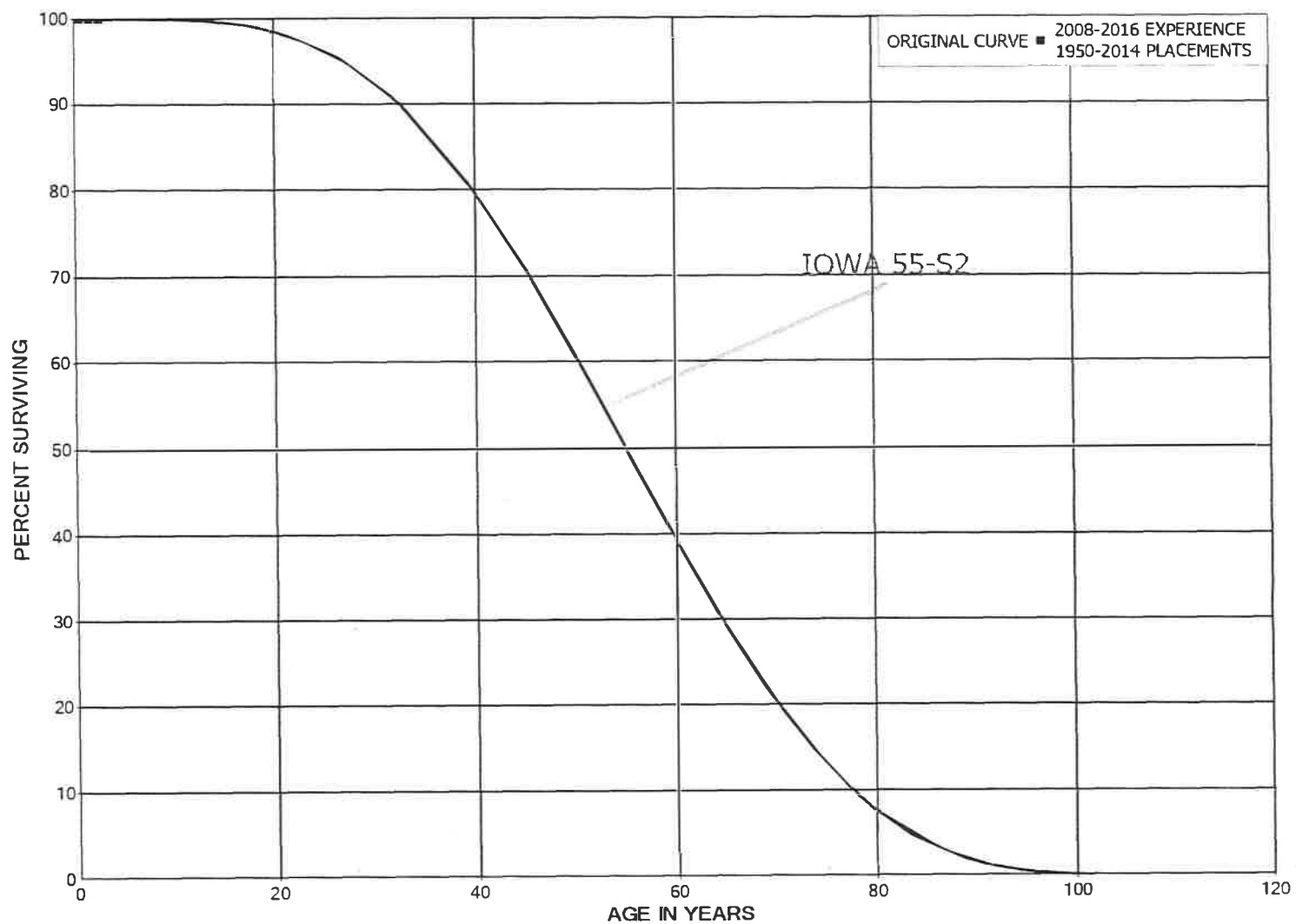
ACCOUNT 308 INFILTRATION GALLERIES AND TUNNELS

ORIGINAL LIFE TABLE

| PLACEMENT BAND 2010-2010       |  |                                       | EXPERIENCE BAND 2010-2016 |               |                                  |
|--------------------------------|--|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 0.0                            | 1,601  |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 0.5                            | 1,601  |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 1.5                            | 1,601  |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 2.5                            | 1,601  |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 3.5                            | 1,601  |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 4.5                            | 1,601  |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 5.5                            | 1,601  |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 6.5                            |  |                                       |                           |               | 100.00                           |



SUEZ WATER RHODE ISLAND  
ACCOUNT 309 SUPPLY MAINS  
ORIGINAL AND SMOOTH SURVIVOR CURVES





SUEZ WATER RHODE ISLAND

ACCOUNT 309 SUPPLY MAINS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1950-2014

EXPERIENCE BAND 2008-2016

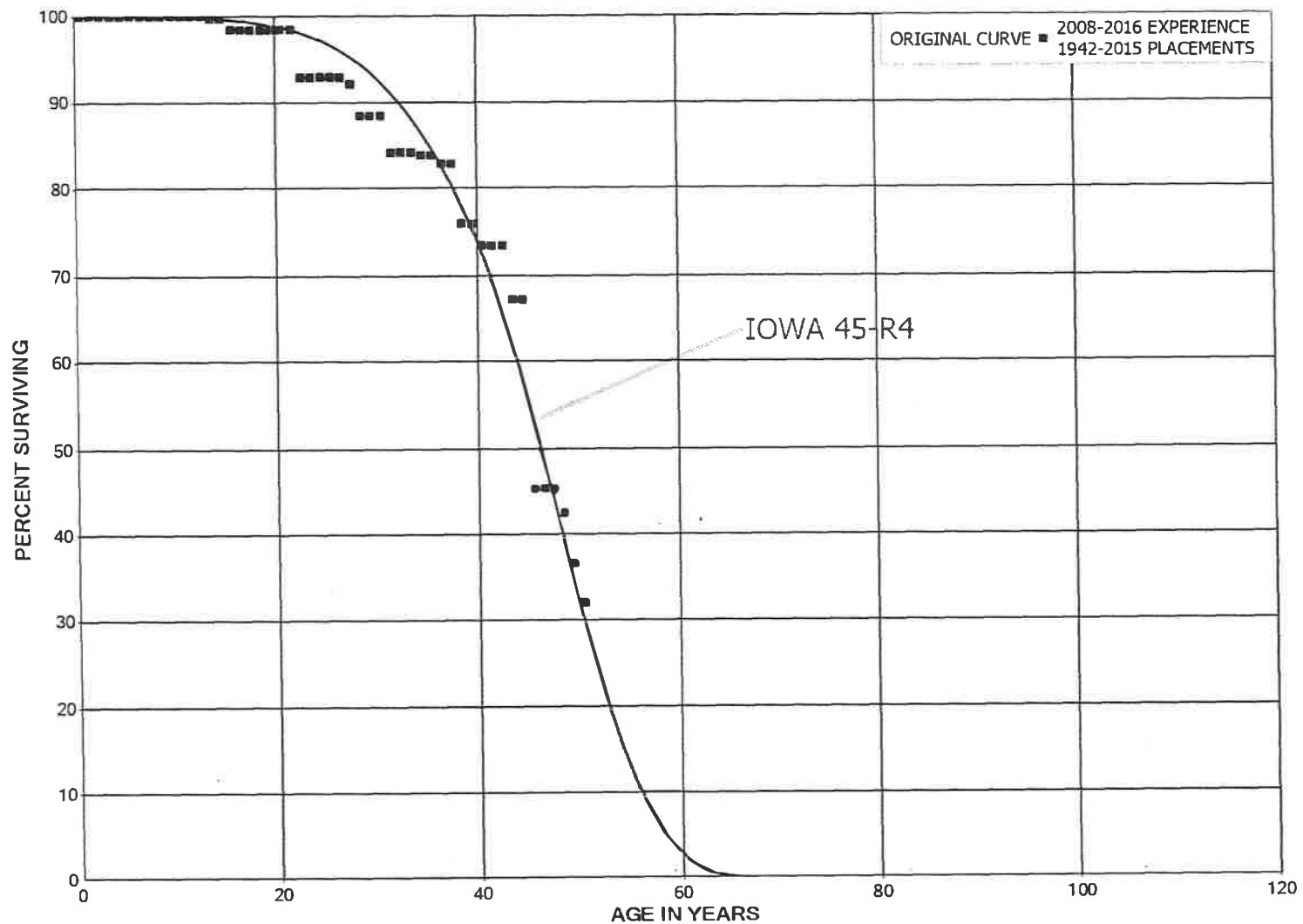
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|--|---------------------------------------|----------------|---------------|----------------------------------|
| 0.0                            | 11,144                                       |                                       | 0.0000         | 1.0000        | 100.00                           |
| 0.5                            | 11,144                                       |                                       | 0.0000         | 1.0000        | 100.00                           |
| 1.5                            | 11,144                                       |                                       | 0.0000         | 1.0000        | 100.00                           |
| 2.5                            |  |                                       |                |               | 100.00                           |
| 3.5                            |  |                                       |                |               |                                  |
| 4.5                            |  |                                       |                |               |                                  |
| 5.5                            |  |                                       |                |               |                                  |
| 6.5                            |  |                                       |                |               |                                  |
| 7.5                            |  |                                       |                |               |                                  |
| 8.5                            |  |                                       |                |               |                                  |
| 9.5                            |  |                                       |                |               |                                  |
| 10.5                           |  |                                       |                |               |                                  |
| 11.5                           |  |                                       |                |               |                                  |
| 12.5                           |  |                                       |                |               |                                  |
| 13.5                           |  |                                       |                |               |                                  |
| 14.5                           |  |                                       |                |               |                                  |
| 15.5                           |  |                                       |                |               |                                  |
| 16.5                           |  |                                       |                |               |                                  |
| 17.5                           |  |                                       |                |               |                                  |
| 18.5                           |  |                                       |                |               |                                  |
| 19.5                           | 19,050                                       |                                       | 0.0000         |               |                                  |
| 20.5                           | 20,606                                       |                                       | 0.0000         |               |                                  |
| 21.5                           | 20,606                                       |                                       | 0.0000         |               |                                  |
| 22.5                           | 20,606                                       |                                       | 0.0000         |               |                                  |
| 23.5                           | 20,606                                       |                                       | 0.0000         |               |                                  |
| 24.5                           | 20,606                                       |                                       | 0.0000         |               |                                  |
| 25.5                           | 23,146                                       |                                       | 0.0000         |               |                                  |
| 26.5                           | 25,178                                       |                                       | 0.0000         |               |                                  |
| 27.5                           | 26,956                                       | 1,114                                 | 0.0413         |               |                                  |
| 28.5                           | 7,906  | 778                                   | 0.0984         |               |                                  |
| 29.5                           | 6,350  |                                       | 0.0000         |               |                                  |
| 30.5                           | 6,350  |                                       | 0.0000         |               |                                  |
| 31.5                           | 6,350  |                                       | 0.0000         |               |                                  |
| 32.5                           | 6,350  |                                       | 0.0000         |               |                                  |
| 33.5                           | 6,350  |                                       | 0.0000         |               |                                  |
| 34.5                           | 3,810  |                                       | 0.0000         |               |                                  |
| 35.5                           | 1,778  |                                       | 0.0000         |               |                                  |
| 36.5                           | 10,447                                       |                                       | 0.0000         |               |                                  |
| 37.5                           | 10,447                                       |                                       | 0.0000         |               |                                  |
| 38.5                           | 10,447                                       |                                       | 0.0000         |               |                                  |

SUEZ WATER RHODE ISLAND  
ACCOUNT 309 SUPPLY MAINS  
ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1950-2014       |  |                                       | EXPERIENCE BAND 2008-2016 |               |                                  |
|--------------------------------|--|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 39.5                           | 10,447                                       |                                       | 0.0000                    |               |                                  |
| 40.5                           | 10,447                                       |                                       | 0.0000                    |               |                                  |
| 41.5                           | 17,604                                       |                                       | 0.0000                    |               |                                  |
| 42.5                           | 17,604                                       |                                       | 0.0000                    |               |                                  |
| 43.5                           | 17,604                                       |                                       | 0.0000                    |               |                                  |
| 44.5                           | 17,604                                       | 5,779                                 | 0.3283                    |               |                                  |
| 45.5                           | 7,157  |                                       | 0.0000                    |               |                                  |
| 46.5                           | 7,157  |                                       | 0.0000                    |               |                                  |
| 47.5                           | 7,157  |                                       | 0.0000                    |               |                                  |
| 48.5                           | 7,157  |                                       | 0.0000                    |               |                                  |
| 49.5                           | 7,157  |                                       | 0.0000                    |               |                                  |
| 50.5                           |  |                                       |                           |               |                                  |
| 51.5                           |  |                                       |                           |               |                                  |
| 52.5                           |  |                                       |                           |               |                                  |
| 53.5                           |  |                                       |                           |               |                                  |
| 54.5                           |  |                                       |                           |               |                                  |
| 55.5                           |  |                                       |                           |               |                                  |
| 56.5                           |  |                                       |                           |               |                                  |
| 57.5                           | 3,067  |                                       | 0.0000                    |               |                                  |
| 58.5                           | 3,067  |                                       | 0.0000                    |               |                                  |
| 59.5                           | 3,067  |                                       | 0.0000                    |               |                                  |
| 60.5                           | 3,067  |                                       | 0.0000                    |               |                                  |
| 61.5                           | 3,067  |                                       | 0.0000                    |               |                                  |
| 62.5                           | 3,067  |                                       | 0.0000                    |               |                                  |
| 63.5                           | 3,067  |                                       | 0.0000                    |               |                                  |
| 64.5                           | 3,067  |                                       | 0.0000                    |               |                                  |
| 65.5                           | 3,067  |                                       | 0.0000                    |               |                                  |
| 66.5                           |  |                                       |                           |               |                                  |



SUEZ WATER RHODE ISLAND  
ACCOUNT 311 PUMPING EQUIPMENT  
ORIGINAL AND SMOOTH SURVIVOR CURVES



SUEZ WATER RHODE ISLAND

ACCOUNT 311 PUMPING EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1942-2015

EXPERIENCE BAND 2008-2016

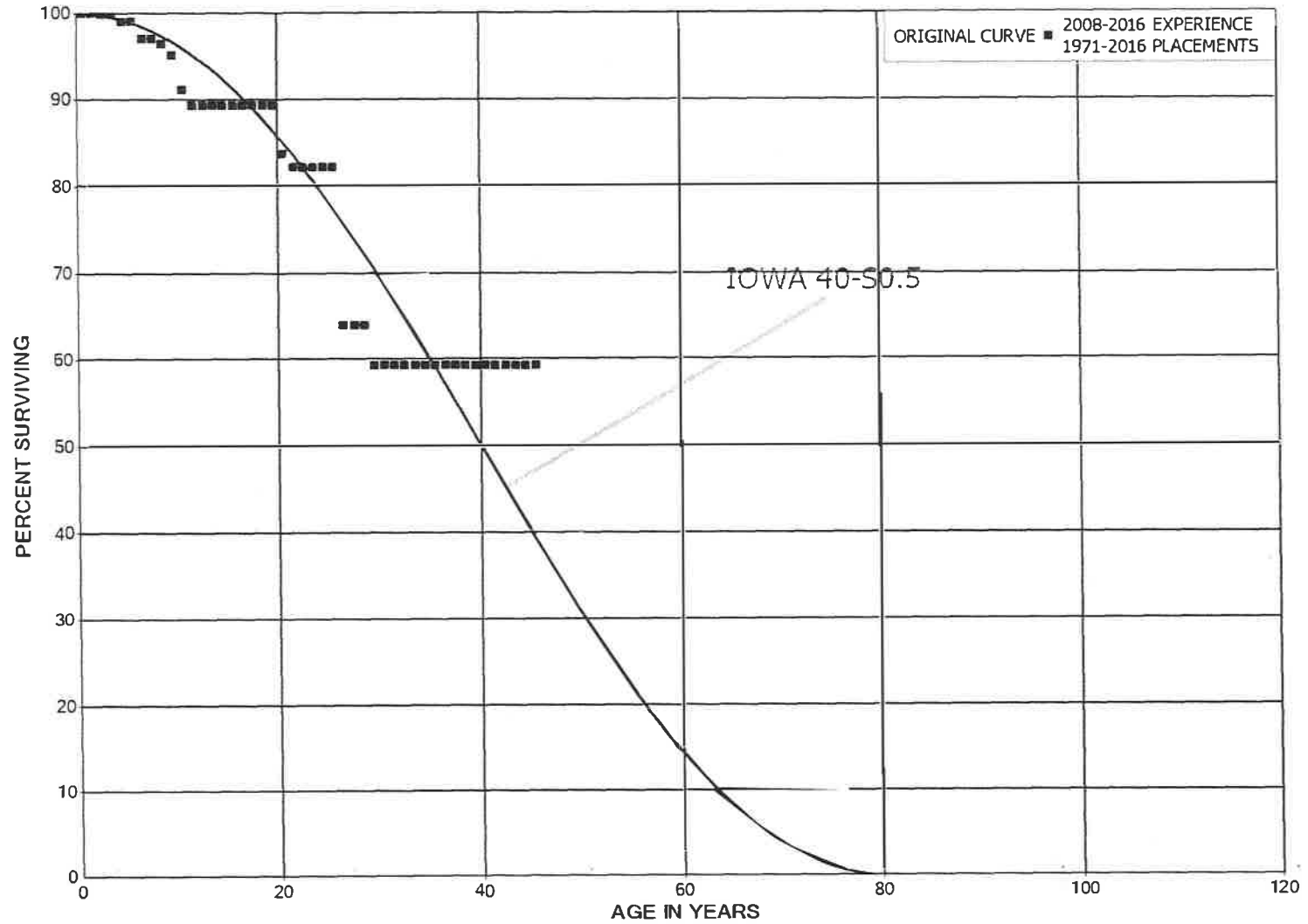
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|--|---------------------------------------|----------------|---------------|----------------------------------|
| 0.0                            | 253,047                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 0.5                            | 253,047                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 1.5                            | 108,701                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 2.5                            | 98,241                                       |                                       | 0.0000         | 1.0000        | 100.00                           |
| 3.5                            | 79,720                                       |                                       | 0.0000         | 1.0000        | 100.00                           |
| 4.5                            | 125,526                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 5.5                            | 225,741                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 6.5                            | 262,716                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 7.5                            | 237,849                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 8.5                            | 237,849                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 9.5                            | 890,888                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 10.5                           | 868,184                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 11.5                           | 999,372                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 12.5                           | 999,372                                      | 4,250                                 | 0.0043         | 0.9957        | 100.00                           |
| 13.5                           | 953,630                                      |                                       | 0.0000         | 1.0000        | 99.57                            |
| 14.5                           | 848,671                                      | 10,307                                | 0.0121         | 0.9879        | 99.57                            |
| 15.5                           | 801,388                                      |                                       | 0.0000         | 1.0000        | 98.37                            |
| 16.5                           | 801,388                                      |                                       | 0.0000         | 1.0000        | 98.37                            |
| 17.5                           | 888,518                                      |                                       | 0.0000         | 1.0000        | 98.37                            |
| 18.5                           | 235,479                                      |                                       | 0.0000         | 1.0000        | 98.37                            |
| 19.5                           | 272,843                                      |                                       | 0.0000         | 1.0000        | 98.37                            |
| 20.5                           | 141,655                                      |                                       | 0.0000         | 1.0000        | 98.37                            |
| 21.5                           | 141,655                                      | 8,000                                 | 0.0565         | 0.9435        | 98.37                            |
| 22.5                           | 144,726                                      |                                       | 0.0000         | 1.0000        | 92.81                            |
| 23.5                           | 144,726                                      |                                       | 0.0000         | 1.0000        | 92.81                            |
| 24.5                           | 144,726                                      |                                       | 0.0000         | 1.0000        | 92.81                            |
| 25.5                           | 146,133                                      |                                       | 0.0000         | 1.0000        | 92.81                            |
| 26.5                           | 67,347                                       | 563                                   | 0.0084         | 0.9916        | 92.81                            |
| 27.5                           | 92,332                                       | 3,680                                 | 0.0399         | 0.9601        | 92.03                            |
| 28.5                           | 55,531                                       |                                       | 0.0000         | 1.0000        | 88.37                            |
| 29.5                           | 59,940                                       |                                       | 0.0000         | 1.0000        | 88.37                            |
| 30.5                           | 59,940                                       | 2,839                                 | 0.0474         | 0.9526        | 88.37                            |
| 31.5                           | 84,922                                       |                                       | 0.0000         | 1.0000        | 84.18                            |
| 32.5                           | 84,922                                       |                                       | 0.0000         | 1.0000        | 84.18                            |
| 33.5                           | 84,922                                       | 344                                   | 0.0041         | 0.9959        | 84.18                            |
| 34.5                           | 83,171                                       |                                       | 0.0000         | 1.0000        | 83.84                            |
| 35.5                           | 83,171                                       | 1,000                                 | 0.0120         | 0.9880        | 83.84                            |
| 36.5                           | 99,243                                       |                                       | 0.0000         | 1.0000        | 82.83                            |
| 37.5                           | 99,243                                       | 8,183                                 | 0.0825         | 0.9175        | 82.83                            |
| 38.5                           | 86,651                                       |                                       | 0.0000         | 1.0000        | 76.00                            |

SUEZ WATER RHODE ISLAND  
ACCOUNT 311 PUMPING EQUIPMENT  
ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1942-2015       |  |                                       | EXPERIENCE BAND 2008-2016 |               |                                  |  |
|--------------------------------|--|---------------------------------------|---------------------------|---------------|----------------------------------|--|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |  |
| 39.5                           | 89,596                                       | 3,100                                 | 0.0346                    | 0.9654        | 76.00                            |  |
| 40.5                           | 44,566                                       |                                       | 0.0000                    | 1.0000        | 73.37                            |  |
| 41.5                           | 84,486                                       |                                       | 0.0000                    | 1.0000        | 73.37                            |  |
| 42.5                           | 84,486                                       | 7,197                                 | 0.0852                    | 0.9148        | 73.37                            |  |
| 43.5                           | 77,289                                       |                                       | 0.0000                    | 1.0000        | 67.12                            |  |
| 44.5                           | 77,289                                       | 25,152                                | 0.3254                    | 0.6746        | 67.12                            |  |
| 45.5                           | 42,865                                       |                                       | 0.0000                    | 1.0000        | 45.28                            |  |
| 46.5                           | 42,865                                       | 0                                     | 0.0000                    | 1.0000        | 45.28                            |  |
| 47.5                           | 42,865                                       | 2,681                                 | 0.0626                    | 0.9374        | 45.28                            |  |
| 48.5                           | 39,920                                       | 5,469                                 | 0.1370                    | 0.8630        | 42.45                            |  |
| 49.5                           | 34,452                                       | 4,252                                 | 0.1234                    | 0.8766        | 36.63                            |  |
| 50.5                           |  |                                       |                           |               | 32.11                            |  |
| 51.5                           |  |                                       |                           |               |                                  |  |
| 52.5                           |  |                                       |                           |               |                                  |  |
| 53.5                           |  |                                       |                           |               |                                  |  |
| 54.5                           |  |                                       |                           |               |                                  |  |
| 55.5                           |  |                                       |                           |               |                                  |  |
| 56.5                           |  |                                       |                           |               |                                  |  |
| 57.5                           | 8,136  |                                       | 0.0000                    |               |                                  |  |
| 58.5                           | 16,121                                       |                                       | 0.0000                    |               |                                  |  |
| 59.5                           | 16,121                                       |                                       | 0.0000                    |               |                                  |  |
| 60.5                           | 16,121                                       |                                       | 0.0000                    |               |                                  |  |
| 61.5                           | 16,121                                       |                                       | 0.0000                    |               |                                  |  |
| 62.5                           | 16,121                                       | 6,148                                 | 0.3813                    |               |                                  |  |
| 63.5                           | 9,974  | 2,186                                 | 0.2192                    |               |                                  |  |
| 64.5                           | 7,787  |                                       | 0.0000                    |               |                                  |  |
| 65.5                           | 27,060                                       | 1,205                                 | 0.0445                    |               |                                  |  |
| 66.5                           | 25,072                                       | 2,236                                 | 0.0892                    |               |                                  |  |
| 67.5                           | 19,273                                       |                                       | 0.0000                    |               |                                  |  |
| 68.5                           | 19,273                                       |                                       | 0.0000                    |               |                                  |  |
| 69.5                           | 19,273                                       |                                       | 0.0000                    |               |                                  |  |
| 70.5                           | 19,273                                       | 2,445                                 | 0.1268                    |               |                                  |  |
| 71.5                           | 16,828                                       |                                       | 0.0000                    |               |                                  |  |
| 72.5                           | 16,828                                       |                                       | 0.0000                    |               |                                  |  |
| 73.5                           | 16,828                                       | 14,742                                | 0.8760                    |               |                                  |  |
| 74.5                           |  |                                       |                           |               |                                  |  |



SUEZ WATER RHODE ISLAND  
ACCOUNT 320 WATER TREATMENT EQUIPMENT  
ORIGINAL AND SMOOTH SURVIVOR CURVES



## SUEZ WATER RHODE ISLAND

## ACCOUNT 320 WATER TREATMENT EQUIPMENT

## ORIGINAL LIFE TABLE

## PLACEMENT BAND 1971-2016

## EXPERIENCE BAND 2008-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|--|---------------------------------------|----------------|---------------|----------------------------------|
| 0.0                            | 250,287                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 0.5                            | 266,404                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 1.5                            | 262,788                                      | 419                                   | 0.0016         | 0.9984        | 100.00                           |
| 2.5                            | 184,635                                      |                                       | 0.0000         | 1.0000        | 99.84                            |
| 3.5                            | 163,854                                      | 1,507                                 | 0.0092         | 0.9908        | 99.84                            |
| 4.5                            | 159,899                                      |                                       | 0.0000         | 1.0000        | 98.92                            |
| 5.5                            | 152,950                                      | 3,080                                 | 0.0201         | 0.9799        | 98.92                            |
| 6.5                            | 158,019                                      |                                       | 0.0000         | 1.0000        | 96.93                            |
| 7.5                            | 145,467                                      | 750                                   | 0.0052         | 0.9948        | 96.93                            |
| 8.5                            | 167,407                                      | 2,419                                 | 0.0144         | 0.9856        | 96.43                            |
| 9.5                            | 212,222                                      | 8,867                                 | 0.0418         | 0.9582        | 95.04                            |
| 10.5                           | 191,199                                      | 3,660                                 | 0.0191         | 0.9809        | 91.07                            |
| 11.5                           | 187,539                                      |                                       | 0.0000         | 1.0000        | 89.32                            |
| 12.5                           | 207,627                                      |                                       | 0.0000         | 1.0000        | 89.32                            |
| 13.5                           | 210,627                                      |                                       | 0.0000         | 1.0000        | 89.32                            |
| 14.5                           | 208,254                                      |                                       | 0.0000         | 1.0000        | 89.32                            |
| 15.5                           | 200,105                                      |                                       | 0.0000         | 1.0000        | 89.32                            |
| 16.5                           | 200,105                                      |                                       | 0.0000         | 1.0000        | 89.32                            |
| 17.5                           | 119,005                                      |                                       | 0.0000         | 1.0000        | 89.32                            |
| 18.5                           | 48,198                                       |                                       | 0.0000         | 1.0000        | 89.32                            |
| 19.5                           | 48,198                                       | 3,000                                 | 0.0622         | 0.9378        | 89.32                            |
| 20.5                           | 66,123                                       | 1,224                                 | 0.0185         | 0.9815        | 83.76                            |
| 21.5                           | 46,035                                       |                                       | 0.0000         | 1.0000        | 82.21                            |
| 22.5                           | 46,035                                       |                                       | 0.0000         | 1.0000        | 82.21                            |
| 23.5                           | 46,035                                       |                                       | 0.0000         | 1.0000        | 82.21                            |
| 24.5                           | 46,035                                       |                                       | 0.0000         | 1.0000        | 82.21                            |
| 25.5                           | 46,035                                       | 10,213                                | 0.2218         | 0.7782        | 82.21                            |
| 26.5                           | 23,969                                       |                                       | 0.0000         | 1.0000        | 63.97                            |
| 27.5                           | 34,306                                       |                                       | 0.0000         | 1.0000        | 63.97                            |
| 28.5                           | 34,306                                       | 2,500                                 | 0.0729         | 0.9271        | 63.97                            |
| 29.5                           | 10,881                                       |                                       | 0.0000         | 1.0000        | 59.31                            |
| 30.5                           | 10,881                                       |                                       | 0.0000         | 1.0000        | 59.31                            |
| 31.5                           | 10,881                                       |                                       | 0.0000         | 1.0000        | 59.31                            |
| 32.5                           | 10,881                                       |                                       | 0.0000         | 1.0000        | 59.31                            |
| 33.5                           | 10,881                                       |                                       | 0.0000         | 1.0000        | 59.31                            |
| 34.5                           | 10,881                                       |                                       | 0.0000         | 1.0000        | 59.31                            |
| 35.5                           | 7,837  |                                       | 0.0000         | 1.0000        | 59.31                            |
| 36.5                           | 6,696  |                                       | 0.0000         | 1.0000        | 59.31                            |
| 37.5                           | 6,696  |                                       | 0.0000         | 1.0000        | 59.31                            |
| 38.5                           | 6,696  |                                       | 0.0000         | 1.0000        | 59.31                            |

SUEZ WATER RHODE ISLAND

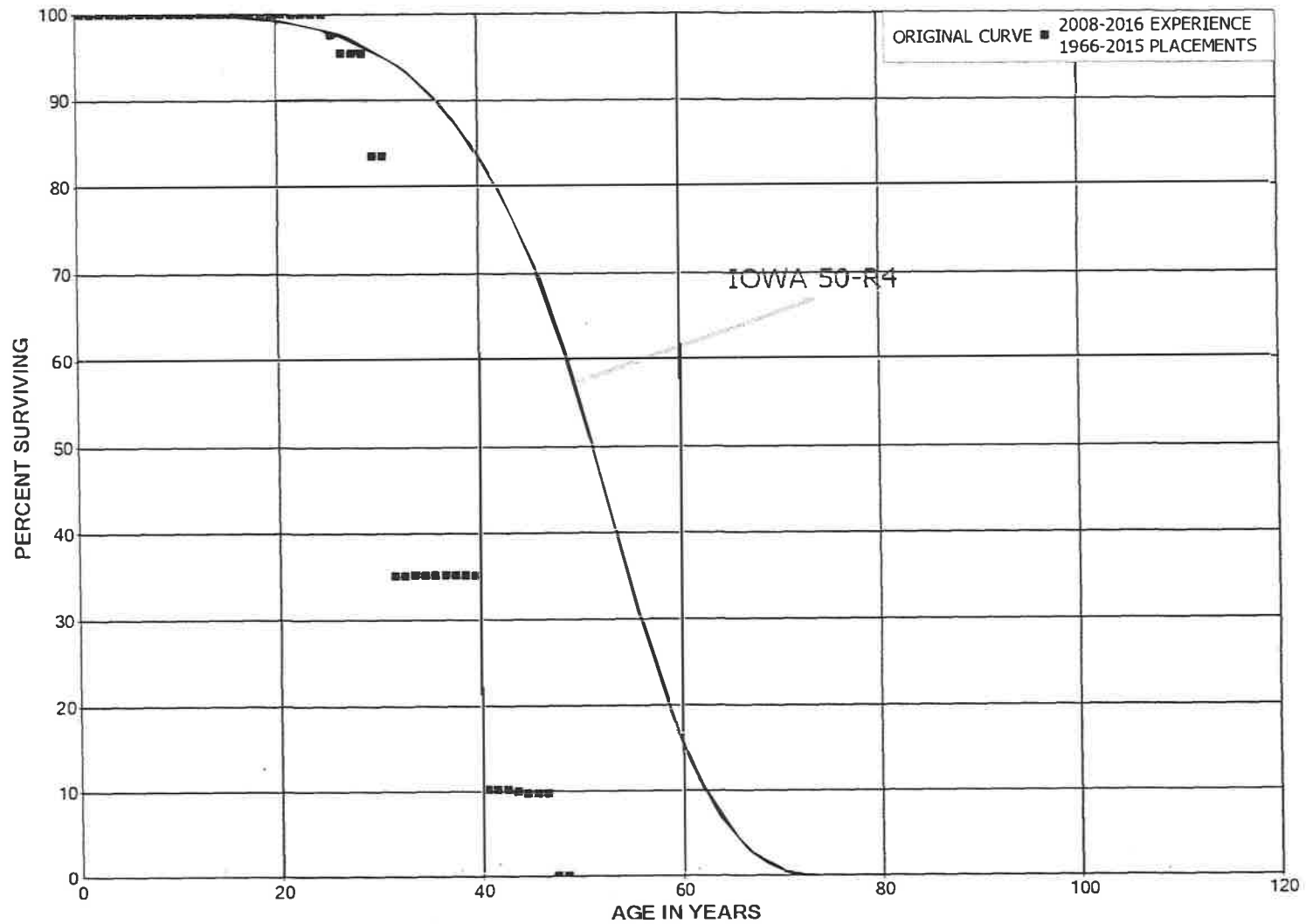
ACCOUNT 320 WATER TREATMENT EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1971-2016       |  |                                       | EXPERIENCE BAND 2008-2016 |               |                                  |
|--------------------------------|--|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 39.5                           | 6,696  |                                       | 0.0000                    | 1.0000        | 59.31                            |
| 40.5                           | 6,696  |                                       | 0.0000                    | 1.0000        | 59.31                            |
| 41.5                           | 6,696  |                                       | 0.0000                    | 1.0000        | 59.31                            |
| 42.5                           | 6,696  |                                       | 0.0000                    | 1.0000        | 59.31                            |
| 43.5                           | 6,696  |                                       | 0.0000                    | 1.0000        | 59.31                            |
| 44.5                           | 6,696  |                                       | 0.0000                    | 1.0000        | 59.31                            |
| 45.5                           |  |                                       |                           |               | 59.31                            |



SUEZ WATER RHODE ISLAND  
ACCOUNT 330 DISTRIBUTION RESERVOIRS AND STANDPIPES  
ORIGINAL AND SMOOTH SURVIVOR CURVES



SUEZ WATER RHODE ISLAND

ACCOUNT 330 DISTRIBUTION RESERVOIRS AND STANDPIPES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1966-2015

EXPERIENCE BAND 2008-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETM<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|--|---------------------------------------|---------------|---------------|----------------------------------|
| 0.0                            | 3,518,294                                    |                                       | 0.0000        | 1.0000        | 100.00                           |
| 0.5                            | 3,562,933                                    |                                       | 0.0000        | 1.0000        | 100.00                           |
| 1.5                            | 3,560,650                                    |                                       | 0.0000        | 1.0000        | 100.00                           |
| 2.5                            | 3,522,991                                    |                                       | 0.0000        | 1.0000        | 100.00                           |
| 3.5                            | 151,586                                      |                                       | 0.0000        | 1.0000        | 100.00                           |
| 4.5                            | 44,639                                       |                                       | 0.0000        | 1.0000        | 100.00                           |
| 5.5                            | 44,639                                       |                                       | 0.0000        | 1.0000        | 100.00                           |
| 6.5                            | 44,639                                       |                                       | 0.0000        | 1.0000        | 100.00                           |
| 7.5                            | 44,639                                       |                                       | 0.0000        | 1.0000        | 100.00                           |
| 8.5                            | 44,639                                       |                                       | 0.0000        | 1.0000        | 100.00                           |
| 9.5                            | 476,732                                      |                                       | 0.0000        | 1.0000        | 100.00                           |
| 10.5                           | 607,052                                      |                                       | 0.0000        | 1.0000        | 100.00                           |
| 11.5                           | 607,052                                      |                                       | 0.0000        | 1.0000        | 100.00                           |
| 12.5                           | 607,052                                      |                                       | 0.0000        | 1.0000        | 100.00                           |
| 13.5                           | 607,052                                      |                                       | 0.0000        | 1.0000        | 100.00                           |
| 14.5                           | 607,052                                      |                                       | 0.0000        | 1.0000        | 100.00                           |
| 15.5                           | 607,052                                      |                                       | 0.0000        | 1.0000        | 100.00                           |
| 16.5                           | 607,052                                      |                                       | 0.0000        | 1.0000        | 100.00                           |
| 17.5                           | 617,846                                      |                                       | 0.0000        | 1.0000        | 100.00                           |
| 18.5                           | 141,114                                      |                                       | 0.0000        | 1.0000        | 100.00                           |
| 19.5                           | 157,710                                      |                                       | 0.0000        | 1.0000        | 100.00                           |
| 20.5                           | 161,568                                      |                                       | 0.0000        | 1.0000        | 100.00                           |
| 21.5                           | 161,568                                      |                                       | 0.0000        | 1.0000        | 100.00                           |
| 22.5                           | 161,568                                      |                                       | 0.0000        | 1.0000        | 100.00                           |
| 23.5                           | 161,568                                      |                                       | 0.0000        | 1.0000        | 100.00                           |
| 24.5                           | 161,568                                      | 3,964                                 | 0.0245        | 0.9755        | 100.00                           |
| 25.5                           | 157,604                                      | 3,415                                 | 0.0217        | 0.9783        | 97.55                            |
| 26.5                           | 150,774                                      |                                       | 0.0000        | 1.0000        | 95.43                            |
| 27.5                           | 165,408                                      |                                       | 0.0000        | 1.0000        | 95.43                            |
| 28.5                           | 18,492                                       | 2,315                                 | 0.1252        | 0.8748        | 95.43                            |
| 29.5                           | 14,634                                       |                                       | 0.0000        | 1.0000        | 83.49                            |
| 30.5                           | 14,634                                       | 8,485                                 | 0.5798        | 0.4202        | 83.49                            |
| 31.5                           | 6,149  |                                       | 0.0000        | 1.0000        | 35.08                            |
| 32.5                           | 6,149  |                                       | 0.0000        | 1.0000        | 35.08                            |
| 33.5                           | 6,149  |                                       | 0.0000        | 1.0000        | 35.08                            |
| 34.5                           | 6,149  |                                       | 0.0000        | 1.0000        | 35.08                            |
| 35.5                           | 44,089                                       |                                       | 0.0000        | 1.0000        | 35.08                            |
| 36.5                           | 37,940                                       |                                       | 0.0000        | 1.0000        | 35.08                            |
| 37.5                           | 37,940                                       |                                       | 0.0000        | 1.0000        | 35.08                            |
| 38.5                           | 37,940                                       |                                       | 0.0000        | 1.0000        | 35.08                            |

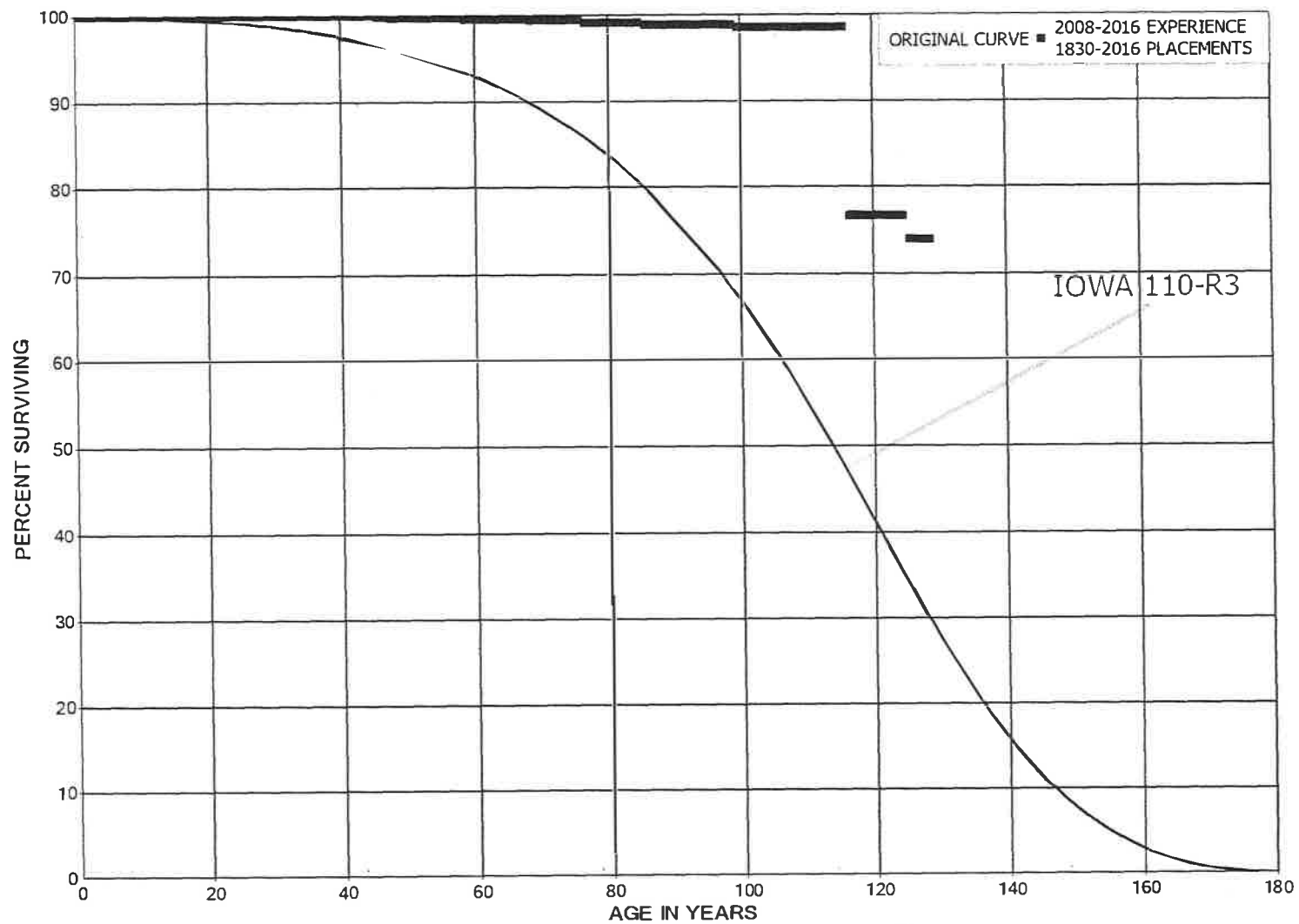
SUEZ WATER RHODE ISLAND

ACCOUNT 330 DISTRIBUTION RESERVOIRS AND STANDPIPES

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1966-2015       |  |                                       | EXPERIENCE BAND 2008-2016 |               |                                  |
|--------------------------------|--|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 39.5                           | 38,818                                       | 27,535                                | 0.7093                    | 0.2907        | 35.08                            |
| 40.5                           | 11,283                                       |                                       | 0.0000                    | 1.0000        | 10.20                            |
| 41.5                           | 114,088                                      |                                       | 0.0000                    | 1.0000        | 10.20                            |
| 42.5                           | 114,088                                      | 3,197                                 | 0.0280                    | 0.9720        | 10.20                            |
| 43.5                           | 110,891                                      | 1,742                                 | 0.0157                    | 0.9843        | 9.91                             |
| 44.5                           | 102,183                                      |                                       | 0.0000                    | 1.0000        | 9.75                             |
| 45.5                           | 102,183                                      |                                       | 0.0000                    | 1.0000        | 9.75                             |
| 46.5                           | 102,183                                      | 101,605                               | 0.9943                    | 0.0057        | 9.75                             |
| 47.5                           | 578  |                                       | 0.0000                    | 1.0000        | 0.06                             |
| 48.5                           |  |                                       |                           |               | 0.06                             |

SUEZ WATER RHODE ISLAND  
ACCOUNT 331 MAINS  
ORIGINAL AND SMOOTH SURVIVOR CURVES



## SUEZ WATER RHODE ISLAND

ACCOUNT 331 MAINS

## ORIGINAL LIFE TABLE

PLACEMENT BAND 1830-2016

EXPERIENCE BAND 2008-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|--|---------------------------------------|----------------|---------------|----------------------------------|
| 0.0                            | 4,450,746                                    |                                       | 0.0000         | 1.0000        | 100.00                           |
| 0.5                            | 4,545,365                                    |                                       | 0.0000         | 1.0000        | 100.00                           |
| 1.5                            | 5,556,233                                    |                                       | 0.0000         | 1.0000        | 100.00                           |
| 2.5                            | 4,895,030                                    |                                       | 0.0000         | 1.0000        | 100.00                           |
| 3.5                            | 3,152,832                                    |                                       | 0.0000         | 1.0000        | 100.00                           |
| 4.5                            | 3,151,989                                    |                                       | 0.0000         | 1.0000        | 100.00                           |
| 5.5                            | 2,911,582                                    |                                       | 0.0000         | 1.0000        | 100.00                           |
| 6.5                            | 3,004,442                                    |                                       | 0.0000         | 1.0000        | 100.00                           |
| 7.5                            | 3,068,819                                    |                                       | 0.0000         | 1.0000        | 100.00                           |
| 8.5                            | 2,570,503                                    |                                       | 0.0000         | 1.0000        | 100.00                           |
| 9.5                            | 2,363,494                                    |                                       | 0.0000         | 1.0000        | 100.00                           |
| 10.5                           | 1,051,203                                    |                                       | 0.0000         | 1.0000        | 100.00                           |
| 11.5                           | 1,261,627                                    |                                       | 0.0000         | 1.0000        | 100.00                           |
| 12.5                           | 1,216,767                                    |                                       | 0.0000         | 1.0000        | 100.00                           |
| 13.5                           | 1,078,745                                    |                                       | 0.0000         | 1.0000        | 100.00                           |
| 14.5                           | 903,938                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 15.5                           | 705,651                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 16.5                           | 629,293                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 17.5                           | 622,707                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 18.5                           | 652,742                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 19.5                           | 741,944                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 20.5                           | 519,455                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 21.5                           | 577,926                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 22.5                           | 696,367                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 23.5                           | 726,652                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 24.5                           | 833,399                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 25.5                           | 783,024                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 26.5                           | 1,047,792                                    |                                       | 0.0000         | 1.0000        | 100.00                           |
| 27.5                           | 1,004,434                                    |                                       | 0.0000         | 1.0000        | 100.00                           |
| 28.5                           | 765,003                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 29.5                           | 805,902                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 30.5                           | 747,431                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 31.5                           | 642,933                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 32.5                           | 612,648                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 33.5                           | 601,638                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 34.5                           | 765,267                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 35.5                           | 761,362                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 36.5                           | 902,279                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 37.5                           | 930,897                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 38.5                           | 889,326                                      | 266                                   | 0.0003         | 0.9997        | 100.00                           |



SUEZ WATER RHODE ISLAND

ACCOUNT 331 MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1830-2016

EXPERIENCE BAND 2008-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|--|---------------------------------------|----------------|---------------|----------------------------------|
| 39.5                           | 939,677                                      |                                       | 0.0000         | 1.0000        | 99.97                            |
| 40.5                           | 948,965                                      |                                       | 0.0000         | 1.0000        | 99.97                            |
| 41.5                           | 1,128,498                                    |                                       | 0.0000         | 1.0000        | 99.97                            |
| 42.5                           | 1,100,279                                    |                                       | 0.0000         | 1.0000        | 99.97                            |
| 43.5                           | 961,102                                      |                                       | 0.0000         | 1.0000        | 99.97                            |
| 44.5                           | 745,522                                      | 700                                   | 0.0009         | 0.9991        | 99.97                            |
| 45.5                           | 663,468                                      |                                       | 0.0000         | 1.0000        | 99.88                            |
| 46.5                           | 697,686                                      | 1,134                                 | 0.0016         | 0.9984        | 99.88                            |
| 47.5                           | 724,211                                      |                                       | 0.0000         | 1.0000        | 99.71                            |
| 48.5                           | 721,133                                      |                                       | 0.0000         | 1.0000        | 99.71                            |
| 49.5                           | 787,711                                      |                                       | 0.0000         | 1.0000        | 99.71                            |
| 50.5                           | 629,292                                      | 200                                   | 0.0003         | 0.9997        | 99.71                            |
| 51.5                           | 560,828                                      |                                       | 0.0000         | 1.0000        | 99.68                            |
| 52.5                           | 511,612                                      |                                       | 0.0000         | 1.0000        | 99.68                            |
| 53.5                           | 460,097                                      |                                       | 0.0000         | 1.0000        | 99.68                            |
| 54.5                           | 385,809                                      |                                       | 0.0000         | 1.0000        | 99.68                            |
| 55.5                           | 294,445                                      |                                       | 0.0000         | 1.0000        | 99.68                            |
| 56.5                           | 224,611                                      |                                       | 0.0000         | 1.0000        | 99.68                            |
| 57.5                           | 350,601                                      | 500                                   | 0.0014         | 0.9986        | 99.68                            |
| 58.5                           | 523,775                                      | 93                                    | 0.0002         | 0.9998        | 99.54                            |
| 59.5                           | 756,815                                      | 148                                   | 0.0002         | 0.9998        | 99.52                            |
| 60.5                           | 1,094,328                                    |                                       | 0.0000         | 1.0000        | 99.50                            |
| 61.5                           | 1,092,357                                    |                                       | 0.0000         | 1.0000        | 99.50                            |
| 62.5                           | 1,110,981                                    |                                       | 0.0000         | 1.0000        | 99.50                            |
| 63.5                           | 1,196,697                                    |                                       | 0.0000         | 1.0000        | 99.50                            |
| 64.5                           | 1,189,947                                    |                                       | 0.0000         | 1.0000        | 99.50                            |
| 65.5                           | 1,182,908                                    |                                       | 0.0000         | 1.0000        | 99.50                            |
| 66.5                           | 1,000,153                                    |                                       | 0.0000         | 1.0000        | 99.50                            |
| 67.5                           | 736,464                                      | 500                                   | 0.0007         | 0.9993        | 99.50                            |
| 68.5                           | 478,241                                      |                                       | 0.0000         | 1.0000        | 99.44                            |
| 69.5                           | 136,364                                      |                                       | 0.0000         | 1.0000        | 99.44                            |
| 70.5                           | 166,515                                      |                                       | 0.0000         | 1.0000        | 99.44                            |
| 71.5                           | 147,774                                      |                                       | 0.0000         | 1.0000        | 99.44                            |
| 72.5                           | 55,374                                       |                                       | 0.0000         | 1.0000        | 99.44                            |
| 73.5                           | 61,286                                       |                                       | 0.0000         | 1.0000        | 99.44                            |
| 74.5                           | 73,074                                       |                                       | 0.0000         | 1.0000        | 99.44                            |
| 75.5                           | 78,204                                       | 300                                   | 0.0038         | 0.9962        | 99.44                            |
| 76.5                           | 72,081                                       |                                       | 0.0000         | 1.0000        | 99.05                            |
| 77.5                           | 78,161                                       |                                       | 0.0000         | 1.0000        | 99.05                            |
| 78.5                           | 113,101                                      |                                       | 0.0000         | 1.0000        | 99.05                            |

## SUEZ WATER RHODE ISLAND

## ACCOUNT 331 MAINS

## ORIGINAL LIFE TABLE, CONT.

## PLACEMENT BAND 1830-2016

## EXPERIENCE BAND 2008-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|--|---------------------------------------|----------------|---------------|----------------------------------|
| 79.5                           | 104,161                                      |                                       | 0.0000         | 1.0000        | 99.05                            |
| 80.5                           | 119,486                                      |                                       | 0.0000         | 1.0000        | 99.05                            |
| 81.5                           | 119,334                                      |                                       | 0.0000         | 1.0000        | 99.05                            |
| 82.5                           | 139,606                                      | 38                                    | 0.0003         | 0.9997        | 99.05                            |
| 83.5                           | 141,427                                      |                                       | 0.0000         | 1.0000        | 99.03                            |
| 84.5                           | 142,944                                      | 289                                   | 0.0020         | 0.9980        | 99.03                            |
| 85.5                           | 140,064                                      | 63                                    | 0.0004         | 0.9996        | 98.83                            |
| 86.5                           | 133,954                                      |                                       | 0.0000         | 1.0000        | 98.78                            |
| 87.5                           | 102,599                                      |                                       | 0.0000         | 1.0000        | 98.78                            |
| 88.5                           | 86,359                                       |                                       | 0.0000         | 1.0000        | 98.78                            |
| 89.5                           | 70,413                                       |                                       | 0.0000         | 1.0000        | 98.78                            |
| 90.5                           | 74,466                                       |                                       | 0.0000         | 1.0000        | 98.78                            |
| 91.5                           | 51,716                                       |                                       | 0.0000         | 1.0000        | 98.78                            |
| 92.5                           | 48,291                                       |                                       | 0.0000         | 1.0000        | 98.78                            |
| 93.5                           | 43,723                                       |                                       | 0.0000         | 1.0000        | 98.78                            |
| 94.5                           | 45,185                                       |                                       | 0.0000         | 1.0000        | 98.78                            |
| 95.5                           | 41,030                                       |                                       | 0.0000         | 1.0000        | 98.78                            |
| 96.5                           | 42,003                                       |                                       | 0.0000         | 1.0000        | 98.78                            |
| 97.5                           | 44,076                                       |                                       | 0.0000         | 1.0000        | 98.78                            |
| 98.5                           | 41,904                                       | 101                                   | 0.0024         | 0.9976        | 98.78                            |
| 99.5                           | 41,926                                       |                                       | 0.0000         | 1.0000        | 98.54                            |
| 100.5                          | 38,594                                       | 3                                     | 0.0001         | 0.9999        | 98.54                            |
| 101.5                          | 31,370                                       |                                       | 0.0000         | 1.0000        | 98.54                            |
| 102.5                          | 29,063                                       | 5                                     | 0.0002         | 0.9998        | 98.54                            |
| 103.5                          | 27,526                                       |                                       | 0.0000         | 1.0000        | 98.52                            |
| 104.5                          | 25,636                                       |                                       | 0.0000         | 1.0000        | 98.52                            |
| 105.5                          | 17,671                                       |                                       | 0.0000         | 1.0000        | 98.52                            |
| 106.5                          | 10,731                                       |                                       | 0.0000         | 1.0000        | 98.52                            |
| 107.5                          | 10,731                                       |                                       | 0.0000         | 1.0000        | 98.52                            |
| 108.5                          | 5,510  |                                       | 0.0000         | 1.0000        | 98.52                            |
| 109.5                          | 11,399                                       |                                       | 0.0000         | 1.0000        | 98.52                            |
| 110.5                          | 6,450  |                                       | 0.0000         | 1.0000        | 98.52                            |
| 111.5                          | 9,522  |                                       | 0.0000         | 1.0000        | 98.52                            |
| 112.5                          | 9,522  |                                       | 0.0000         | 1.0000        | 98.52                            |
| 113.5                          | 10,522                                       |                                       | 0.0000         | 1.0000        | 98.52                            |
| 114.5                          | 10,522                                       |                                       | 0.0000         | 1.0000        | 98.52                            |
| 115.5                          | 12,852                                       | 2,843                                 | 0.2212         | 0.7788        | 98.52                            |
| 116.5                          | 11,274                                       |                                       | 0.0000         | 1.0000        | 76.73                            |
| 117.5                          | 11,714                                       |                                       | 0.0000         | 1.0000        | 76.73                            |
| 118.5                          | 10,969                                       |                                       | 0.0000         | 1.0000        | 76.73                            |

SUEZ WATER RHODE ISLAND

ACCOUNT 331 MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1830-2016

EXPERIENCE BAND 2008-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|--|---------------------------------------|----------------|---------------|----------------------------------|
| 119.5                          | 226,835                                      |                                       | 0.0000         | 1.0000        | 76.73                            |
| 120.5                          | 223,763                                      |                                       | 0.0000         | 1.0000        | 76.73                            |
| 121.5                          | 223,763                                      |                                       | 0.0000         | 1.0000        | 76.73                            |
| 122.5                          | 222,764                                      |                                       | 0.0000         | 1.0000        | 76.73                            |
| 123.5                          | 222,764                                      |                                       | 0.0000         | 1.0000        | 76.73                            |
| 124.5                          | 219,872                                      | 7,969                                 | 0.0362         | 0.9638        | 76.73                            |
| 125.5                          | 210,638                                      |                                       | 0.0000         | 1.0000        | 73.95                            |
| 126.5                          | 210,198                                      |                                       | 0.0000         | 1.0000        | 73.95                            |
| 127.5                          | 207,898                                      |                                       | 0.0000         | 1.0000        | 73.95                            |
| 128.5                          |  |                                       |                |               | 73.95                            |
| 129.5                          |  |                                       |                |               |                                  |
| 130.5                          |  |                                       |                |               |                                  |
| 131.5                          |  |                                       |                |               |                                  |
| 132.5                          |  |                                       |                |               |                                  |
| 133.5                          |  |                                       |                |               |                                  |
| 134.5                          |  |                                       |                |               |                                  |
| 135.5                          |  |                                       |                |               |                                  |
| 136.5                          |  |                                       |                |               |                                  |
| 137.5                          |  |                                       |                |               |                                  |
| 138.5                          |  |                                       |                |               |                                  |
| 139.5                          |  |                                       |                |               |                                  |
| 140.5                          |  |                                       |                |               |                                  |
| 141.5                          |  |                                       |                |               |                                  |
| 142.5                          |  |                                       |                |               |                                  |
| 143.5                          |  |                                       |                |               |                                  |
| 144.5                          |  |                                       |                |               |                                  |
| 145.5                          |  |                                       |                |               |                                  |
| 146.5                          |  |                                       |                |               |                                  |
| 147.5                          |  |                                       |                |               |                                  |
| 148.5                          |  |                                       |                |               |                                  |
| 149.5                          |  |                                       |                |               |                                  |
| 150.5                          |  |                                       |                |               |                                  |
| 151.5                          |  |                                       |                |               |                                  |
| 152.5                          |  |                                       |                |               |                                  |
| 153.5                          |  |                                       |                |               |                                  |
| 154.5                          |  |                                       |                |               |                                  |
| 155.5                          |  |                                       |                |               |                                  |
| 156.5                          |  |                                       |                |               |                                  |
| 157.5                          |  |                                       |                |               |                                  |
| 158.5                          |  |                                       |                |               |                                  |



SUEZ WATER RHODE ISLAND

ACCOUNT 331 MAINS

ORIGINAL LIFE TABLE, CONT.

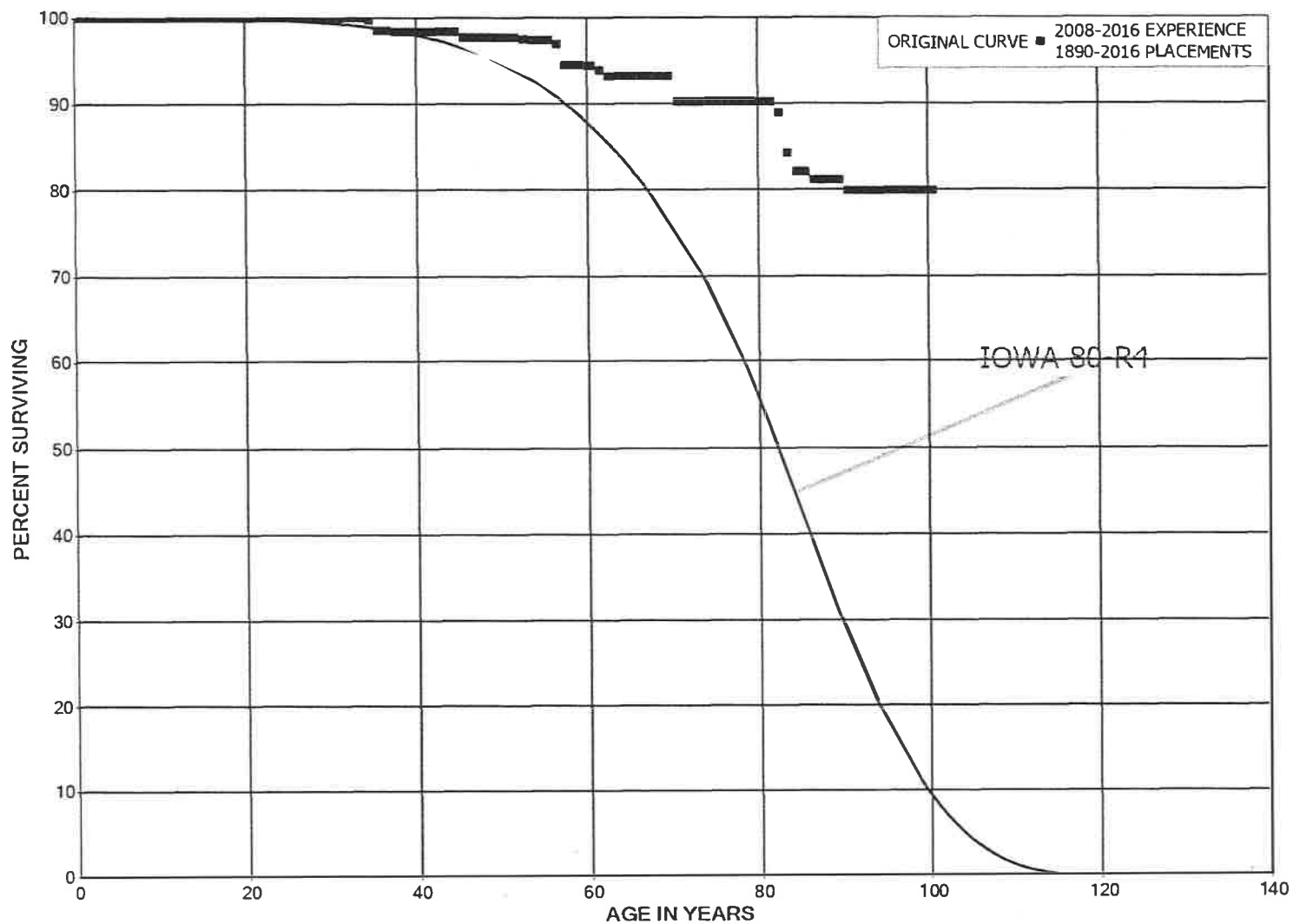
PLACEMENT BAND 1830-2016

EXPERIENCE BAND 2008-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|--|---------------------------------------|----------------|---------------|----------------------------------|
| 159.5                          |  |                                       |                |               |                                  |
| 160.5                          |  |                                       |                |               |                                  |
| 161.5                          |  |                                       |                |               |                                  |
| 162.5                          |  |                                       |                |               |                                  |
| 163.5                          |  |                                       |                |               |                                  |
| 164.5                          |  |                                       |                |               |                                  |
| 165.5                          |  |                                       |                |               |                                  |
| 166.5                          |  |                                       |                |               |                                  |
| 167.5                          |  |                                       |                |               |                                  |
| 168.5                          |  |                                       |                |               |                                  |
| 169.5                          |  |                                       |                |               |                                  |
| 170.5                          |  |                                       |                |               |                                  |
| 171.5                          |  |                                       |                |               |                                  |
| 172.5                          |  |                                       |                |               |                                  |
| 173.5                          |  |                                       |                |               |                                  |
| 174.5                          |  |                                       |                |               |                                  |
| 175.5                          |  |                                       |                |               |                                  |
| 176.5                          |  |                                       |                |               |                                  |
| 177.5                          | 1,830  |                                       | 0.0000         |               |                                  |
| 178.5                          | 1,830  |                                       | 0.0000         |               |                                  |
| 179.5                          | 1,830  |                                       | 0.0000         |               |                                  |
| 180.5                          | 1,830  |                                       | 0.0000         |               |                                  |
| 181.5                          | 1,830  |                                       | 0.0000         |               |                                  |
| 182.5                          | 1,830  |                                       | 0.0000         |               |                                  |
| 183.5                          | 1,830  |                                       | 0.0000         |               |                                  |
| 184.5                          | 1,830  |                                       | 0.0000         |               |                                  |
| 185.5                          | 1,830  |                                       | 0.0000         |               |                                  |
| 186.5                          |  |                                       |                |               |                                  |



SUEZ WATER RHODE ISLAND  
ACCOUNT 333 SERVICES  
ORIGINAL AND SMOOTH SURVIVOR CURVES



SUEZ WATER RHODE ISLAND

ACCOUNT 333 SERVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1890-2016

EXPERIENCE BAND 2008-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|--|---------------------------------------|----------------|---------------|----------------------------------|
| 0.0                            | 1,344,123                                    |                                       | 0.0000         | 1.0000        | 100.00                           |
| 0.5                            | 1,234,958                                    |                                       | 0.0000         | 1.0000        | 100.00                           |
| 1.5                            | 1,253,793                                    |                                       | 0.0000         | 1.0000        | 100.00                           |
| 2.5                            | 1,163,486                                    |                                       | 0.0000         | 1.0000        | 100.00                           |
| 3.5                            | 1,088,760                                    |                                       | 0.0000         | 1.0000        | 100.00                           |
| 4.5                            | 1,102,667                                    |                                       | 0.0000         | 1.0000        | 100.00                           |
| 5.5                            | 1,156,125                                    |                                       | 0.0000         | 1.0000        | 100.00                           |
| 6.5                            | 1,153,769                                    |                                       | 0.0000         | 1.0000        | 100.00                           |
| 7.5                            | 1,193,837                                    | 100                                   | 0.0001         | 0.9999        | 100.00                           |
| 8.5                            | 1,129,173                                    |                                       | 0.0000         | 1.0000        | 99.99                            |
| 9.5                            | 973,372                                      |                                       | 0.0000         | 1.0000        | 99.99                            |
| 10.5                           | 886,697                                      |                                       | 0.0000         | 1.0000        | 99.99                            |
| 11.5                           | 939,001                                      |                                       | 0.0000         | 1.0000        | 99.99                            |
| 12.5                           | 852,953                                      | 150                                   | 0.0002         | 0.9998        | 99.99                            |
| 13.5                           | 727,531                                      |                                       | 0.0000         | 1.0000        | 99.97                            |
| 14.5                           | 553,354                                      | 300                                   | 0.0005         | 0.9995        | 99.97                            |
| 15.5                           | 469,727                                      |                                       | 0.0000         | 1.0000        | 99.92                            |
| 16.5                           | 400,128                                      |                                       | 0.0000         | 1.0000        | 99.92                            |
| 17.5                           | 339,208                                      |                                       | 0.0000         | 1.0000        | 99.92                            |
| 18.5                           | 334,517                                      |                                       | 0.0000         | 1.0000        | 99.92                            |
| 19.5                           | 468,974                                      |                                       | 0.0000         | 1.0000        | 99.92                            |
| 20.5                           | 310,044                                      |                                       | 0.0000         | 1.0000        | 99.92                            |
| 21.5                           | 351,811                                      |                                       | 0.0000         | 1.0000        | 99.92                            |
| 22.5                           | 436,417                                      |                                       | 0.0000         | 1.0000        | 99.92                            |
| 23.5                           | 458,051                                      |                                       | 0.0000         | 1.0000        | 99.92                            |
| 24.5                           | 534,303                                      |                                       | 0.0000         | 1.0000        | 99.92                            |
| 25.5                           | 498,319                                      |                                       | 0.0000         | 1.0000        | 99.92                            |
| 26.5                           | 691,501                                      |                                       | 0.0000         | 1.0000        | 99.92                            |
| 27.5                           | 660,529                                      |                                       | 0.0000         | 1.0000        | 99.92                            |
| 28.5                           | 489,496                                      |                                       | 0.0000         | 1.0000        | 99.92                            |
| 29.5                           | 518,712                                      |                                       | 0.0000         | 1.0000        | 99.92                            |
| 30.5                           | 476,944                                      |                                       | 0.0000         | 1.0000        | 99.92                            |
| 31.5                           | 402,298                                      |                                       | 0.0000         | 1.0000        | 99.92                            |
| 32.5                           | 380,665                                      |                                       | 0.0000         | 1.0000        | 99.92                            |
| 33.5                           | 317,745                                      | 625                                   | 0.0020         | 0.9980        | 99.92                            |
| 34.5                           | 325,808                                      | 4,050                                 | 0.0124         | 0.9876        | 99.72                            |
| 35.5                           | 143,887                                      |                                       | 0.0000         | 1.0000        | 98.48                            |
| 36.5                           | 148,462                                      | 75                                    | 0.0005         | 0.9995        | 98.48                            |
| 37.5                           | 136,604                                      |                                       | 0.0000         | 1.0000        | 98.43                            |
| 38.5                           | 85,442                                       |                                       | 0.0000         | 1.0000        | 98.43                            |

## SUEZ WATER RHODE ISLAND

## ACCOUNT 333 SERVICES

## ORIGINAL LIFE TABLE, CONT.

## PLACEMENT BAND 1890-2016

## EXPERIENCE BAND 2008-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETM<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|--|---------------------------------------|---------------|---------------|----------------------------------|
| 39.5                           | 93,959                                       |                                       | 0.0000        | 1.0000        | 98.43                            |
| 40.5                           | 91,301                                       |                                       | 0.0000        | 1.0000        | 98.43                            |
| 41.5                           | 100,068                                      |                                       | 0.0000        | 1.0000        | 98.43                            |
| 42.5                           | 94,827                                       |                                       | 0.0000        | 1.0000        | 98.43                            |
| 43.5                           | 79,878                                       |                                       | 0.0000        | 1.0000        | 98.43                            |
| 44.5                           | 80,347                                       | 550                                   | 0.0068        | 0.9932        | 98.43                            |
| 45.5                           | 73,690                                       |                                       | 0.0000        | 1.0000        | 97.76                            |
| 46.5                           | 74,560                                       |                                       | 0.0000        | 1.0000        | 97.76                            |
| 47.5                           | 74,972                                       |                                       | 0.0000        | 1.0000        | 97.76                            |
| 48.5                           | 71,522                                       | 50                                    | 0.0007        | 0.9993        | 97.76                            |
| 49.5                           | 69,348                                       |                                       | 0.0000        | 1.0000        | 97.69                            |
| 50.5                           | 62,773                                       |                                       | 0.0000        | 1.0000        | 97.69                            |
| 51.5                           | 58,716                                       | 100                                   | 0.0017        | 0.9983        | 97.69                            |
| 52.5                           | 53,915                                       | 100                                   | 0.0019        | 0.9981        | 97.53                            |
| 53.5                           | 44,793                                       |                                       | 0.0000        | 1.0000        | 97.34                            |
| 54.5                           | 39,721                                       |                                       | 0.0000        | 1.0000        | 97.34                            |
| 55.5                           | 35,570                                       | 125                                   | 0.0035        | 0.9965        | 97.34                            |
| 56.5                           | 28,381                                       | 750                                   | 0.0264        | 0.9736        | 97.00                            |
| 57.5                           | 32,861                                       |                                       | 0.0000        | 1.0000        | 94.44                            |
| 58.5                           | 32,737                                       |                                       | 0.0000        | 1.0000        | 94.44                            |
| 59.5                           | 33,241                                       |                                       | 0.0000        | 1.0000        | 94.44                            |
| 60.5                           | 32,766                                       | 200                                   | 0.0061        | 0.9939        | 94.44                            |
| 61.5                           | 32,206                                       | 250                                   | 0.0078        | 0.9922        | 93.86                            |
| 62.5                           | 29,598                                       |                                       | 0.0000        | 1.0000        | 93.13                            |
| 63.5                           | 27,320                                       |                                       | 0.0000        | 1.0000        | 93.13                            |
| 64.5                           | 24,389                                       |                                       | 0.0000        | 1.0000        | 93.13                            |
| 65.5                           | 21,947                                       |                                       | 0.0000        | 1.0000        | 93.13                            |
| 66.5                           | 12,923                                       |                                       | 0.0000        | 1.0000        | 93.13                            |
| 67.5                           | 8,386  |                                       | 0.0000        | 1.0000        | 93.13                            |
| 68.5                           | 6,576  |                                       | 0.0000        | 1.0000        | 93.13                            |
| 69.5                           | 3,963  | 125                                   | 0.0315        | 0.9685        | 93.13                            |
| 70.5                           | 3,475  |                                       | 0.0000        | 1.0000        | 90.20                            |
| 71.5                           | 3,871  |                                       | 0.0000        | 1.0000        | 90.20                            |
| 72.5                           | 3,692  |                                       | 0.0000        | 1.0000        | 90.20                            |
| 73.5                           | 3,743  |                                       | 0.0000        | 1.0000        | 90.20                            |
| 74.5                           | 4,273  |                                       | 0.0000        | 1.0000        | 90.20                            |
| 75.5                           | 4,406  |                                       | 0.0000        | 1.0000        | 90.20                            |
| 76.5                           | 4,998  |                                       | 0.0000        | 1.0000        | 90.20                            |
| 77.5                           | 5,190  |                                       | 0.0000        | 1.0000        | 90.20                            |
| 78.5                           | 6,318  |                                       | 0.0000        | 1.0000        | 90.20                            |

SUEZ WATER RHODE ISLAND

ACCOUNT 333 SERVICES

ORIGINAL LIFE TABLE, CONT.

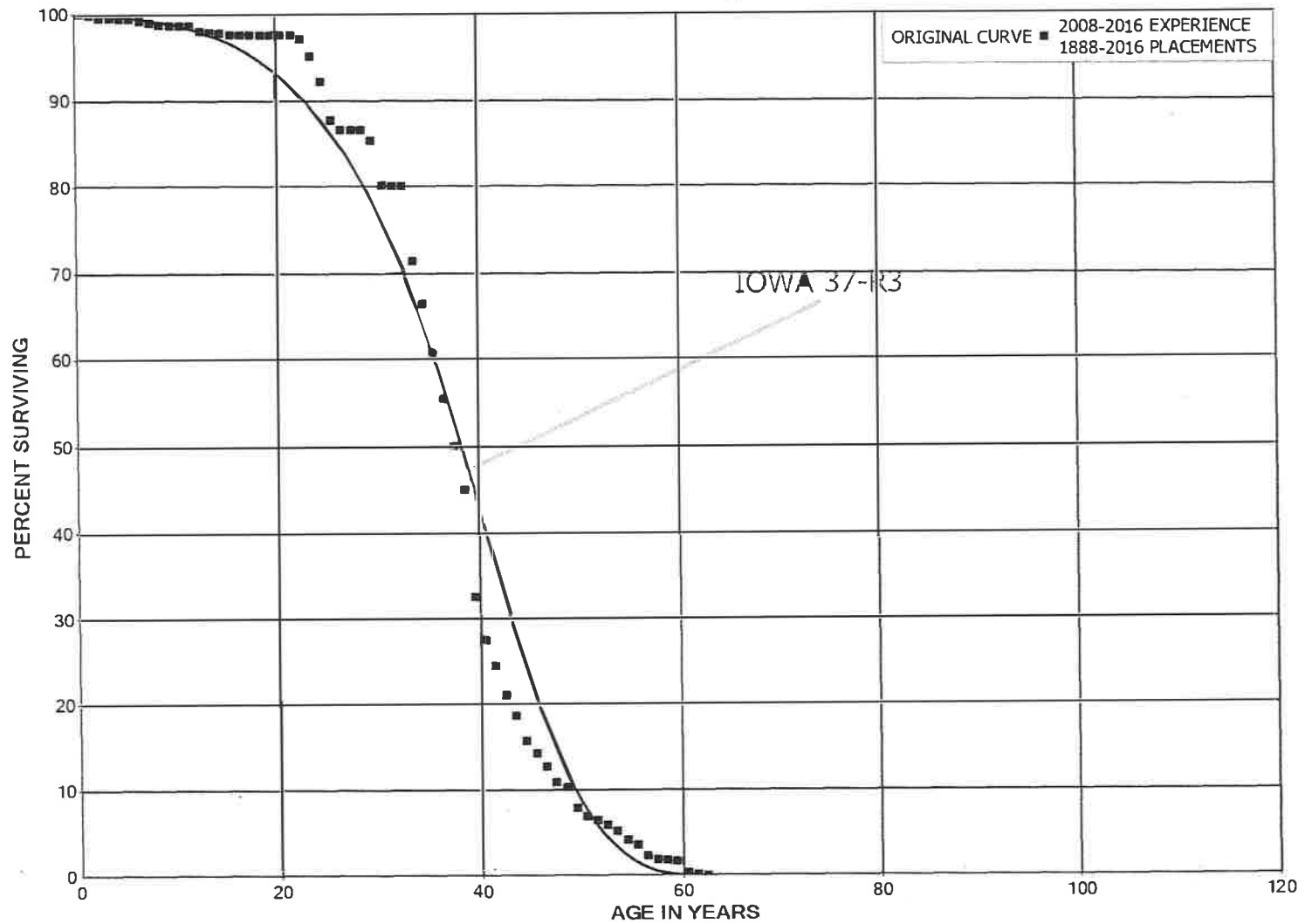
PLACEMENT BAND 1890-2016

EXPERIENCE BAND 2008-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|--|---------------------------------------|----------------|---------------|----------------------------------|
| 79.5                           | 7,130  |                                       | 0.0000         | 1.0000        | 90.20                            |
| 80.5                           | 9,069  |                                       | 0.0000         | 1.0000        | 90.20                            |
| 81.5                           | 9,651  | 150                                   | 0.0155         | 0.9845        | 90.20                            |
| 82.5                           | 10,727                                       | 549                                   | 0.0512         | 0.9488        | 88.79                            |
| 83.5                           | 11,718                                       | 300                                   | 0.0256         | 0.9744        | 84.25                            |
| 84.5                           | 11,746                                       |                                       | 0.0000         | 1.0000        | 82.09                            |
| 85.5                           | 11,223                                       | 130                                   | 0.0116         | 0.9884        | 82.09                            |
| 86.5                           | 11,043                                       |                                       | 0.0000         | 1.0000        | 81.14                            |
| 87.5                           | 10,576                                       |                                       | 0.0000         | 1.0000        | 81.14                            |
| 88.5                           | 9,305  |                                       | 0.0000         | 1.0000        | 81.14                            |
| 89.5                           | 6,742  | 100                                   | 0.0148         | 0.9852        | 81.14                            |
| 90.5                           | 6,263  |                                       | 0.0000         | 1.0000        | 79.94                            |
| 91.5                           | 5,419  |                                       | 0.0000         | 1.0000        | 79.94                            |
| 92.5                           | 4,179  |                                       | 0.0000         | 1.0000        | 79.94                            |
| 93.5                           | 3,197  |                                       | 0.0000         | 1.0000        | 79.94                            |
| 94.5                           | 2,709  |                                       | 0.0000         | 1.0000        | 79.94                            |
| 95.5                           | 1,982  |                                       | 0.0000         | 1.0000        | 79.94                            |
| 96.5                           | 1,403  |                                       | 0.0000         | 1.0000        | 79.94                            |
| 97.5                           | 1,072  |                                       | 0.0000         | 1.0000        | 79.94                            |
| 98.5                           | 951  |                                       | 0.0000         | 1.0000        | 79.94                            |
| 99.5                           | 683  |                                       | 0.0000         | 1.0000        | 79.94                            |
| 100.5                          |  |                                       |                |               | 79.94                            |
| 101.5                          |  |                                       |                |               |                                  |
| 102.5                          |  |                                       |                |               |                                  |
| 103.5                          |  |                                       |                |               |                                  |
| 104.5                          |  |                                       |                |               |                                  |
| 105.5                          |  |                                       |                |               |                                  |
| 106.5                          |  |                                       |                |               |                                  |
| 107.5                          | 50   |                                       | 0.0000         |               |                                  |
| 108.5                          | 50   |                                       | 0.0000         |               |                                  |
| 109.5                          | 50   | 50                                    | 1.0000         |               |                                  |
| 110.5                          |  |                                       |                |               |                                  |
| 111.5                          |  |                                       |                |               |                                  |
| 112.5                          |  |                                       |                |               |                                  |
| 113.5                          |  |                                       |                |               |                                  |
| 114.5                          |  |                                       |                |               |                                  |
| 115.5                          |  |                                       |                |               |                                  |
| 116.5                          |  |                                       |                |               |                                  |
| 117.5                          | 50   |                                       | 0.0000         |               |                                  |
| 118.5                          | 50   |                                       | 0.0000         |               |                                  |
| 119.5                          | 50   | 50                                    | 1.0000         |               |                                  |
| 120.5                          |  |                                       |                |               |                                  |



SUEZ WATER RHODE ISLAND  
ACCOUNT 334 METER AND METER INSTALLATIONS  
ORIGINAL AND SMOOTH SURVIVOR CURVES



SUEZ WATER RHODE ISLAND  
ACCOUNT 334 METER AND METER INSTALLATIONS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1888-2016

EXPERIENCE BAND 2008-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|--|---------------------------------------|----------------|---------------|----------------------------------|
| 0.0                            | 1,439,174                                    | 416                                   | 0.0003         | 0.9997        | 100.00                           |
| 0.5                            | 1,458,181                                    | 2,160                                 | 0.0015         | 0.9985        | 99.97                            |
| 1.5                            | 1,351,050                                    | 3,704                                 | 0.0027         | 0.9973        | 99.82                            |
| 2.5                            | 1,335,984                                    | 396                                   | 0.0003         | 0.9997        | 99.55                            |
| 3.5                            | 1,371,422                                    | 1,536                                 | 0.0011         | 0.9989        | 99.52                            |
| 4.5                            | 1,268,119                                    | 766                                   | 0.0006         | 0.9994        | 99.41                            |
| 5.5                            | 1,233,659                                    | 1,965                                 | 0.0016         | 0.9984        | 99.35                            |
| 6.5                            | 1,169,627                                    | 3,420                                 | 0.0029         | 0.9971        | 99.19                            |
| 7.5                            | 1,166,832                                    | 2,430                                 | 0.0021         | 0.9979        | 98.90                            |
| 8.5                            | 880,892                                      | 1,075                                 | 0.0012         | 0.9988        | 98.69                            |
| 9.5                            | 695,473                                      | 20                                    | 0.0000         | 1.0000        | 98.57                            |
| 10.5                           | 617,332                                      | 20                                    | 0.0000         | 1.0000        | 98.57                            |
| 11.5                           | 577,184                                      | 3,312                                 | 0.0057         | 0.9943        | 98.57                            |
| 12.5                           | 497,916                                      | 618                                   | 0.0012         | 0.9988        | 98.00                            |
| 13.5                           | 495,379                                      | 1,025                                 | 0.0021         | 0.9979        | 97.88                            |
| 14.5                           | 506,529                                      | 990                                   | 0.0020         | 0.9980        | 97.68                            |
| 15.5                           | 513,451                                      |                                       | 0.0000         | 1.0000        | 97.49                            |
| 16.5                           | 484,256                                      |                                       | 0.0000         | 1.0000        | 97.49                            |
| 17.5                           | 480,514                                      |                                       | 0.0000         | 1.0000        | 97.49                            |
| 18.5                           | 487,582                                      | 140                                   | 0.0003         | 0.9997        | 97.49                            |
| 19.5                           | 484,988                                      |                                       | 0.0000         | 1.0000        | 97.46                            |
| 20.5                           | 417,008                                      |                                       | 0.0000         | 1.0000        | 97.46                            |
| 21.5                           | 382,600                                      | 1,389                                 | 0.0036         | 0.9964        | 97.46                            |
| 22.5                           | 351,582                                      | 7,392                                 | 0.0210         | 0.9790        | 97.10                            |
| 23.5                           | 294,721                                      | 8,842                                 | 0.0300         | 0.9700        | 95.06                            |
| 24.5                           | 252,488                                      | 12,404                                | 0.0491         | 0.9509        | 92.21                            |
| 25.5                           | 202,632                                      | 2,437                                 | 0.0120         | 0.9880        | 87.68                            |
| 26.5                           | 193,627                                      |                                       | 0.0000         | 1.0000        | 86.63                            |
| 27.5                           | 185,855                                      | 114                                   | 0.0006         | 0.9994        | 86.63                            |
| 28.5                           | 176,967                                      | 2,380                                 | 0.0134         | 0.9866        | 86.57                            |
| 29.5                           | 170,421                                      | 10,506                                | 0.0616         | 0.9384        | 85.41                            |
| 30.5                           | 149,139                                      | 60                                    | 0.0004         | 0.9996        | 80.14                            |
| 31.5                           | 144,792                                      | 80                                    | 0.0006         | 0.9994        | 80.11                            |
| 32.5                           | 166,560                                      | 17,993                                | 0.1080         | 0.8920        | 80.07                            |
| 33.5                           | 139,650                                      | 9,698                                 | 0.0694         | 0.9306        | 71.42                            |
| 34.5                           | 125,118                                      | 10,494                                | 0.0839         | 0.9161        | 66.46                            |
| 35.5                           | 108,139                                      | 9,512                                 | 0.0880         | 0.9120        | 60.88                            |
| 36.5                           | 94,745                                       | 9,299                                 | 0.0981         | 0.9019        | 55.53                            |
| 37.5                           | 81,453                                       | 8,412                                 | 0.1033         | 0.8967        | 50.08                            |
| 38.5                           | 70,445                                       | 19,371                                | 0.2750         | 0.7250        | 44.91                            |

SUEZ WATER RHODE ISLAND

ACCOUNT 334 METER AND METER INSTALLATIONS

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1888-2016       |  |                                       | EXPERIENCE BAND 2008-2016 |               |                                  |
|--------------------------------|--|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 39.5                           | 50,834                                       | 7,910                                 | 0.1556                    | 0.8444        | 32.56                            |
| 40.5                           | 39,536                                       | 4,281                                 | 0.1083                    | 0.8917        | 27.49                            |
| 41.5                           | 38,248                                       | 5,360                                 | 0.1401                    | 0.8599        | 24.52                            |
| 42.5                           | 38,250                                       | 4,489                                 | 0.1174                    | 0.8826        | 21.08                            |
| 43.5                           | 36,302                                       | 5,623                                 | 0.1549                    | 0.8451        | 18.61                            |
| 44.5                           | 33,830                                       | 2,978                                 | 0.0880                    | 0.9120        | 15.72                            |
| 45.5                           | 35,056                                       | 3,893                                 | 0.1111                    | 0.8889        | 14.34                            |
| 46.5                           | 35,264                                       | 5,285                                 | 0.1499                    | 0.8501        | 12.75                            |
| 47.5                           | 34,681                                       | 1,659                                 | 0.0478                    | 0.9522        | 10.84                            |
| 48.5                           | 37,484                                       | 8,981                                 | 0.2396                    | 0.7604        | 10.32                            |
| 49.5                           | 41,049                                       | 5,362                                 | 0.1306                    | 0.8694        | 7.85                             |
| 50.5                           | 36,365                                       | 2,541                                 | 0.0699                    | 0.9301        | 6.82                             |
| 51.5                           | 35,199                                       | 3,131                                 | 0.0890                    | 0.9110        | 6.34                             |
| 52.5                           | 32,749                                       | 4,204                                 | 0.1284                    | 0.8716        | 5.78                             |
| 53.5                           | 39,106                                       | 7,784                                 | 0.1991                    | 0.8009        | 5.04                             |
| 54.5                           | 33,572                                       | 4,253                                 | 0.1267                    | 0.8733        | 4.04                             |
| 55.5                           | 29,319                                       | 10,098                                | 0.3444                    | 0.6556        | 3.52                             |
| 56.5                           | 19,220                                       | 3,754                                 | 0.1953                    | 0.8047        | 2.31                             |
| 57.5                           | 15,466                                       | 1,453                                 | 0.0940                    | 0.9060        | 1.86                             |
| 58.5                           | 14,013                                       | 582                                   | 0.0415                    | 0.9585        | 1.68                             |
| 59.5                           | 13,431                                       | 11,036                                | 0.8217                    | 0.1783        | 1.61                             |
| 60.5                           | 2,395  | 2,297                                 | 0.9592                    | 0.0408        | 0.29                             |
| 61.5                           | 98   | 98                                    | 1.0000                    |               | 0.01                             |
| 62.5                           | 13,376                                       |                                       | 0.0000                    | 1.0000        |                                  |
| 63.5                           | 13,376                                       |                                       | 0.0000                    |               |                                  |
| 64.5                           | 13,376                                       |                                       | 0.0000                    |               |                                  |
| 65.5                           | 13,376                                       |                                       | 0.0000                    |               |                                  |
| 66.5                           | 13,376                                       |                                       | 0.0000                    |               |                                  |
| 67.5                           | 13,376                                       |                                       | 0.0000                    |               |                                  |
| 68.5                           | 13,376                                       | 13,376                                | 1.0000                    |               |                                  |
| 69.5                           |  |                                       |                           |               |                                  |
| 70.5                           | 2,927  |                                       | 0.0000                    |               |                                  |
| 71.5                           | 2,927  |                                       | 0.0000                    |               |                                  |
| 72.5                           | 2,927  |                                       | 0.0000                    |               |                                  |
| 73.5                           | 2,927  |                                       | 0.0000                    |               |                                  |
| 74.5                           | 2,927  |                                       | 0.0000                    |               |                                  |
| 75.5                           | 2,927  |                                       | 0.0000                    |               |                                  |
| 76.5                           | 2,927  | 2,927                                 | 1.0000                    |               |                                  |
| 77.5                           |  |                                       |                           |               |                                  |
| 78.5                           |  |                                       |                           |               |                                  |



SUEZ WATER RHODE ISLAND

ACCOUNT 334 METER AND METER INSTALLATIONS

ORIGINAL LIFE TABLE, CONT.

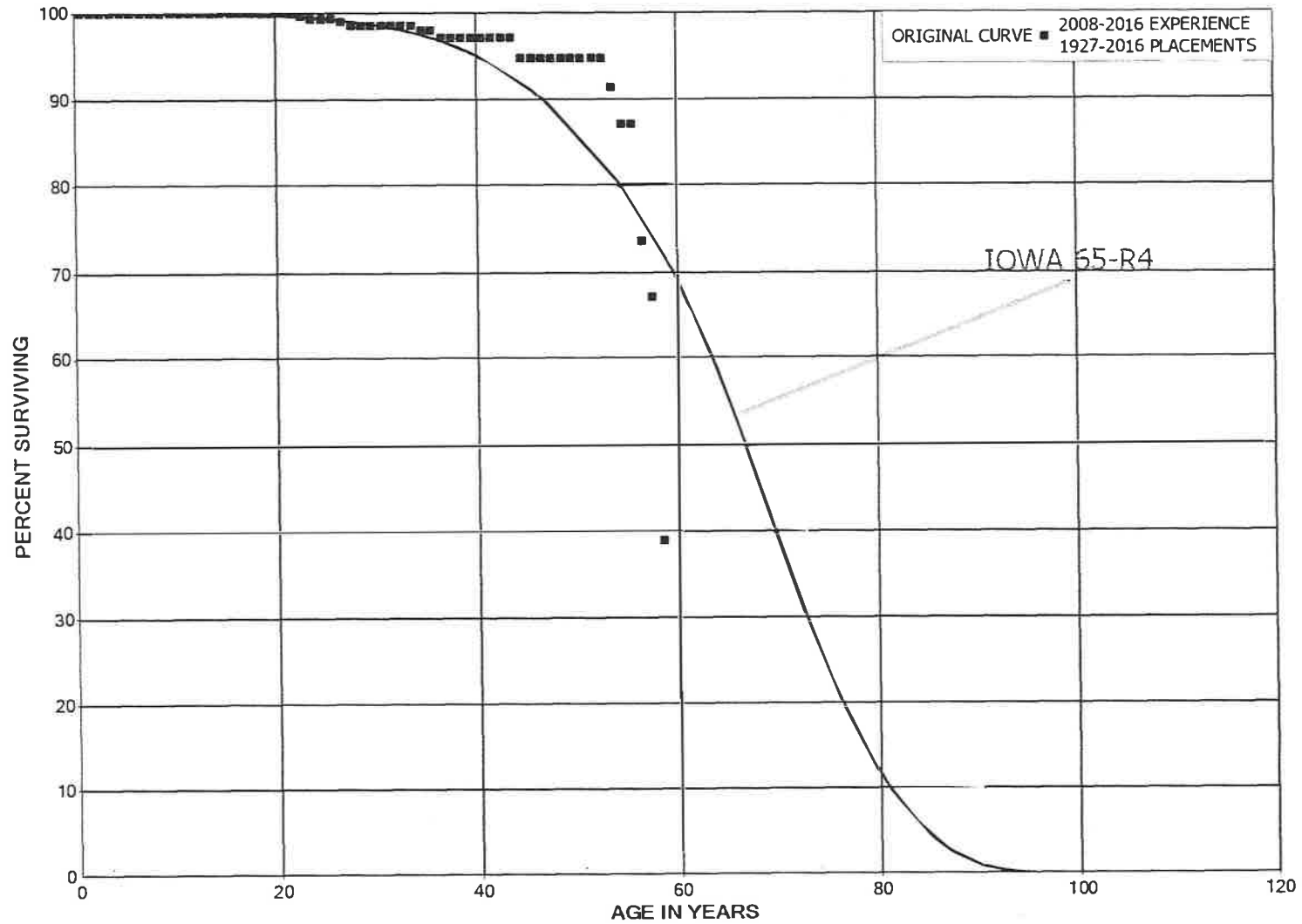
PLACEMENT BAND 1888-2016

EXPERIENCE BAND 2008-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|--|---------------------------------------|----------------|---------------|----------------------------------|
| 79.5                           | 5,233  |                                       | 0.0000         |               |                                  |
| 80.5                           | 5,233  |                                       | 0.0000         |               |                                  |
| 81.5                           | 5,233  |                                       | 0.0000         |               |                                  |
| 82.5                           | 5,233  |                                       | 0.0000         |               |                                  |
| 83.5                           | 5,233  |                                       | 0.0000         |               |                                  |
| 84.5                           | 5,233  |                                       | 0.0000         |               |                                  |
| 85.5                           | 5,233  | 5,233                                 | 1.0000         |               |                                  |
| 86.5                           |  |                                       |                |               |                                  |
| 87.5                           |  |                                       |                |               |                                  |
| 88.5                           |  |                                       |                |               |                                  |
| 89.5                           |  |                                       |                |               |                                  |
| 90.5                           |  |                                       |                |               |                                  |
| 91.5                           |  |                                       |                |               |                                  |
| 92.5                           |  |                                       |                |               |                                  |
| 93.5                           |  |                                       |                |               |                                  |
| 94.5                           |  |                                       |                |               |                                  |
| 95.5                           |  |                                       |                |               |                                  |
| 96.5                           |  |                                       |                |               |                                  |
| 97.5                           | 782  |                                       | 0.0000         |               |                                  |
| 98.5                           | 782  |                                       | 0.0000         |               |                                  |
| 99.5                           | 782  |                                       | 0.0000         |               |                                  |
| 100.5                          | 782  |                                       | 0.0000         |               |                                  |
| 101.5                          | 782  |                                       | 0.0000         |               |                                  |
| 102.5                          | 782  |                                       | 0.0000         |               |                                  |
| 103.5                          | 782  | 782                                   | 1.0000         |               |                                  |
| 104.5                          |  |                                       |                |               |                                  |



SUEZ WATER RHODE ISLAND  
ACCOUNT 335 HYDRANTS  
ORIGINAL AND SMOOTH SURVIVOR CURVES



SUEZ WATER RHODE ISLAND

ACCOUNT 335 HYDRANTS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1927-2016

EXPERIENCE BAND 2008-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|--|---------------------------------------|----------------|---------------|----------------------------------|
| 0.0                            | 327,459                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 0.5                            | 325,687                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 1.5                            | 258,437                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 2.5                            | 254,893                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 3.5                            | 214,729                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 4.5                            | 188,701                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 5.5                            | 191,689                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 6.5                            | 190,635                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 7.5                            | 181,236                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 8.5                            | 173,317                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 9.5                            | 149,830                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 10.5                           | 149,154                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 11.5                           | 142,377                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 12.5                           | 143,698                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 13.5                           | 134,045                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 14.5                           | 112,352                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 15.5                           | 99,444                                       |                                       | 0.0000         | 1.0000        | 100.00                           |
| 16.5                           | 111,234                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 17.5                           | 130,186                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 18.5                           | 135,476                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 19.5                           | 161,809                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 20.5                           | 153,547                                      |                                       | 0.0000         | 1.0000        | 100.00                           |
| 21.5                           | 183,554                                      | 785                                   | 0.0043         | 0.9957        | 100.00                           |
| 22.5                           | 244,921                                      | 800                                   | 0.0033         | 0.9967        | 99.57                            |
| 23.5                           | 286,826                                      |                                       | 0.0000         | 1.0000        | 99.25                            |
| 24.5                           | 302,878                                      |                                       | 0.0000         | 1.0000        | 99.25                            |
| 25.5                           | 306,499                                      | 780                                   | 0.0025         | 0.9975        | 99.25                            |
| 26.5                           | 300,253                                      | 1,434                                 | 0.0048         | 0.9952        | 98.99                            |
| 27.5                           | 307,585                                      |                                       | 0.0000         | 1.0000        | 98.52                            |
| 28.5                           | 275,796                                      |                                       | 0.0000         | 1.0000        | 98.52                            |
| 29.5                           | 280,158                                      |                                       | 0.0000         | 1.0000        | 98.52                            |
| 30.5                           | 256,290                                      |                                       | 0.0000         | 1.0000        | 98.52                            |
| 31.5                           | 187,594                                      |                                       | 0.0000         | 1.0000        | 98.52                            |
| 32.5                           | 142,782                                      |                                       | 0.0000         | 1.0000        | 98.52                            |
| 33.5                           | 119,461                                      | 740                                   | 0.0062         | 0.9938        | 98.52                            |
| 34.5                           | 100,350                                      |                                       | 0.0000         | 1.0000        | 97.91                            |
| 35.5                           | 84,490                                       | 740                                   | 0.0088         | 0.9912        | 97.91                            |
| 36.5                           | 69,201                                       |                                       | 0.0000         | 1.0000        | 97.05                            |
| 37.5                           | 64,736                                       |                                       | 0.0000         | 1.0000        | 97.05                            |
| 38.5                           | 44,420                                       |                                       | 0.0000         | 1.0000        | 97.05                            |

SUEZ WATER RHODE ISLAND

ACCOUNT 335 HYDRANTS

ORIGINAL LIFE TABLE, CONT.

| PLACEMENT BAND 1927-2016       |  |                                       | EXPERIENCE BAND 2008-2016 |               |                                  |
|--------------------------------|--|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 39.5                           | 30,662                                       |                                       | 0.0000                    | 1.0000        | 97.05                            |
| 40.5                           | 31,931                                       |                                       | 0.0000                    | 1.0000        | 97.05                            |
| 41.5                           | 32,389                                       |                                       | 0.0000                    | 1.0000        | 97.05                            |
| 42.5                           | 38,120                                       |                                       | 0.0000                    | 1.0000        | 97.05                            |
| 43.5                           | 31,749                                       | 750                                   | 0.0236                    | 0.9764        | 97.05                            |
| 44.5                           | 27,670                                       |                                       | 0.0000                    | 1.0000        | 94.76                            |
| 45.5                           | 30,233                                       |                                       | 0.0000                    | 1.0000        | 94.76                            |
| 46.5                           | 34,886                                       |                                       | 0.0000                    | 1.0000        | 94.76                            |
| 47.5                           | 34,655                                       |                                       | 0.0000                    | 1.0000        | 94.76                            |
| 48.5                           | 33,711                                       |                                       | 0.0000                    | 1.0000        | 94.76                            |
| 49.5                           | 34,097                                       |                                       | 0.0000                    | 1.0000        | 94.76                            |
| 50.5                           | 29,896                                       |                                       | 0.0000                    | 1.0000        | 94.76                            |
| 51.5                           | 26,565                                       |                                       | 0.0000                    | 1.0000        | 94.76                            |
| 52.5                           | 23,326                                       | 851                                   | 0.0365                    | 0.9635        | 94.76                            |
| 53.5                           | 21,560                                       | 1,000                                 | 0.0464                    | 0.9536        | 91.30                            |
| 54.5                           | 16,516                                       |                                       | 0.0000                    | 1.0000        | 87.07                            |
| 55.5                           | 10,656                                       | 1,649                                 | 0.1547                    | 0.8453        | 87.07                            |
| 56.5                           | 5,763  | 500                                   | 0.0868                    | 0.9132        | 73.60                            |
| 57.5                           | 3,446  | 1,446                                 | 0.4197                    | 0.5803        | 67.21                            |
| 58.5                           |  |                                       |                           |               | 39.00                            |
| 59.5                           |  |                                       |                           |               |                                  |
| 60.5                           |  |                                       |                           |               |                                  |
| 61.5                           |  |                                       |                           |               |                                  |
| 62.5                           |  |                                       |                           |               |                                  |
| 63.5                           |  |                                       |                           |               |                                  |
| 64.5                           |  |                                       |                           |               |                                  |
| 65.5                           |  |                                       |                           |               |                                  |
| 66.5                           |  |                                       |                           |               |                                  |
| 67.5                           |  |                                       |                           |               |                                  |
| 68.5                           |  |                                       |                           |               |                                  |
| 69.5                           |  |                                       |                           |               |                                  |
| 70.5                           |  |                                       |                           |               |                                  |
| 71.5                           |  |                                       |                           |               |                                  |
| 72.5                           |  |                                       |                           |               |                                  |
| 73.5                           |  |                                       |                           |               |                                  |
| 74.5                           |  |                                       |                           |               |                                  |
| 75.5                           |  |                                       |                           |               |                                  |
| 76.5                           |  |                                       |                           |               |                                  |
| 77.5                           |  |                                       |                           |               |                                  |
| 78.5                           |  |                                       |                           |               |                                  |

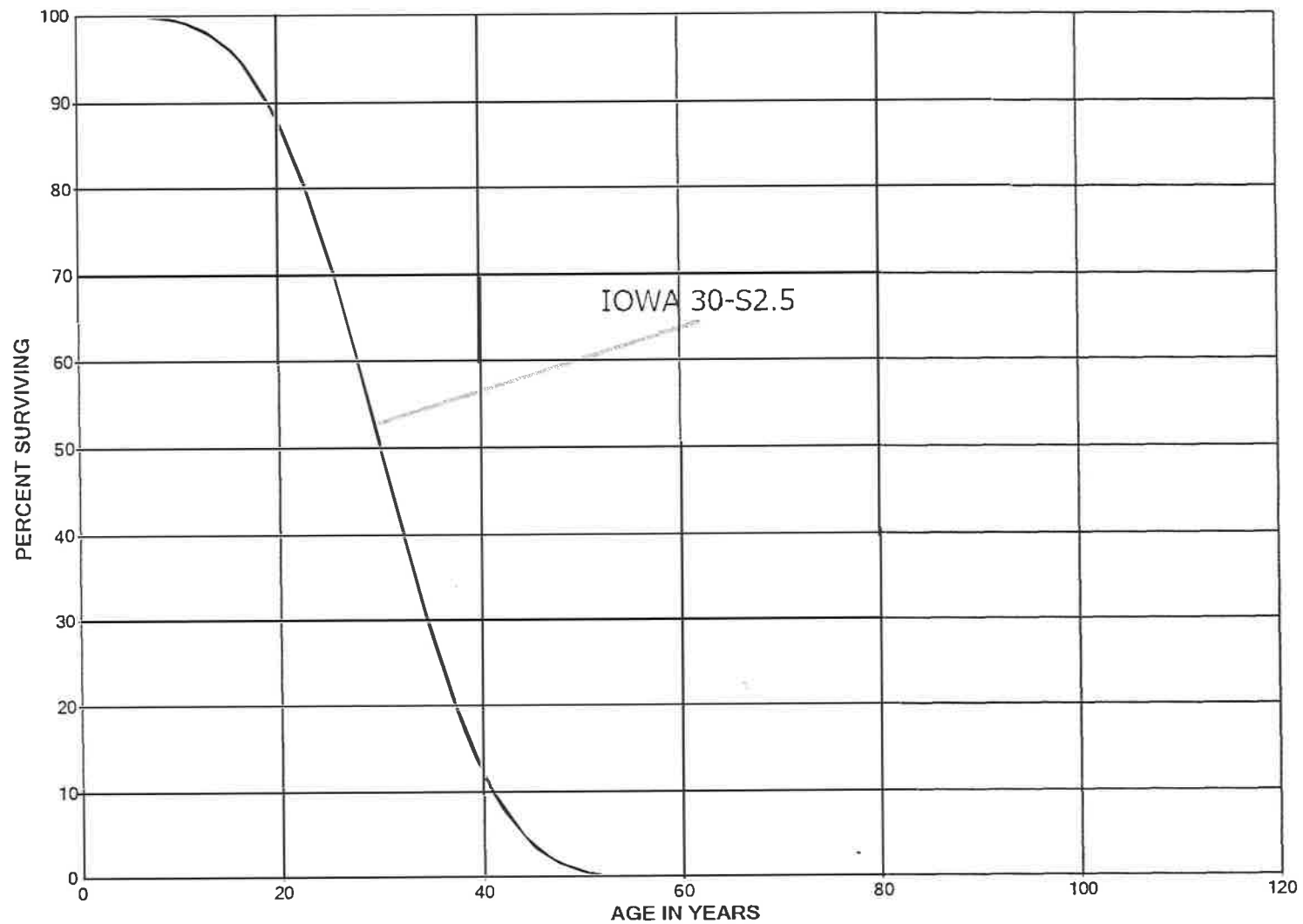
SUEZ WATER RHODE ISLAND

ACCOUNT 335 HYDRANTS

ORIGINAL LIFE TABLE, CONT.

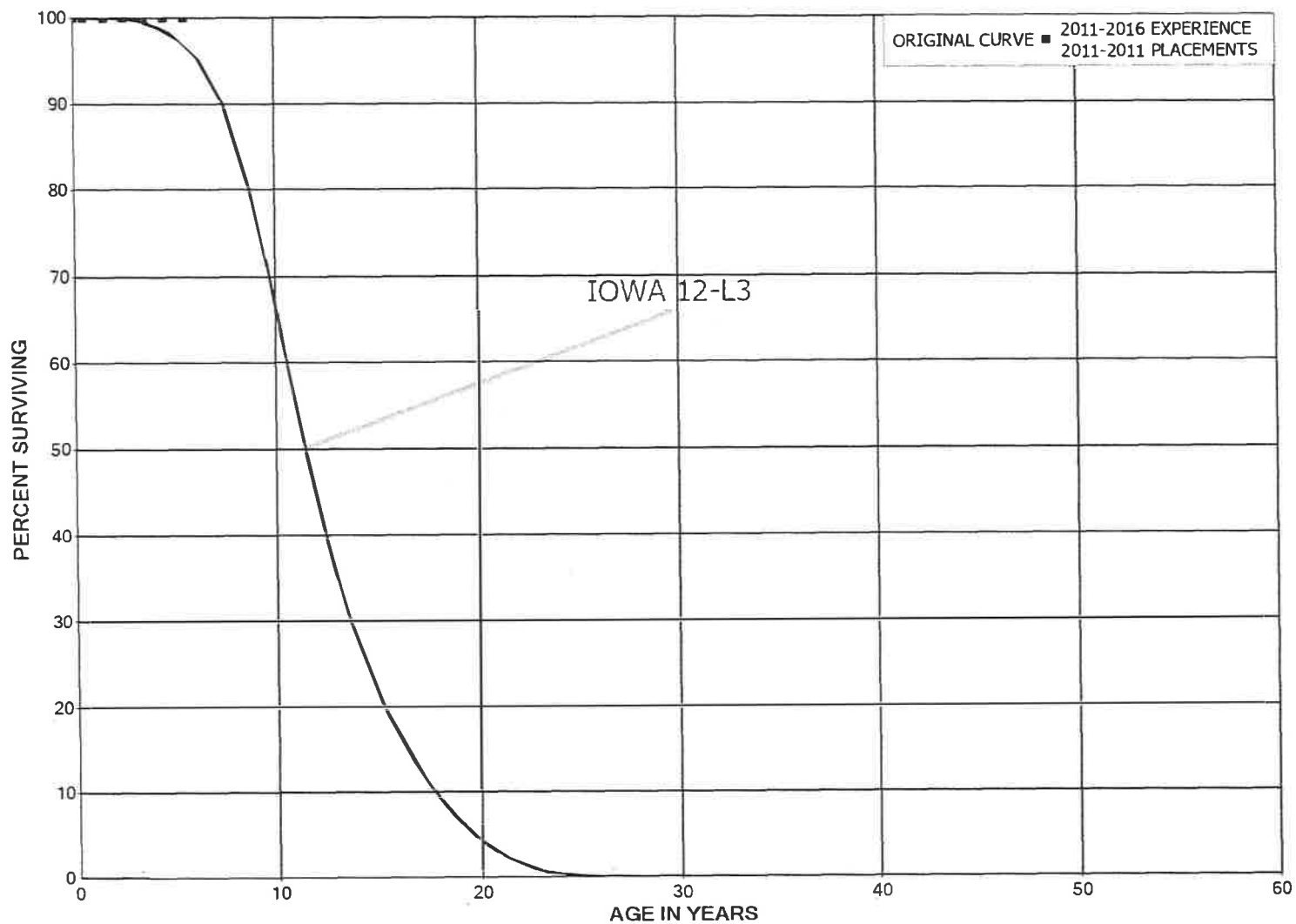
| PLACEMENT BAND 1927-2016       |  |                                       | EXPERIENCE BAND 2008-2016 |               |                                  |
|--------------------------------|--|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 79.5                           |  |                                       |                           |               |                                  |
| 80.5                           | 1,535  |                                       | 0.0000                    |               |                                  |
| 81.5                           | 1,535  |                                       | 0.0000                    |               |                                  |
| 82.5                           | 1,535  |                                       | 0.0000                    |               |                                  |
| 83.5                           | 1,535  |                                       | 0.0000                    |               |                                  |
| 84.5                           | 1,535  | 1,535                                 | 1.0000                    |               |                                  |
| 85.5                           |  |                                       |                           |               |                                  |

SUEZ WATER RHODE ISLAND  
ACCOUNT 339.2 MISCELLANEOUS INTANGIBLE PLANT - OTHER EQUIPMENT  
SMOOTH SURVIVOR CURVE





SUEZ WATER RHODE ISLAND  
ACCOUNT 341 TRANSPORTATION EQUIPMENT  
ORIGINAL AND SMOOTH SURVIVOR CURVES



SUEZ WATER RHODE ISLAND

ACCOUNT 341 TRANSPORTATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 2011-2011

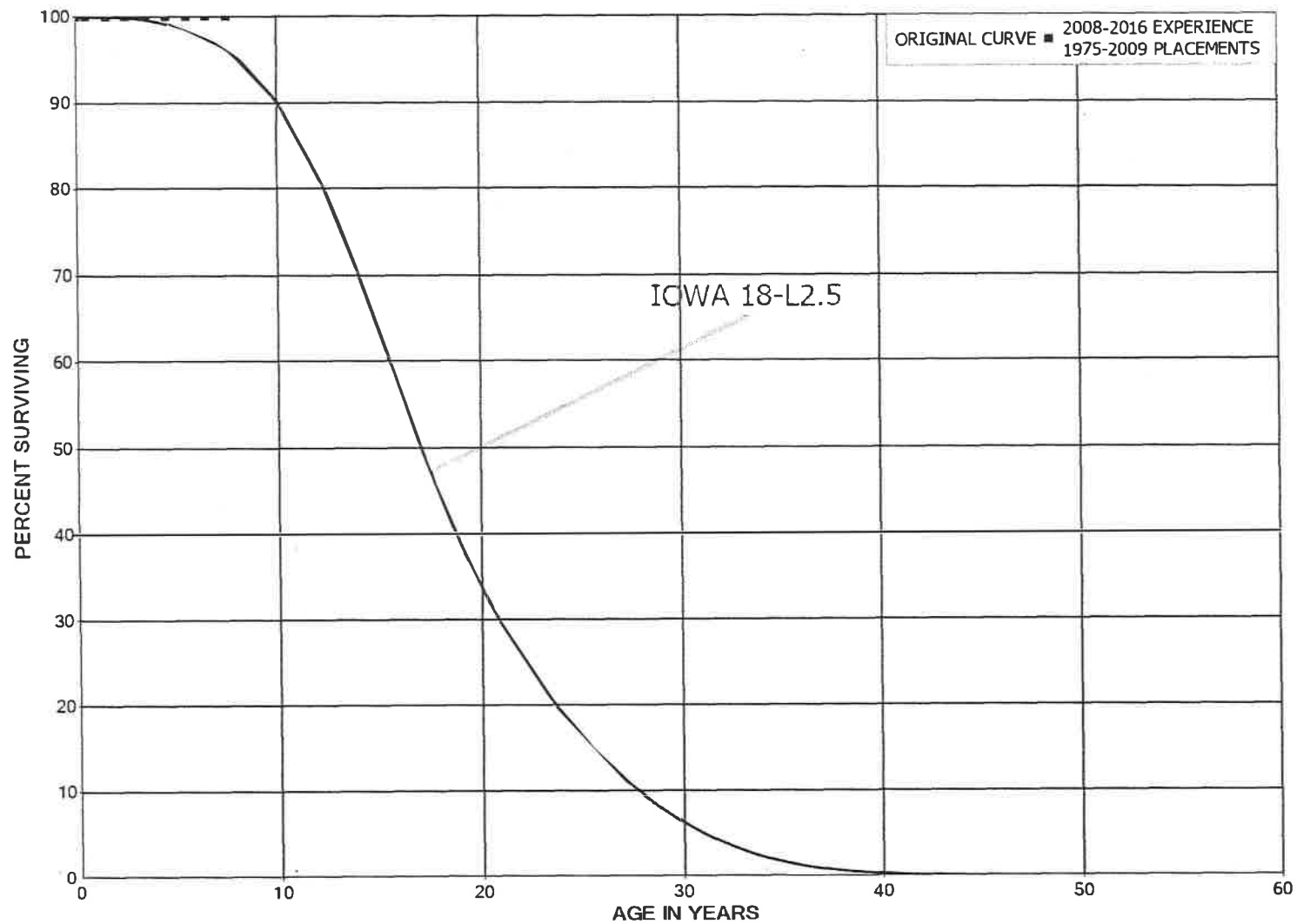
EXPERIENCE BAND 2011-2016

| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
|--------------------------------|--|---------------------------------------|----------------|---------------|----------------------------------|
| 0.0                            | 3,451  |                                       | 0.0000         | 1.0000        | 100.00                           |
| 0.5                            | 3,451  |                                       | 0.0000         | 1.0000        | 100.00                           |
| 1.5                            | 3,451  |                                       | 0.0000         | 1.0000        | 100.00                           |
| 2.5                            | 3,451  |                                       | 0.0000         | 1.0000        | 100.00                           |
| 3.5                            | 3,451  |                                       | 0.0000         | 1.0000        | 100.00                           |
| 4.5                            | 3,451  |                                       | 0.0000         | 1.0000        | 100.00                           |
| 5.5                            |  |                                       |                |               | 100.00                           |





SUEZ WATER RHODE ISLAND  
ACCOUNT 345 POWER OPERATED EQUIPMENT  
ORIGINAL AND SMOOTH SURVIVOR CURVES



SUEZ WATER RHODE ISLAND  
ACCOUNT 345 POWER OPERATED EQUIPMENT

ORIGINAL LIFE TABLE

| PLACEMENT BAND 1975-2009       |  |                                       | EXPERIENCE BAND 2008-2016 |               |                                  |
|--------------------------------|--|---------------------------------------|---------------------------|---------------|----------------------------------|
| AGE AT<br>BEGIN OF<br>INTERVAL | EXPOSURES AT<br>BEGINNING OF<br>AGE INTERVAL | RETIREMENTS<br>DURING AGE<br>INTERVAL | RETMT<br>RATIO            | SURV<br>RATIO | PCT SURV<br>BEGIN OF<br>INTERVAL |
| 0.0                            | 15,685                                       |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 0.5                            | 15,685                                       |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 1.5                            | 15,685                                       |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 2.5                            | 15,685                                       |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 3.5                            | 15,685                                       |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 4.5                            | 15,685                                       |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 5.5                            | 15,685                                       |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 6.5                            | 15,685                                       |                                       | 0.0000                    | 1.0000        | 100.00                           |
| 7.5                            |  |                                       |                           |               | 100.00                           |
| 8.5                            |  |                                       |                           |               |                                  |
| 9.5                            |  |                                       |                           |               |                                  |
| 10.5                           |  |                                       |                           |               |                                  |
| 11.5                           |  |                                       |                           |               |                                  |
| 12.5                           |  |                                       |                           |               |                                  |
| 13.5                           |  |                                       |                           |               |                                  |
| 14.5                           |  |                                       |                           |               |                                  |
| 15.5                           |  |                                       |                           |               |                                  |
| 16.5                           |  |                                       |                           |               |                                  |
| 17.5                           |  |                                       |                           |               |                                  |
| 18.5                           |  |                                       |                           |               |                                  |
| 19.5                           |  |                                       |                           |               |                                  |
| 20.5                           |  |                                       |                           |               |                                  |
| 21.5                           |  |                                       |                           |               |                                  |
| 22.5                           | 11,450                                       |                                       | 0.0000                    |               |                                  |
| 23.5                           | 11,450                                       | 11,450                                | 1.0000                    |               |                                  |
| 24.5                           |  |                                       |                           |               |                                  |
| 25.5                           |  |                                       |                           |               |                                  |
| 26.5                           |  |                                       |                           |               |                                  |
| 27.5                           | 13,400                                       |                                       | 0.0000                    |               |                                  |
| 28.5                           | 13,400                                       | 13,400                                | 1.0000                    |               |                                  |
| 29.5                           |  |                                       |                           |               |                                  |
| 30.5                           |  |                                       |                           |               |                                  |
| 31.5                           |  |                                       |                           |               |                                  |
| 32.5                           | 10,650                                       |                                       | 0.0000                    |               |                                  |
| 33.5                           | 10,650                                       | 10,650                                | 1.0000                    |               |                                  |
| 34.5                           |  |                                       |                           |               |                                  |

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## **PART VIII. NET SALVAGE STATISTICS**

SUEZ WATER RHODE ISLAND

ACCOUNTS 304.1 THROUGH 304.5 STRUCTURES AND IMPROVEMENTS

SUMMARY OF BOOK SALVAGE

| YEAR                       | REGULAR<br>RETIREMENTS | COST OF<br>REMOVAL<br>AMOUNT | PCT | GROSS<br>SALVAGE<br>AMOUNT | PCT | NET<br>SALVAGE<br>AMOUNT | PCT |
|----------------------------|------------------------|------------------------------|-----|----------------------------|-----|--------------------------|-----|
| 2009                       | 5,837                  |                              | 0   |                            | 0   |                          | 0   |
| 2010                       |                        |                              |     |                            |     |                          |     |
| 2011                       |                        |                              |     |                            |     |                          |     |
| 2012                       |                        |                              |     |                            |     |                          |     |
| 2013                       |                        |                              |     |                            |     |                          |     |
| 2014                       | 3,967                  |                              | 0   |                            | 0   |                          | 0   |
| 2015                       | 4,068                  |                              | 0   |                            | 0   |                          | 0   |
| 2016                       |                        |                              |     |                            |     |                          |     |
| TOTAL                      | 13,871                 |                              | 0   |                            | 0   |                          | 0   |
| THREE-YEAR MOVING AVERAGES |                        |                              |     |                            |     |                          |     |
| 09-11                      | 1,946                  |                              | 0   |                            | 0   |                          | 0   |
| 10-12                      |                        |                              |     |                            |     |                          |     |
| 11-13                      |                        |                              |     |                            |     |                          |     |
| 12-14                      | 1,322                  |                              | 0   |                            | 0   |                          | 0   |
| 13-15                      | 2,678                  |                              | 0   |                            | 0   |                          | 0   |
| 14-16                      | 2,678                  |                              | 0   |                            | 0   |                          | 0   |
| FIVE-YEAR AVERAGE          |                        |                              |     |                            |     |                          |     |
| 12-16                      | 1,607                  |                              | 0   |                            | 0   |                          | 0   |

SUEZ WATER RHODE ISLAND  
ACCOUNT 307 WELLS AND SPRINGS

SUMMARY OF BOOK SALVAGE

| YEAR                       | REGULAR<br>RETIREMENTS | COST OF<br>REMOVAL<br>AMOUNT | PCT | GROSS<br>SALVAGE<br>AMOUNT | PCT | NET<br>SALVAGE<br>AMOUNT | PCT |
|----------------------------|------------------------|------------------------------|-----|----------------------------|-----|--------------------------|-----|
| 2013                       | 4,250                  |                              | 0   |                            | 0   |                          | 0   |
| 2014                       | 10,000                 |                              | 0   |                            | 0   |                          | 0   |
| 2015                       | 57,577                 |                              | 0   |                            | 0   |                          | 0   |
| 2016                       |                        |                              |     |                            |     |                          |     |
| TOTAL                      | 71,827                 |                              | 0   |                            | 0   |                          | 0   |
| THREE-YEAR MOVING AVERAGES |                        |                              |     |                            |     |                          |     |
| 13-15                      | 23,942                 |                              | 0   |                            | 0   |                          | 0   |
| 14-16                      | 22,526                 |                              | 0   |                            | 0   |                          | 0   |

SUEZ WATER RHODE ISLAND  
ACCOUNT 311 PUMPING EQUIPMENT

SUMMARY OF BOOK SALVAGE

| YEAR                       | REGULAR<br>RETIREMENTS | COST OF<br>REMOVAL<br>AMOUNT | PCT | GROSS<br>SALVAGE<br>AMOUNT | PCT | NET<br>SALVAGE<br>AMOUNT | PCT |
|----------------------------|------------------------|------------------------------|-----|----------------------------|-----|--------------------------|-----|
| 2012                       | 8,000                  |                              | 0   |                            | 0   |                          | 0   |
| 2013                       | 15,029                 |                              | 0   |                            | 0   |                          | 0   |
| 2014                       | 15,380                 | 3,244                        | 21  |                            | 0   | 3,244-                   | 21- |
| 2015                       | 16,683                 |                              | 0   |                            | 0   |                          | 0   |
| 2016                       | 21,465                 | 1,124                        | 5   |                            | 0   | 1,124-                   | 5-  |
| TOTAL                      | 76,557                 | 4,368                        | 6   |                            | 0   | 4,368-                   | 6-  |
| THREE-YEAR MOVING AVERAGES |                        |                              |     |                            |     |                          |     |
| 12-14                      | 12,803                 | 1,081                        | 8   |                            | 0   | 1,081-                   | 8-  |
| 13-15                      | 15,697                 | 1,081                        | 7   |                            | 0   | 1,081-                   | 7-  |
| 14-16                      | 17,843                 | 1,456                        | 8   |                            | 0   | 1,456-                   | 8-  |
| FIVE-YEAR AVERAGE          |                        |                              |     |                            |     |                          |     |
| 12-16                      | 15,311                 | 874                          | 6   |                            | 0   | 874-                     | 6-  |

SUEZ WATER RHODE ISLAND

ACCOUNT 320 WATER TREATMENT EQUIPMENT

SUMMARY OF BOOK SALVAGE

| YEAR  | REGULAR<br>RETIREMENTS | COST OF<br>REMOVAL<br>AMOUNT | PCT | GROSS<br>SALVAGE<br>AMOUNT | PCT | NET<br>SALVAGE<br>AMOUNT | PCT |
|-------|------------------------|------------------------------|-----|----------------------------|-----|--------------------------|-----|
| 2009  | 2,500                  |                              | 0   |                            | 0   |                          | 0   |
| 2010  |                        |                              |     |                            |     |                          |     |
| 2011  | 2,838                  |                              | 0   |                            | 0   |                          | 0   |
| 2012  | 8,867                  |                              | 0   |                            | 0   |                          | 0   |
| 2013  | 5,167                  |                              | 0   |                            | 0   |                          | 0   |
| 2014  | 3,000                  |                              | 0   |                            | 0   |                          | 0   |
| 2015  | 3,080                  |                              | 0   |                            | 0   |                          | 0   |
| 2016  | 750                    | 1                            | 0   |                            | 0   | 1-                       | 0   |
| TOTAL | 26,202                 | 1                            | 0   |                            | 0   | 1-                       | 0   |

THREE-YEAR MOVING AVERAGES

|       |       |  |   |  |   |  |   |
|-------|-------|--|---|--|---|--|---|
| 09-11 | 1,779 |  | 0 |  | 0 |  | 0 |
| 10-12 | 3,901 |  | 0 |  | 0 |  | 0 |
| 11-13 | 5,624 |  | 0 |  | 0 |  | 0 |
| 12-14 | 5,678 |  | 0 |  | 0 |  | 0 |
| 13-15 | 3,749 |  | 0 |  | 0 |  | 0 |
| 14-16 | 2,277 |  | 0 |  | 0 |  | 0 |

FIVE-YEAR AVERAGE

|       |       |  |   |  |   |  |   |
|-------|-------|--|---|--|---|--|---|
| 12-16 | 4,173 |  | 0 |  | 0 |  | 0 |
|-------|-------|--|---|--|---|--|---|

SUEZ WATER RHODE ISLAND

ACCOUNT 330 DISTRIBUTION RESERVOIRS AND STANDPIPES

SUMMARY OF BOOK SALVAGE

| YEAR  | REGULAR<br>RETIREMENTS | COST OF<br>REMOVAL<br>AMOUNT | PCT | GROSS<br>SALVAGE<br>AMOUNT | PCT | NET<br>SALVAGE<br>AMOUNT | PCT |
|-------|------------------------|------------------------------|-----|----------------------------|-----|--------------------------|-----|
| 2009  | 1,500                  |                              | 0   |                            | 0   |                          | 0   |
| 2010  |                        |                              |     |                            |     |                          |     |
| 2011  | 8,485                  |                              | 0   |                            | 0   |                          | 0   |
| 2012  | 27,535                 |                              | 0   |                            | 0   |                          | 0   |
| 2013  | 101,305                | 19,500                       | 19  |                            | 0   | 19,500-                  | 19- |
| 2014  |                        | 75,000                       |     |                            |     | 75,000-                  |     |
| 2015  | 5,961                  |                              | 0   |                            | 0   |                          | 0   |
| 2016  |                        |                              |     |                            |     |                          |     |
| TOTAL | 144,786                | 94,500                       | 65  |                            | 0   | 94,500-                  | 65- |

THREE-YEAR MOVING AVERAGES

|       |        |        |    |  |   |         |     |
|-------|--------|--------|----|--|---|---------|-----|
| 09-11 | 3,328  |        | 0  |  | 0 |         | 0   |
| 10-12 | 12,007 |        | 0  |  | 0 |         | 0   |
| 11-13 | 45,775 | 6,500  | 14 |  | 0 | 6,500-  | 14- |
| 12-14 | 42,947 | 31,500 | 73 |  | 0 | 31,500- | 73- |
| 13-15 | 35,755 | 31,500 | 88 |  | 0 | 31,500- | 88- |
| 14-16 | 1,987  | 25,000 |    |  | 0 | 25,000- |     |

FIVE-YEAR AVERAGE

|       |        |        |    |  |   |         |     |
|-------|--------|--------|----|--|---|---------|-----|
| 12-16 | 26,960 | 18,900 | 70 |  | 0 | 18,900- | 70- |
|-------|--------|--------|----|--|---|---------|-----|



SUEZ WATER RHODE ISLAND

ACCOUNT 331 MAINS

SUMMARY OF BOOK SALVAGE

| YEAR  | REGULAR<br>RETIREMENTS | COST OF<br>REMOVAL<br>AMOUNT | PCT | GROSS<br>SALVAGE<br>AMOUNT | PCT | NET<br>SALVAGE<br>AMOUNT | PCT  |
|-------|------------------------|------------------------------|-----|----------------------------|-----|--------------------------|------|
| 2007  | 250                    |                              | 0   |                            | 0   |                          | 0    |
| 2008  | 200                    |                              | 0   |                            | 0   |                          | 0    |
| 2009  |                        |                              |     |                            |     |                          |      |
| 2010  |                        |                              |     |                            |     |                          |      |
| 2011  |                        |                              |     |                            |     |                          |      |
| 2012  |                        |                              |     |                            |     |                          |      |
| 2013  | 8,524                  |                              | 0   |                            | 0   |                          | 0    |
| 2014  | 2,991                  |                              | 0   |                            | 0   |                          | 0    |
| 2015  | 800                    | 2,980                        | 372 |                            | 0   | 2,980-                   | 372- |
| 2016  | 2,637                  | 4,406                        | 167 |                            | 0   | 4,406-                   | 167- |
| TOTAL | 15,402                 | 7,386                        | 48  |                            | 0   | 7,386-                   | 48-  |

THREE-YEAR MOVING AVERAGES

|       |       |       |     |  |   |        |      |
|-------|-------|-------|-----|--|---|--------|------|
| 07-09 | 150   |       | 0   |  | 0 |        | 0    |
| 08-10 | 67    |       | 0   |  | 0 |        | 0    |
| 09-11 |       |       |     |  |   |        |      |
| 10-12 |       |       |     |  |   |        |      |
| 11-13 | 2,841 |       | 0   |  | 0 |        | 0    |
| 12-14 | 3,838 |       | 0   |  | 0 |        | 0    |
| 13-15 | 4,105 | 993   | 24  |  | 0 | 993-   | 24-  |
| 14-16 | 2,143 | 2,462 | 115 |  | 0 | 2,462- | 115- |

FIVE-YEAR AVERAGE

|       |       |       |    |  |   |        |     |
|-------|-------|-------|----|--|---|--------|-----|
| 12-16 | 2,990 | 1,477 | 49 |  | 0 | 1,477- | 49- |
|-------|-------|-------|----|--|---|--------|-----|

SUEZ WATER RHODE ISLAND

ACCOUNT 333 SERVICES

SUMMARY OF BOOK SALVAGE

| YEAR  | REGULAR<br>RETIREMENTS | COST OF<br>REMOVAL<br>AMOUNT | PCT  | GROSS<br>SALVAGE<br>AMOUNT | PCT | NET<br>SALVAGE<br>AMOUNT | PCT  |
|-------|------------------------|------------------------------|------|----------------------------|-----|--------------------------|------|
| 2005  | 2,400                  |                              | 0    |                            | 0   |                          | 0    |
| 2006  |                        |                              |      |                            |     |                          |      |
| 2007  | 3,220                  |                              | 0    |                            | 0   |                          | 0    |
| 2008  | 1,625                  |                              | 0    |                            | 0   |                          | 0    |
| 2009  | 200                    |                              | 0    |                            | 0   |                          | 0    |
| 2010  | 775                    |                              | 0    |                            | 0   |                          | 0    |
| 2011  |                        |                              |      |                            |     |                          |      |
| 2012  |                        |                              |      |                            |     |                          |      |
| 2013  |                        |                              |      |                            |     |                          |      |
| 2014  |                        |                              |      |                            |     |                          |      |
| 2015  | 130                    | 707-                         | 544- |                            | 0   | 707                      | 544  |
| 2016  | 6,149                  | 7,002                        | 114  |                            | 0   | 7,002-                   | 114- |
| TOTAL | 14,499                 | 6,294                        | 43   |                            | 0   | 6,294-                   | 43-  |

THREE-YEAR MOVING AVERAGES

|       |       |       |      |  |   |        |      |
|-------|-------|-------|------|--|---|--------|------|
| 05-07 | 1,873 |       | 0    |  | 0 |        | 0    |
| 06-08 | 1,615 |       | 0    |  | 0 |        | 0    |
| 07-09 | 1,682 |       | 0    |  | 0 |        | 0    |
| 08-10 | 867   |       | 0    |  | 0 |        | 0    |
| 09-11 | 325   |       | 0    |  | 0 |        | 0    |
| 10-12 | 258   |       | 0    |  | 0 |        | 0    |
| 11-13 |       |       |      |  |   |        |      |
| 12-14 |       |       |      |  |   |        |      |
| 13-15 | 43    | 236-  | 544- |  | 0 | 236    | 544  |
| 14-16 | 2,093 | 2,098 | 100  |  | 0 | 2,098- | 100- |

FIVE-YEAR AVERAGE

|       |       |       |     |  |   |        |      |
|-------|-------|-------|-----|--|---|--------|------|
| 12-16 | 1,256 | 1,259 | 100 |  | 0 | 1,259- | 100- |
|-------|-------|-------|-----|--|---|--------|------|

SUEZ WATER RHODE ISLAND

ACCOUNT 334 METER AND METER INSTALLATIONS

SUMMARY OF BOOK SALVAGE

| YEAR  | REGULAR<br>RETIREMENTS | COST OF<br>REMOVAL<br>AMOUNT | PCT | GROSS<br>SALVAGE<br>AMOUNT | PCT | NET<br>SALVAGE<br>AMOUNT | PCT |
|-------|------------------------|------------------------------|-----|----------------------------|-----|--------------------------|-----|
| 2005  | 3,177                  | 46                           | 1   |                            | 0   | 46-                      | 1-  |
| 2006  |                        |                              |     |                            |     |                          |     |
| 2007  | 28,151                 |                              | 0   |                            | 0   |                          | 0   |
| 2008  | 7,065                  |                              | 0   |                            | 0   |                          | 0   |
| 2009  | 6,160                  |                              | 0   |                            | 0   |                          | 0   |
| 2010  | 6,240                  | 46-                          | 1-  | 1,638                      | 26  | 1,684                    | 27  |
| 2011  |                        |                              |     |                            |     |                          |     |
| 2012  |                        |                              |     |                            |     |                          |     |
| 2013  |                        |                              |     | 3,246                      |     | 3,246                    |     |
| 2014  | 98,408                 |                              | 0   |                            | 0   |                          | 0   |
| 2015  | 69,787                 | 8                            | 0   |                            | 0   | 8-                       | 0   |
| 2016  | 96,052                 | 1,441                        | 2   |                            | 0   | 1,441-                   | 2-  |
| TOTAL | 315,040                | 1,449                        | 0   | 4,884                      | 2   | 3,435                    | 1   |

THREE-YEAR MOVING AVERAGES

|       |        |     |    |       |    |       |    |
|-------|--------|-----|----|-------|----|-------|----|
| 05-07 | 10,443 | 15  | 0  |       | 0  | 15-   | 0  |
| 06-08 | 11,739 |     | 0  |       | 0  |       | 0  |
| 07-09 | 13,792 |     | 0  |       | 0  |       | 0  |
| 08-10 | 6,488  | 15- | 0  | 546   | 8  | 561   | 9  |
| 09-11 | 4,133  | 15- | 0  | 546   | 13 | 561   | 14 |
| 10-12 | 2,080  | 15- | 1- | 546   | 26 | 561   | 27 |
| 11-13 |        |     |    | 1,082 |    | 1,082 |    |
| 12-14 | 32,803 |     | 0  | 1,082 | 3  | 1,082 | 3  |
| 13-15 | 56,065 | 3   | 0  | 1,082 | 2  | 1,079 | 2  |
| 14-16 | 88,082 | 483 | 1  |       | 0  | 483-  | 1- |

FIVE-YEAR AVERAGE

|       |        |     |   |     |   |     |   |
|-------|--------|-----|---|-----|---|-----|---|
| 12-16 | 52,849 | 290 | 1 | 649 | 1 | 359 | 1 |
|-------|--------|-----|---|-----|---|-----|---|

SUEZ WATER RHODE ISLAND

ACCOUNT 335 HYDRANTS

SUMMARY OF BOOK SALVAGE

| YEAR  | REGULAR<br>RETIREMENTS | COST OF<br>REMOVAL<br>AMOUNT | PCT | GROSS<br>SALVAGE<br>AMOUNT | PCT | NET<br>SALVAGE<br>AMOUNT | PCT  |
|-------|------------------------|------------------------------|-----|----------------------------|-----|--------------------------|------|
| 2007  | 1,050                  |                              | 0   |                            | 0   |                          | 0    |
| 2008  | 3,115                  |                              | 0   |                            | 0   |                          | 0    |
| 2009  | 750                    |                              | 0   |                            | 0   |                          | 0    |
| 2010  | 1,350                  |                              | 0   |                            | 0   |                          | 0    |
| 2011  | 2,275                  |                              | 0   |                            | 0   |                          | 0    |
| 2012  | 3,925                  |                              | 0   |                            | 0   |                          | 0    |
| 2013  |                        |                              |     | 4,534                      |     | 4,534                    |      |
| 2014  |                        |                              |     |                            |     |                          |      |
| 2015  | 500                    |                              | 0   |                            | 0   |                          | 0    |
| 2016  | 2,446                  | 7,060                        | 289 |                            | 0   | 7,060-                   | 289- |
| TOTAL | 15,411                 | 7,060                        | 46  | 4,534                      | 29  | 2,526-                   | 16-  |

THREE-YEAR MOVING AVERAGES

|       |       |       |     |       |     |        |      |
|-------|-------|-------|-----|-------|-----|--------|------|
| 07-09 | 1,638 |       | 0   |       | 0   |        | 0    |
| 08-10 | 1,738 |       | 0   |       | 0   |        | 0    |
| 09-11 | 1,458 |       | 0   |       | 0   |        | 0    |
| 10-12 | 2,517 |       | 0   |       | 0   |        | 0    |
| 11-13 | 2,067 |       | 0   | 1,511 | 73  | 1,511  | 73   |
| 12-14 | 1,308 |       | 0   | 1,511 | 116 | 1,511  | 116  |
| 13-15 | 167   |       | 0   | 1,511 | 907 | 1,511  | 907  |
| 14-16 | 982   | 2,353 | 240 |       | 0   | 2,353- | 240- |

FIVE-YEAR AVERAGE

|       |       |       |     |     |    |      |     |
|-------|-------|-------|-----|-----|----|------|-----|
| 12-16 | 1,374 | 1,412 | 103 | 907 | 66 | 505- | 37- |
|-------|-------|-------|-----|-----|----|------|-----|

SUEZ WATER RHODE ISLAND

ACCOUNT 339.2 MISCELLANEOUS INTANGIBLE PLANT - OTHER EQUIPMENT

SUMMARY OF BOOK SALVAGE

| YEAR                       | REGULAR<br>RETIREMENTS | COST OF<br>REMOVAL<br>AMOUNT | PCT | GROSS<br>SALVAGE<br>AMOUNT | PCT | NET<br>SALVAGE<br>AMOUNT | PCT |
|----------------------------|------------------------|------------------------------|-----|----------------------------|-----|--------------------------|-----|
| 2013                       | 4,250                  |                              | 0   |                            | 0   |                          | 0   |
| 2014                       |                        |                              |     |                            |     |                          |     |
| 2015                       |                        |                              |     |                            |     |                          |     |
| 2016                       |                        |                              |     |                            |     |                          |     |
| TOTAL                      | 4,250                  |                              | 0   |                            | 0   |                          | 0   |
| THREE-YEAR MOVING AVERAGES |                        |                              |     |                            |     |                          |     |
| 13-15                      | 1,417                  |                              | 0   |                            | 0   |                          | 0   |
| 14-16                      |                        |                              |     |                            |     |                          |     |

SUEZ WATER RHODE ISLAND  
ACCOUNT 341 TRANSPORTATION EQUIPMENT  
SUMMARY OF BOOK SALVAGE

| YEAR                       | REGULAR<br>RETIREMENTS | COST OF<br>REMOVAL<br>AMOUNT | PCT | GROSS<br>SALVAGE<br>AMOUNT | PCT | NET<br>SALVAGE<br>AMOUNT | PCT |
|----------------------------|------------------------|------------------------------|-----|----------------------------|-----|--------------------------|-----|
| 2009                       | 24,910                 |                              | 0   |                            | 0   |                          | 0   |
| 2010                       |                        |                              |     |                            |     |                          |     |
| 2011                       |                        |                              |     |                            |     |                          |     |
| 2012                       |                        |                              |     |                            |     |                          |     |
| 2013                       |                        |                              |     |                            |     |                          |     |
| 2014                       |                        |                              |     |                            |     |                          |     |
| 2015                       |                        |                              |     |                            |     |                          |     |
| 2016                       |                        |                              |     |                            |     |                          |     |
| TOTAL                      | 24,910                 |                              | 0   |                            | 0   |                          | 0   |
| THREE-YEAR MOVING AVERAGES |                        |                              |     |                            |     |                          |     |
| 09-11                      | 8,303                  |                              | 0   |                            | 0   |                          | 0   |
| 10-12                      |                        |                              |     |                            |     |                          |     |
| 11-13                      |                        |                              |     |                            |     |                          |     |
| 12-14                      |                        |                              |     |                            |     |                          |     |
| 13-15                      |                        |                              |     |                            |     |                          |     |
| 14-16                      |                        |                              |     |                            |     |                          |     |
| FIVE-YEAR AVERAGE          |                        |                              |     |                            |     |                          |     |
| 12-16                      |                        |                              |     |                            |     |                          |     |

SUEZ WATER RHODE ISLAND  
ACCOUNT 345 POWER OPERATED EQUIPMENT

SUMMARY OF BOOK SALVAGE

| YEAR                       | REGULAR<br>RETIREMENTS | COST OF<br>REMOVAL<br>AMOUNT | PCT | GROSS<br>SALVAGE<br>AMOUNT | PCT | NET<br>SALVAGE<br>AMOUNT | PCT |
|----------------------------|------------------------|------------------------------|-----|----------------------------|-----|--------------------------|-----|
| 2009                       | 51,951                 |                              | 0   |                            | 0   |                          | 0   |
| 2010                       |                        |                              |     |                            |     |                          |     |
| 2011                       |                        |                              |     |                            |     |                          |     |
| 2012                       |                        |                              |     |                            |     |                          |     |
| 2013                       |                        |                              |     |                            |     |                          |     |
| 2014                       |                        |                              |     |                            |     |                          |     |
| 2015                       |                        |                              |     |                            |     |                          |     |
| 2016                       |                        |                              |     |                            |     |                          |     |
| TOTAL                      | 51,951                 |                              | 0   |                            | 0   |                          | 0   |
| THREE-YEAR MOVING AVERAGES |                        |                              |     |                            |     |                          |     |
| 09-11                      | 17,317                 |                              | 0   |                            | 0   |                          | 0   |
| 10-12                      |                        |                              |     |                            |     |                          |     |
| 11-13                      |                        |                              |     |                            |     |                          |     |
| 12-14                      |                        |                              |     |                            |     |                          |     |
| 13-15                      |                        |                              |     |                            |     |                          |     |
| 14-16                      |                        |                              |     |                            |     |                          |     |
| FIVE-YEAR AVERAGE          |                        |                              |     |                            |     |                          |     |
| 12-16                      |                        |                              |     |                            |     |                          |     |

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**PART IX. DETAILED DEPRECIATION  
CALCULATIONS**



SUEZ WATER RHODE ISLAND

ACCOUNT 304.1 STRUCTURES AND IMPROVEMENTS - SOURCE OF SUPPLY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| YEAR<br>(1)                 | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 50-R3 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. -5    |                         |                              |                               |                                |                     |                          |
| 1942                        | 16,569.93               | 16,556                       | 15,793                        | 1,605                          | 2.42                | 663                      |
| 1949                        | 10,260.80               | 9,865                        | 9,410                         | 1,364                          | 4.22                | 323                      |
| 1950                        | 9,259.01                | 8,851                        | 8,443                         | 1,279                          | 4.48                | 285                      |
| 1966                        | 12,513.84               | 10,551                       | 10,065                        | 3,075                          | 9.85                | 312                      |
| 1971                        | 6,528.97                | 5,157                        | 4,919                         | 1,936                          | 12.39               | 156                      |
| 1990                        | 8,616.39                | 4,404                        | 4,201                         | 4,846                          | 25.66               | 189                      |
| 1996                        | 27,235.00               | 11,021                       | 10,513                        | 18,084                         | 30.73               | 588                      |
| 2000                        | 8,352.77                | 2,757                        | 2,630                         | 6,140                          | 34.28               | 179                      |
| 2001                        | 11,412.96               | 3,550                        | 3,386                         | 8,598                          | 35.19               | 244                      |
| 2003                        | 34,106.64               | 9,290                        | 8,862                         | 26,950                         | 37.03               | 728                      |
| 2006                        | 17,885.92               | 3,816                        | 3,640                         | 15,140                         | 39.84               | 380                      |
| 2008                        | 53,267.51               | 9,240                        | 8,814                         | 47,117                         | 41.74               | 1,129                    |
| 2009                        | 526,301.32              | 80,793                       | 77,072                        | 475,544                        | 42.69               | 11,139                   |
| 2013                        | 4,105.09                | 296                          | 282                           | 4,028                          | 46.57               | 86                       |
|                             | 746,416.15              | 176,147                      | 168,030                       | 615,707                        |                     | 16,401                   |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 37.5 2.20

SUEZ WATER RHODE ISLAND

ACCOUNT 304.3 STRUCTURES AND IMPROVEMENTS - TREATMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| YEAR<br>(1)                 | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 50-R3 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. -5    |                         |                              |                               |                                |                     |                          |
| 1942                        | 2,443.45                | 2,441                        | 2,401                         | 165                            | 2.42                | 68                       |
| 1949                        | 2,986.44                | 2,871                        | 2,824                         | 312                            | 4.22                | 74                       |
| 1950                        | 297.00                  | 284                          | 279                           | 33                             | 4.48                | 7                        |
| 1966                        | 878.00                  | 740                          | 728                           | 194                            | 9.85                | 20                       |
| 1971                        | 2,168.18                | 1,712                        | 1,684                         | 593                            | 12.39               | 48                       |
| 1985                        | 1,615.00                | 959                          | 944                           | 752                            | 21.72               | 35                       |
| 2008                        | 6,717.91                | 1,165                        | 1,146                         | 5,908                          | 41.74               | 142                      |
|                             | 17,105.98               | 10,172                       | 10,006                        | 7,955                          |                     | 394                      |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 20.2 2.30

SUEZ WATER RHODE ISLAND

ACCOUNT 304.4 STRUCTURES AND IMPROVEMENTS - TRANSMISSION AND DISTRIBUTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| YEAR<br>(1)   | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|---|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 50-R3                                       |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. -5  |                         |                              |                               |                                |                     |                          |
| 1990  | 10,308.80               | 5,269                        | 10,650                        | 174                            | 25.66               | 7                        |
| 1995  | 15,463.20               | 6,540                        | 13,219                        | 3,017                          | 29.86               | 101                      |
| 2013  | 114,212.82              | 8,227                        | 16,629                        | 103,294                        | 46.57               | 2,218                    |
|   | 139,984.82              | 20,036                       | 40,498                        | 106,486                        |                     | 2,326                    |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 45.8 |                         |                              |                               |                                |                     | 1.66                     |

SUEZ WATER RHODE ISLAND

ACCOUNT 304.5 STRUCTURES AND IMPROVEMENTS - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| YEAR<br>(1)   | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|---|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 50-R3                                       |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. -5  |                         |                              |                               |                                |                     |                          |
| 2000  | 44,166.13               | 14,580                       | 34,530                        | 11,844                         | 34.28               | 346                      |
| 2008  | 71,066.84               | 12,327                       | 29,194                        | 45,426                         | 41.74               | 1,088                    |
| 2009  | 425.24                  | 65                           | 154                           | 293                            | 42.69               | 7                        |
| 2010  | 70,569.80               | 9,396                        | 22,252                        | 51,846                         | 43.66               | 1,187                    |
| 2011  | 14,154.62               | 1,599                        | 3,787                         | 11,075                         | 44.62               | 248                      |
| 2014  | 2,696.95                | 139                          | 329                           | 2,503                          | 47.54               | 53                       |
| 2016  | 1,941.41                | 20                           | 47                            | 1,991                          | 49.51               | 40                       |
|   | 205,020.99              | 38,126                       | 90,293                        | 124,979                        |                     | 2,969                    |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 42.1 |                         |                              |                               |                                |                     | 1.45                     |

SUEZ WATER RHODE ISLAND

ACCOUNT 307 WELLS AND SPRINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| YEAR<br>(1)                 | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 35-S1 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. -5    |                         |                              |                               |                                |                     |                          |
| 1942                        | 6,651.23                | 6,984                        | 6,984                         |                                |                     |                          |
| 1949                        | 4,704.99                | 4,846                        | 3,796                         | 1,144                          | 0.67                | 1,144                    |
| 1950                        | 5,320.98                | 5,437                        | 4,259                         | 1,328                          | 0.94                | 1,328                    |
| 1966                        | 27,795.59               | 24,516                       | 19,206                        | 9,979                          | 5.60                | 1,782                    |
| 1971                        | 9,017.55                | 7,502                        | 5,877                         | 3,591                          | 7.27                | 494                      |
| 1983                        | 18,584.00               | 12,895                       | 10,102                        | 9,411                          | 11.87               | 793                      |
| 1998                        | 16,070.00               | 7,395                        | 5,793                         | 11,080                         | 19.66               | 564                      |
| 1999                        | 2,971.00                | 1,310                        | 1,026                         | 2,094                          | 20.30               | 103                      |
| 2001                        | 193,993.21              | 77,752                       | 60,910                        | 142,783                        | 21.64               | 6,598                    |
| 2007                        | 19,140.35               | 5,065                        | 3,968                         | 16,129                         | 26.18               | 616                      |
| 2008                        | 14,402.63               | 3,452                        | 2,704                         | 12,419                         | 27.01               | 460                      |
| 2009                        | 13,429.02               | 2,868                        | 2,247                         | 11,853                         | 27.88               | 425                      |
| 2012                        | 81,620.33               | 10,774                       | 8,440                         | 77,261                         | 30.60               | 2,525                    |
| 2013                        | 38,759.96               | 4,012                        | 3,143                         | 37,555                         | 31.55               | 1,190                    |
|                             | 452,460.84              | 174,808                      | 138,455                       | 336,629                        |                     | 18,022                   |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 18.7 3.98

SUEZ WATER RHODE ISLAND

ACCOUNT 308 INFILTRATION GALLERIES AND TUNNELS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| YEAR<br>(1)   | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|---|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 55-R2.5                                     |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0   |                         |                              |                               |                                |                     |                          |
| 2010  | 1,601.00                | 177                          | 88                            | 1,513                          | 48.93               | 31                       |
|   | 1,601.00                | 177                          | 88                            | 1,513                          |                     | 31                       |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 48.8 |                         |                              |                               |                                |                     | 1.94                     |

SUEZ WATER RHODE ISLAND

ACCOUNT 309 SUPPLY MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| YEAR<br>(1)                 | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 55-S2 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0     |                         |                              |                               |                                |                     |                          |
| 1950                        | 3,067.20                | 2,515                        | 1,406                         | 1,661                          | 9.90                | 168                      |
| 1966                        | 7,156.80                | 5,098                        | 2,851                         | 4,306                          | 15.82               | 272                      |
| 1971                        | 4,667.80                | 3,127                        | 1,749                         | 2,919                          | 18.16               | 161                      |
| 1980                        | 1,777.90                | 1,029                        | 575                           | 1,203                          | 23.17               | 52                       |
| 1981                        | 2,032.00                | 1,153                        | 645                           | 1,387                          | 23.80               | 58                       |
| 1982                        | 2,540.00                | 1,411                        | 789                           | 1,751                          | 24.44               | 72                       |
| 1987                        | 778.00                  | 383                          | 214                           | 564                            | 27.91               | 20                       |
| 1988                        | 17,935.74               | 8,593                        | 4,805                         | 13,131                         | 28.65               | 458                      |
| 2014                        | 11,143.64               | 506                          | 283                           | 10,860                         | 52.50               | 207                      |
|                             | 51,099.08               | 23,815                       | 13,317                        | 37,782                         |                     | 1,468                    |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 25.7 2.87

SUEZ WATER RHODE ISLAND

ACCOUNT 311 PUMPING EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| YEAR<br>(1)                 | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 45-R4 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. -10   |                         |                              |                               |                                |                     |                          |
| 1942                        | 2,086.36                | 2,295                        | 2,295                         |                                |                     |                          |
| 1949                        | 3,562.90                | 3,893                        | 3,919                         |                                |                     |                          |
| 1950                        | 784.00                  | 854                          | 862                           |                                |                     |                          |
| 1966                        | 30,199.63               | 29,912                       | 33,220                        |                                |                     |                          |
| 1968                        | 263.76                  | 257                          | 290                           |                                |                     |                          |
| 1971                        | 9,271.77                | 8,758                        | 10,199                        |                                |                     |                          |
| 1976                        | 41,931.00               | 36,858                       | 46,124                        |                                |                     |                          |
| 1978                        | 4,409.00                | 3,737                        | 4,716                         | 134                            | 10.33               | 13                       |
| 1980                        | 24,547.58               | 19,982                       | 25,215                        | 1,787                          | 11.70               | 153                      |
| 1982                        | 1,406.94                | 1,096                        | 1,383                         | 165                            | 13.13               | 13                       |
| 1985                        | 25,393.08               | 18,380                       | 23,193                        | 4,739                          | 15.39               | 308                      |
| 1988                        | 33,120.90               | 22,014                       | 27,779                        | 8,654                          | 17.81               | 486                      |
| 1990                        | 79,130.00               | 49,344                       | 62,266                        | 24,777                         | 19.49               | 1,271                    |
| 1994                        | 17,161.11               | 9,212                        | 11,624                        | 7,253                          | 23.04               | 315                      |
| 1996                        | 131,188.00              | 64,489                       | 81,377                        | 62,930                         | 24.89               | 2,528                    |
| 1998                        | 653,038.68              | 291,008                      | 367,214                       | 351,129                        | 26.77               | 13,117                   |
| 2001                        | 36,975.83               | 13,874                       | 17,507                        | 23,166                         | 29.65               | 781                      |
| 2002                        | 104,958.92              | 36,895                       | 46,557                        | 68,898                         | 30.62               | 2,250                    |
| 2003                        | 58,652.97               | 19,226                       | 24,261                        | 40,257                         | 31.59               | 1,274                    |
| 2006                        | 22,704.22               | 5,800                        | 7,319                         | 17,656                         | 34.55               | 511                      |
| 2009                        | 39,424.40               | 7,208                        | 9,095                         | 34,272                         | 37.52               | 913                      |
| 2011                        | 4,744.11                | 637                          | 804                           | 4,415                          | 39.51               | 112                      |
| 2012                        | 12,847.35               | 1,410                        | 1,779                         | 12,353                         | 40.51               | 305                      |
| 2013                        | 18,520.61               | 1,585                        | 2,000                         | 18,373                         | 41.50               | 443                      |
| 2014                        | 10,460.22               | 639                          | 806                           | 10,700                         | 42.50               | 252                      |
| 2015                        | 167,050.38              | 6,125                        | 7,730                         | 176,026                        | 43.50               | 4,047                    |
|                             | 1,533,833.72            | 655,488                      | 819,534                       | 867,684                        |                     | 29,092                   |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 29.8 1.90



SUEZ WATER RHODE ISLAND

ACCOUNT 320 WATER TREATMENT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| YEAR<br>(1)                   | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 40-S0.5 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. -10     |                         |                              |                               |                                |                     |                          |
| 1971                          | 6,696.01                | 5,132                        | 7,366                         |                                |                     |                          |
| 1980                          | 7,837.12                | 5,194                        | 8,280                         | 341                            | 15.90               | 21                       |
| 1981                          | 3,043.87                | 1,980                        | 3,157                         | 191                            | 16.35               | 12                       |
| 1987                          | 20,924.98               | 11,963                       | 19,072                        | 3,945                          | 19.21               | 205                      |
| 1990                          | 14,897.46               | 7,878                        | 12,559                        | 3,828                          | 20.77               | 184                      |
| 1995                          | 18,864.26               | 8,523                        | 13,588                        | 7,163                          | 23.57               | 304                      |
| 1998                          | 70,806.90               | 28,448                       | 45,352                        | 32,536                         | 25.39               | 1,281                    |
| 1999                          | 106,210.36              | 40,803                       | 65,049                        | 51,782                         | 26.03               | 1,989                    |
| 2001                          | 8,149.10                | 2,837                        | 4,523                         | 4,441                          | 27.34               | 162                      |
| 2002                          | 2,372.44                | 781                          | 1,245                         | 1,365                          | 28.03               | 49                       |
| 2006                          | 12,156.78               | 3,039                        | 4,845                         | 8,527                          | 30.91               | 276                      |
| 2007                          | 23,573.42               | 5,394                        | 8,599                         | 17,332                         | 31.68               | 547                      |
| 2008                          | 83,519.60               | 17,295                       | 27,572                        | 64,300                         | 32.47               | 1,980                    |
| 2009                          | 12,552.64               | 2,323                        | 3,703                         | 10,105                         | 33.27               | 304                      |
| 2011                          | 24,266.25               | 3,377                        | 5,384                         | 21,309                         | 34.94               | 610                      |
| 2012                          | 2,447.44                | 282                          | 450                           | 2,242                          | 35.81               | 63                       |
| 2013                          | 20,780.85               | 1,886                        | 3,007                         | 19,852                         | 36.70               | 541                      |
| 2014                          | 77,734.15               | 5,109                        | 8,145                         | 77,363                         | 37.61               | 2,057                    |
| 2015                          | 15,772.85               | 633                          | 1,009                         | 16,341                         | 38.54               | 424                      |
| 2016                          | 7,456.68                | 100                          | 159                           | 8,043                          | 39.51               | 204                      |
|                               | 540,063.16              | 152,977                      | 243,064                       | 351,005                        |                     | 11,213                   |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 31.3 2.08

SUEZ WATER RHODE ISLAND

ACCOUNT 330 DISTRIBUTION RESERVOIRS AND STANDPIPES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| YEAR<br>(1)   | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|---|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 50-R4                                       |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. -30   |                         |                              |                               |                                |                     |                          |
| 1968  | 578.00                  | 630                          | 223                           | 528                            | 8.05                | 66                       |
| 1972  | 6,966.30                | 7,180                        | 2,538                         | 6,518                          | 10.36               | 629                      |
| 1980  | 6,149.00                | 5,444                        | 1,924                         | 6,070                          | 15.95               | 381                      |
| 1987  | 1,543.20                | 1,139                        | 403                           | 1,603                          | 21.61               | 74                       |
| 1988  | 146,916.00              | 105,121                      | 37,156                        | 153,835                        | 22.48               | 6,843                    |
| 1990  | 3,415.00                | 2,286                        | 808                           | 3,632                          | 24.25               | 150                      |
| 1997  | 130,320.00              | 65,225                       | 23,054                        | 146,362                        | 30.75               | 4,760                    |
| 1998  | 476,731.61              | 226,705                      | 80,131                        | 539,620                        | 31.71               | 17,017                   |
| 2007  | 44,639.34               | 10,991                       | 3,885                         | 54,146                         | 40.53               | 1,336                    |
| 2012  | 106,947.03              | 12,485                       | 4,413                         | 134,618                        | 45.51               | 2,958                    |
| 2013  | 3,371,404.26            | 306,798                      | 108,441                       | 4,274,385                      | 46.50               | 91,922                   |
| 2014  | 37,659.35               | 2,448                        | 865                           | 48,092                         | 47.50               | 1,012                    |
| 2015  | 2,282.94                | 89                           | 32                            | 2,936                          | 48.50               | 61                       |
|   | 4,335,552.03            | 746,541                      | 263,873                       | 5,372,345                      |                     | 127,209                  |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 42.2 |                         |                              |                               |                                |                     | 2.93                     |

## SUEZ WATER RHODE ISLAND

## ACCOUNT 331 MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| YEAR<br>(1)                  | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 110-R3 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. -25    |                         |                              |                               |                                |                     |                          |
| 1830                         | 1,830.00                | 2,288                        | 2,288                         |                                |                     |                          |
| 1888                         | 207,897.54              | 224,646                      | 160,617                       | 99,255                         | 14.91               | 6,657                    |
| 1889                         | 2,300.32                | 2,477                        | 1,771                         | 1,104                          | 15.24               | 72                       |
| 1890                         | 440.31                  | 472                          | 337                           | 213                            | 15.57               | 14                       |
| 1891                         | 1,264.34                | 1,352                        | 967                           | 613                            | 15.91               | 39                       |
| 1892                         | 2,892.22                | 3,081                        | 2,203                         | 1,412                          | 16.26               | 87                       |
| 1894                         | 999.44                  | 1,056                        | 755                           | 494                            | 16.98               | 29                       |
| 1896                         | 3,071.92                | 3,221                        | 2,303                         | 1,537                          | 17.73               | 87                       |
| 1898                         | 3,045.94                | 3,167                        | 2,264                         | 1,543                          | 18.51               | 83                       |
| 1901                         | 561.84                  | 576                          | 412                           | 290                            | 19.74               | 15                       |
| 1906                         | 4,948.48                | 4,951                        | 3,540                         | 2,646                          | 21.96               | 120                      |
| 1908                         | 5,220.22                | 5,166                        | 3,694                         | 2,831                          | 22.91               | 124                      |
| 1910                         | 7,502.33                | 7,341                        | 5,249                         | 4,129                          | 23.89               | 173                      |
| 1911                         | 7,964.98                | 7,749                        | 5,540                         | 4,416                          | 24.39               | 181                      |
| 1912                         | 1,890.42                | 1,828                        | 1,307                         | 1,056                          | 24.91               | 42                       |
| 1913                         | 1,530.77                | 1,471                        | 1,052                         | 861                            | 25.43               | 34                       |
| 1914                         | 2,307.24                | 2,203                        | 1,575                         | 1,309                          | 25.96               | 50                       |
| 1915                         | 12,169.83               | 11,547                       | 8,256                         | 6,956                          | 26.50               | 262                      |
| 1916                         | 3,332.36                | 3,141                        | 2,246                         | 1,919                          | 27.05               | 71                       |
| 1917                         | 5,097.06                | 4,773                        | 3,413                         | 2,958                          | 27.60               | 107                      |
| 1918                         | 2,171.64                | 2,019                        | 1,444                         | 1,271                          | 28.17               | 45                       |
| 1919                         | 5,429.68                | 5,014                        | 3,585                         | 3,202                          | 28.74               | 111                      |
| 1920                         | 6,992.42                | 6,411                        | 4,584                         | 4,157                          | 29.32               | 142                      |
| 1921                         | 6,050.28                | 5,507                        | 3,937                         | 3,626                          | 29.90               | 121                      |
| 1922                         | 68.52                   | 62                           | 44                            | 42                             | 30.50               | 1                        |
| 1923                         | 6,875.74                | 6,165                        | 4,408                         | 4,187                          | 31.10               | 135                      |
| 1924                         | 15,597.22               | 13,875                       | 9,920                         | 9,577                          | 31.72               | 302                      |
| 1925                         | 26,183.82               | 23,107                       | 16,521                        | 16,209                         | 32.34               | 501                      |
| 1926                         | 1,043.97                | 914                          | 653                           | 652                            | 32.96               | 20                       |
| 1927                         | 18,117.30               | 15,729                       | 11,246                        | 11,401                         | 33.60               | 339                      |
| 1928                         | 21,669.42               | 18,655                       | 13,338                        | 13,749                         | 34.24               | 402                      |
| 1929                         | 38,347.98               | 32,735                       | 23,405                        | 24,530                         | 34.88               | 703                      |
| 1930                         | 12,096.54               | 10,235                       | 7,318                         | 7,803                          | 35.54               | 220                      |
| 1931                         | 2,660.20                | 2,231                        | 1,595                         | 1,730                          | 36.20               | 48                       |
| 1932                         | 5,359.04                | 4,453                        | 3,184                         | 3,515                          | 36.87               | 95                       |
| 1933                         | 13,737.68               | 11,312                       | 8,088                         | 9,084                          | 37.54               | 242                      |
| 1934                         | 5,912.10                | 4,822                        | 3,448                         | 3,942                          | 38.23               | 103                      |
| 1935                         | 1,195.66                | 966                          | 691                           | 804                            | 38.91               | 21                       |
| 1936                         | 2,792.96                | 2,234                        | 1,597                         | 1,894                          | 39.61               | 48                       |
| 1937                         | 30,898.44               | 24,470                       | 17,495                        | 21,128                         | 40.31               | 524                      |
| 1938                         | 3,471.04                | 2,721                        | 1,945                         | 2,394                          | 41.02               | 58                       |
| 1939                         | 6,015.92                | 4,667                        | 3,337                         | 4,183                          | 41.73               | 100                      |
| 1940                         | 8,483.96                | 6,512                        | 4,656                         | 5,949                          | 42.45               | 140                      |

SUEZ WATER RHODE ISLAND

ACCOUNT 331 MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| YEAR<br>(1)                  | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 110-R3 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. -25    |                         |                              |                               |                                |                     |                          |
| 1941                         | 266.70                  | 203                          | 145                           | 188                            | 43.17               | 4                        |
| 1942                         | 1,949.18                | 1,464                        | 1,047                         | 1,389                          | 43.90               | 32                       |
| 1944                         | 93,595.88               | 68,729                       | 49,140                        | 67,855                         | 45.38               | 1,495                    |
| 1945                         | 21,534.06               | 15,632                       | 11,177                        | 15,741                         | 46.12               | 341                      |
| 1946                         | 747.50                  | 536                          | 383                           | 551                            | 46.88               | 12                       |
| 1947                         | 345,347.81              | 244,765                      | 175,001                       | 256,684                        | 47.63               | 5,389                    |
| 1948                         | 263,738.72              | 184,617                      | 131,997                       | 197,676                        | 48.40               | 4,084                    |
| 1949                         | 272,473.08              | 188,378                      | 134,686                       | 205,905                        | 49.16               | 4,188                    |
| 1950                         | 183,021.40              | 124,912                      | 89,309                        | 139,468                        | 49.94               | 2,793                    |
| 1951                         | 8,988.58                | 6,056                        | 4,330                         | 6,906                          | 50.71               | 136                      |
| 1952                         | 6,749.66                | 4,487                        | 3,208                         | 5,229                          | 51.50               | 102                      |
| 1953                         | 7,880.19                | 5,168                        | 3,695                         | 6,155                          | 52.29               | 118                      |
| 1954                         | 2,910.17                | 1,882                        | 1,346                         | 2,292                          | 53.08               | 43                       |
| 1955                         | 2,718.52                | 1,734                        | 1,240                         | 2,158                          | 53.87               | 40                       |
| 1956                         | 8,186.23                | 5,146                        | 3,679                         | 6,554                          | 54.68               | 120                      |
| 1957                         | 30,605.90               | 18,962                       | 13,557                        | 24,700                         | 55.48               | 445                      |
| 1958                         | 98,798.48               | 60,289                       | 43,105                        | 80,393                         | 56.30               | 1,428                    |
| 1959                         | 57,031.60               | 34,277                       | 24,507                        | 46,782                         | 57.11               | 819                      |
| 1960                         | 78,823.12               | 46,640                       | 33,347                        | 65,182                         | 57.93               | 1,125                    |
| 1961                         | 98,113.36               | 57,129                       | 40,846                        | 81,796                         | 58.76               | 1,392                    |
| 1962                         | 82,168.08               | 47,069                       | 33,653                        | 69,057                         | 59.59               | 1,159                    |
| 1963                         | 54,573.80               | 30,748                       | 21,984                        | 46,233                         | 60.42               | 765                      |
| 1964                         | 51,934.71               | 28,765                       | 20,566                        | 44,352                         | 61.26               | 724                      |
| 1965                         | 76,542.70               | 41,663                       | 29,788                        | 65,890                         | 62.10               | 1,061                    |
| 1966                         | 189,024.73              | 101,064                      | 72,258                        | 164,023                        | 62.95               | 2,606                    |
| 1967                         | 32,721.34               | 17,179                       | 12,283                        | 28,619                         | 63.80               | 449                      |
| 1968                         | 60,109.00               | 30,970                       | 22,143                        | 52,993                         | 64.66               | 820                      |
| 1969                         | 51,164.00               | 25,861                       | 18,490                        | 45,465                         | 65.52               | 694                      |
| 1970                         | 63,896.00               | 31,672                       | 22,645                        | 57,225                         | 66.38               | 862                      |
| 1971                         | 163,522.00              | 79,439                       | 56,797                        | 147,606                        | 67.25               | 2,195                    |
| 1972                         | 270,354.00              | 128,665                      | 91,993                        | 245,950                        | 68.12               | 3,611                    |
| 1973                         | 191,111.00              | 89,041                       | 63,662                        | 175,227                        | 69.00               | 2,540                    |
| 1974                         | 104,962.00              | 47,853                       | 34,214                        | 96,988                         | 69.88               | 1,388                    |
| 1975                         | 9,491.16                | 4,232                        | 3,026                         | 8,838                          | 70.76               | 125                      |
| 1976                         | 23,434.29               | 10,213                       | 7,302                         | 21,991                         | 71.65               | 307                      |
| 1977                         | 9,491.22                | 4,040                        | 2,889                         | 8,975                          | 72.54               | 124                      |
| 1978                         | 93,869.22               | 38,998                       | 27,883                        | 89,454                         | 73.44               | 1,218                    |
| 1979                         | 35,278.38               | 14,296                       | 10,221                        | 33,877                         | 74.34               | 456                      |
| 1980                         | 23,104.44               | 9,126                        | 6,525                         | 22,356                         | 75.24               | 297                      |
| 1981                         | 274,259.43              | 105,528                      | 75,450                        | 267,374                        | 76.14               | 3,512                    |
| 1982                         | 27,482.26               | 10,290                       | 7,357                         | 26,996                         | 77.05               | 350                      |
| 1983                         | 116,238.09              | 42,308                       | 30,249                        | 115,049                        | 77.97               | 1,476                    |
| 1984                         | 39,776.14               | 14,066                       | 10,057                        | 39,663                         | 78.88               | 503                      |

SUEZ WATER RHODE ISLAND

ACCOUNT 331 MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31,2016

| YEAR<br>(1)                  | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|------------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 110-R3 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. -25    |                         |                              |                               |                                |                     |                          |
| 1985                         | 127,932.26              | 43,905                       | 31,391                        | 128,524                        | 79.80               | 1,611                    |
| 1986                         | 67,962.12               | 22,613                       | 16,168                        | 68,785                         | 80.72               | 852                      |
| 1987                         | 52,969.58               | 17,065                       | 12,201                        | 54,011                         | 81.65               | 661                      |
| 1988                         | 274,709.21              | 85,596                       | 61,199                        | 282,188                        | 82.58               | 3,417                    |
| 1989                         | 66,462.86               | 20,007                       | 14,305                        | 68,774                         | 83.51               | 824                      |
| 1990                         | 9,491.22                | 2,757                        | 1,971                         | 9,893                          | 84.44               | 117                      |
| 1991                         | 77,857.19               | 21,782                       | 15,574                        | 81,747                         | 85.38               | 957                      |
| 1992                         | 9,491.22                | 2,554                        | 1,826                         | 10,038                         | 86.32               | 116                      |
| 1993                         | 9,491.22                | 2,453                        | 1,754                         | 10,110                         | 87.26               | 116                      |
| 1994                         | 9,491.22                | 2,350                        | 1,680                         | 10,184                         | 88.21               | 115                      |
| 1995                         | 9,491.22                | 2,248                        | 1,607                         | 10,257                         | 89.16               | 115                      |
| 1996                         | 275,458.83              | 62,261                       | 44,515                        | 299,809                        | 90.11               | 3,327                    |
| 1997                         | 185,507.42              | 39,926                       | 28,546                        | 203,338                        | 91.06               | 2,233                    |
| 1998                         | 36,427.55               | 7,447                        | 5,324                         | 40,210                         | 92.01               | 437                      |
| 1999                         | 16,076.94               | 3,111                        | 2,224                         | 17,872                         | 92.97               | 192                      |
| 2000                         | 154,215.48              | 28,162                       | 20,135                        | 172,634                        | 93.93               | 1,838                    |
| 2001                         | 207,777.98              | 35,675                       | 25,507                        | 234,215                        | 94.89               | 2,468                    |
| 2002                         | 184,298.72              | 29,635                       | 21,188                        | 209,185                        | 95.85               | 2,182                    |
| 2003                         | 147,512.45              | 22,094                       | 15,797                        | 168,594                        | 96.82               | 1,741                    |
| 2004                         | 54,351.29               | 7,547                        | 5,396                         | 62,543                         | 97.78               | 640                      |
| 2005                         | 65,035.18               | 8,314                        | 5,944                         | 75,350                         | 98.75               | 763                      |
| 2006                         | 1,497,798.71            | 174,962                      | 125,094                       | 1,747,154                      | 99.72               | 17,521                   |
| 2007                         | 243,436.71              | 25,728                       | 18,395                        | 285,901                        | 100.70              | 2,839                    |
| 2008                         | 514,392.83              | 48,694                       | 34,815                        | 608,176                        | 101.67              | 5,982                    |
| 2009                         | 89,838.55               | 7,514                        | 5,372                         | 106,926                        | 102.64              | 1,042                    |
| 2010                         | 114,917.55              | 8,332                        | 5,957                         | 137,690                        | 103.62              | 1,329                    |
| 2011                         | 424,705.41              | 26,061                       | 18,633                        | 512,249                        | 104.60              | 4,897                    |
| 2012                         | 148,355.84              | 7,451                        | 5,327                         | 180,118                        | 105.58              | 1,706                    |
| 2013                         | 1,796,549.00            | 70,223                       | 50,209                        | 2,195,477                      | 106.56              | 20,603                   |
| 2014                         | 726,238.87              | 20,298                       | 14,512                        | 893,287                        | 107.54              | 8,307                    |
| 2015                         | 486,930.12              | 8,187                        | 5,854                         | 602,809                        | 108.52              | 5,555                    |
| 2016                         | 148,817.75              | 828                          | 592                           | 185,430                        | 109.51              | 1,693                    |
|                              | 12,379,419.72           | 3,387,194                    | 2,422,420                     | 13,051,855                     |                     | 160,212                  |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 81.5 1.29

## SUEZ WATER RHODE ISLAND

## ACCOUNT 333 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| YEAR<br>(1)                 | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 80-R4 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. -45   |                         |                              |                               |                                |                     |                          |
| 1916                        | 683.07                  | 930                          | 990                           |                                |                     |                          |
| 1917                        | 268.25                  | 364                          | 389                           |                                |                     |                          |
| 1918                        | 121.16                  | 164                          | 176                           |                                |                     |                          |
| 1919                        | 330.70                  | 445                          | 477                           | 3                              | 5.72                | 1                        |
| 1920                        | 578.46                  | 776                          | 832                           | 7                              | 5.99                | 1                        |
| 1921                        | 727.74                  | 973                          | 1,044                         | 11                             | 6.27                | 2                        |
| 1922                        | 487.45                  | 649                          | 696                           | 11                             | 6.55                | 2                        |
| 1923                        | 982.17                  | 1,302                        | 1,396                         | 28                             | 6.84                | 4                        |
| 1924                        | 1,240.40                | 1,638                        | 1,757                         | 42                             | 7.13                | 6                        |
| 1925                        | 1,526.85                | 2,008                        | 2,154                         | 60                             | 7.43                | 8                        |
| 1926                        | 646.65                  | 847                          | 908                           | 30                             | 7.74                | 4                        |
| 1927                        | 2,684.87                | 3,501                        | 3,755                         | 138                            | 8.05                | 17                       |
| 1928                        | 1,601.51                | 2,079                        | 2,230                         | 92                             | 8.38                | 11                       |
| 1929                        | 1,145.18                | 1,480                        | 1,587                         | 74                             | 8.71                | 8                        |
| 1930                        | 778.23                  | 1,001                        | 1,074                         | 54                             | 9.06                | 6                        |
| 1931                        | 1,009.87                | 1,292                        | 1,386                         | 78                             | 9.43                | 8                        |
| 1932                        | 654.70                  | 833                          | 893                           | 56                             | 9.80                | 6                        |
| 1934                        | 301.54                  | 379                          | 406                           | 31                             | 10.60               | 3                        |
| 1935                        | 164.26                  | 205                          | 220                           | 18                             | 11.03               | 2                        |
| 1936                        | 745.84                  | 926                          | 993                           | 88                             | 11.48               | 8                        |
| 1937                        | 839.13                  | 1,035                        | 1,110                         | 107                            | 11.94               | 9                        |
| 1938                        | 147.81                  | 181                          | 194                           | 20                             | 12.43               | 2                        |
| 1939                        | 585.81                  | 712                          | 764                           | 85                             | 12.93               | 7                        |
| 1940                        | 418.27                  | 504                          | 541                           | 65                             | 13.46               | 5                        |
| 1941                        | 521.83                  | 624                          | 669                           | 88                             | 14.01               | 6                        |
| 1942                        | 18.59                   | 22                           | 24                            | 3                              | 14.58               |                          |
| 1943                        | 250.40                  | 294                          | 315                           | 48                             | 15.16               | 3                        |
| 1944                        | 342.97                  | 399                          | 428                           | 69                             | 15.77               | 4                        |
| 1945                        | 350.10                  | 404                          | 433                           | 75                             | 16.39               | 5                        |
| 1946                        | 1,202.41                | 1,373                        | 1,472                         | 271                            | 17.02               | 16                       |
| 1947                        | 2,885.73                | 3,260                        | 3,496                         | 688                            | 17.67               | 39                       |
| 1948                        | 2,396.01                | 2,678                        | 2,872                         | 602                            | 18.33               | 33                       |
| 1949                        | 4,955.06                | 5,478                        | 5,875                         | 1,310                          | 19.01               | 69                       |
| 1950                        | 9,545.40                | 10,436                       | 11,192                        | 2,649                          | 19.68               | 135                      |
| 1951                        | 2,460.71                | 2,660                        | 2,853                         | 715                            | 20.37               | 35                       |
| 1952                        | 3,181.54                | 3,398                        | 3,644                         | 969                            | 21.07               | 46                       |
| 1953                        | 2,620.74                | 2,766                        | 2,966                         | 834                            | 21.78               | 38                       |
| 1954                        | 2,708.10                | 2,823                        | 3,028                         | 899                            | 22.49               | 40                       |
| 1955                        | 1,813.09                | 1,866                        | 2,001                         | 628                            | 23.21               | 27                       |
| 1956                        | 3,360.66                | 3,414                        | 3,661                         | 1,212                          | 23.95               | 51                       |
| 1957                        | 2,091.79                | 2,097                        | 2,249                         | 784                            | 24.69               | 32                       |
| 1958                        | 5,078.62                | 5,022                        | 5,386                         | 1,978                          | 25.44               | 78                       |
| 1959                        | 4,316.11                | 4,209                        | 4,514                         | 1,744                          | 26.20               | 67                       |

SUEZ WATER RHODE ISLAND

ACCOUNT 333 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| YEAR<br>(1)                 | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 80-R4 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. -45   |                         |                              |                               |                                |                     |                          |
| 1960                        | 9,524.00                | 9,154                        | 9,817                         | 3,993                          | 26.97               | 148                      |
| 1961                        | 7,457.88                | 7,063                        | 7,575                         | 3,239                          | 27.75               | 117                      |
| 1962                        | 7,692.60                | 7,175                        | 7,695                         | 3,459                          | 28.54               | 121                      |
| 1963                        | 11,730.37               | 10,771                       | 11,551                        | 5,458                          | 29.34               | 186                      |
| 1964                        | 6,514.33                | 5,886                        | 6,313                         | 3,133                          | 30.15               | 104                      |
| 1965                        | 7,417.27                | 6,592                        | 7,070                         | 3,685                          | 30.97               | 119                      |
| 1966                        | 8,767.21                | 7,661                        | 8,216                         | 4,496                          | 31.79               | 141                      |
| 1967                        | 7,301.81                | 6,269                        | 6,723                         | 3,865                          | 32.63               | 118                      |
| 1968                        | 8,517.00                | 7,183                        | 7,704                         | 4,646                          | 33.47               | 139                      |
| 1969                        | 9,112.00                | 7,544                        | 8,091                         | 5,121                          | 34.32               | 149                      |
| 1970                        | 6,637.00                | 5,392                        | 5,783                         | 3,841                          | 35.18               | 109                      |
| 1971                        | 13,800.00               | 10,993                       | 11,790                        | 8,220                          | 36.05               | 228                      |
| 1972                        | 11,261.00               | 8,791                        | 9,428                         | 6,900                          | 36.93               | 187                      |
| 1973                        | 21,464.00               | 16,414                       | 17,603                        | 13,520                         | 37.81               | 358                      |
| 1974                        | 12,708.00               | 9,513                        | 10,202                        | 8,225                          | 38.70               | 213                      |
| 1976                        | 9,959.96                | 7,129                        | 7,646                         | 6,796                          | 40.51               | 168                      |
| 1978                        | 60,273.76               | 41,142                       | 44,123                        | 43,274                         | 42.34               | 1,022                    |
| 1979                        | 18,420.55               | 12,266                       | 13,155                        | 13,555                         | 43.26               | 313                      |
| 1980                        | 9,724.34                | 6,312                        | 6,769                         | 7,331                          | 44.19               | 166                      |
| 1981                        | 189,131.97              | 119,569                      | 128,233                       | 146,008                        | 45.12               | 3,236                    |
| 1982                        | 12,851.55               | 7,906                        | 8,479                         | 10,156                         | 46.06               | 220                      |
| 1983                        | 76,252.52               | 45,595                       | 48,899                        | 61,667                         | 47.01               | 1,312                    |
| 1984                        | 21,633.44               | 12,563                       | 13,473                        | 17,895                         | 47.96               | 373                      |
| 1985                        | 84,606.03               | 47,675                       | 51,130                        | 71,549                         | 48.91               | 1,463                    |
| 1986                        | 41,767.53               | 22,809                       | 24,462                        | 36,101                         | 49.87               | 724                      |
| 1987                        | 31,057.91               | 16,420                       | 17,610                        | 27,424                         | 50.83               | 540                      |
| 1988                        | 189,453.25              | 96,867                       | 103,886                       | 170,821                        | 51.79               | 3,298                    |
| 1989                        | 40,696.57               | 20,093                       | 21,549                        | 37,461                         | 52.76               | 710                      |
| 1991                        | 48,835.89               | 22,394                       | 24,017                        | 46,795                         | 54.70               | 855                      |
| 1996                        | 189,988.73              | 70,215                       | 75,303                        | 200,181                        | 59.61               | 3,358                    |
| 1997                        | 54,995.35               | 19,347                       | 20,749                        | 58,994                         | 60.59               | 974                      |
| 1998                        | 45,387.70               | 15,153                       | 16,251                        | 49,561                         | 61.58               | 805                      |
| 1999                        | 60,920.35               | 19,246                       | 20,641                        | 67,694                         | 62.57               | 1,082                    |
| 2000                        | 118,434.67              | 35,291                       | 37,848                        | 133,882                        | 63.56               | 2,106                    |
| 2001                        | 83,327.33               | 23,334                       | 25,025                        | 95,800                         | 64.55               | 1,484                    |
| 2002                        | 174,176.64              | 45,650                       | 48,958                        | 203,598                        | 65.54               | 3,106                    |
| 2003                        | 125,272.07              | 30,562                       | 32,776                        | 148,869                        | 66.54               | 2,237                    |
| 2004                        | 86,048.33               | 19,449                       | 20,858                        | 103,912                        | 67.53               | 1,539                    |
| 2005                        | 137,684.71              | 28,625                       | 30,699                        | 168,944                        | 68.53               | 2,465                    |
| 2006                        | 141,820.55              | 26,939                       | 28,891                        | 176,749                        | 69.52               | 2,542                    |
| 2007                        | 201,188.81              | 34,569                       | 37,074                        | 254,650                        | 70.52               | 3,611                    |
| 2008                        | 125,483.90              | 19,309                       | 20,708                        | 161,244                        | 71.51               | 2,255                    |
| 2009                        | 78,466.56               | 10,652                       | 11,424                        | 102,353                        | 72.51               | 1,412                    |

SUEZ WATER RHODE ISLAND

ACCOUNT 333 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| YEAR<br>(1)   | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|---|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 80-R4                                       |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. -45   |                         |                              |                               |                                |                     |                          |
| 2010  | 85,982.97               | 10,114                       | 10,847                        | 113,828                        | 73.51               | 1,548                    |
| 2011  | 120,718.77              | 12,011                       | 12,881                        | 162,161                        | 74.51               | 2,176                    |
| 2012  | 111,365.69              | 9,062                        | 9,719                         | 151,761                        | 75.51               | 2,010                    |
| 2013  | 160,773.79              | 10,199                       | 10,938                        | 222,184                        | 76.50               | 2,904                    |
| 2014  | 227,992.14              | 10,331                       | 11,080                        | 319,509                        | 77.50               | 4,123                    |
| 2015  | 122,985.07              | 3,344                        | 3,586                         | 174,742                        | 78.50               | 2,226                    |
| 2016  | 310,354.06              | 2,813                        | 3,017                         | 446,997                        | 79.50               | 5,623                    |
|   | 3,816,707.71            | 1,138,803                    | 1,221,315                     | 4,312,911                      |                     | 67,267                   |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 64.1 |                         |                              |                               |                                |                     | 1.76                     |



SUEZ WATER RHODE ISLAND

ACCOUNT 334 METER AND METER INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| YEAR<br>(1)                 | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 37-R3 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0     |                         |                              |                               |                                |                     |                          |
| 1975                        | 6,008.17                | 5,099                        | 5,540                         | 468                            | 5.60                | 84                       |
| 1976                        | 5,046.90                | 4,231                        | 4,597                         | 450                            | 5.98                | 75                       |
| 1977                        | 5,525.56                | 4,574                        | 4,970                         | 556                            | 6.37                | 87                       |
| 1978                        | 6,488.88                | 5,298                        | 5,756                         | 733                            | 6.79                | 108                      |
| 1979                        | 6,971.54                | 5,609                        | 6,094                         | 878                            | 7.23                | 121                      |
| 1980                        | 9,613.15                | 7,613                        | 8,271                         | 1,342                          | 7.70                | 174                      |
| 1981                        | 11,415.62               | 8,886                        | 9,655                         | 1,761                          | 8.20                | 215                      |
| 1982                        | 10,213.98               | 7,807                        | 8,482                         | 1,732                          | 8.72                | 199                      |
| 1983                        | 13,218.08               | 9,906                        | 10,763                        | 2,455                          | 9.27                | 265                      |
| 1984                        | 15,621.37               | 11,467                       | 12,459                        | 3,162                          | 9.84                | 321                      |
| 1985                        | 17,303.67               | 12,426                       | 13,501                        | 3,803                          | 10.43               | 365                      |
| 1986                        | 18,745.65               | 13,147                       | 14,284                        | 4,462                          | 11.05               | 404                      |
| 1987                        | 19,226.30               | 13,152                       | 14,290                        | 4,936                          | 11.69               | 422                      |
| 1988                        | 22,110.25               | 14,730                       | 16,004                        | 6,106                          | 12.35               | 494                      |
| 1989                        | 26,916.82               | 17,438                       | 18,946                        | 7,971                          | 13.03               | 612                      |
| 1990                        | 27,878.13               | 17,533                       | 19,049                        | 8,829                          | 13.73               | 643                      |
| 1991                        | 54,073.97               | 32,956                       | 35,806                        | 18,268                         | 14.45               | 1,264                    |
| 1992                        | 61,082.19               | 36,022                       | 39,138                        | 21,944                         | 15.18               | 1,446                    |
| 1993                        | 65,090.41               | 37,066                       | 40,272                        | 24,818                         | 15.93               | 1,558                    |
| 1994                        | 47,585.10               | 26,120                       | 28,379                        | 19,206                         | 16.69               | 1,151                    |
| 1995                        | 63,446.79               | 33,473                       | 36,368                        | 27,079                         | 17.48               | 1,549                    |
| 1996                        | 87,239.34               | 44,162                       | 47,982                        | 39,257                         | 18.27               | 2,149                    |
| 1997                        | 24,761.58               | 11,993                       | 13,030                        | 11,732                         | 19.08               | 615                      |
| 1998                        | 21,424.02               | 9,901                        | 10,757                        | 10,667                         | 19.90               | 536                      |
| 1999                        | 32,006.08               | 14,065                       | 15,282                        | 16,724                         | 20.74               | 806                      |
| 2000                        | 93,071.60               | 38,763                       | 42,116                        | 50,956                         | 21.59               | 2,360                    |
| 2001                        | 61,993.04               | 24,378                       | 26,487                        | 35,506                         | 22.45               | 1,582                    |
| 2002                        | 60,306.31               | 22,297                       | 24,225                        | 36,081                         | 23.32               | 1,547                    |
| 2003                        | 50,894.02               | 17,593                       | 19,115                        | 31,779                         | 24.21               | 1,313                    |
| 2004                        | 139,403.20              | 44,797                       | 48,672                        | 90,731                         | 25.11               | 3,613                    |
| 2005                        | 127,366.58              | 37,832                       | 41,104                        | 86,263                         | 26.01               | 3,317                    |
| 2006                        | 103,023.54              | 28,039                       | 30,464                        | 72,560                         | 26.93               | 2,694                    |
| 2007                        | 205,767.40              | 50,831                       | 55,227                        | 150,540                        | 27.86               | 5,403                    |
| 2008                        | 316,586.59              | 70,247                       | 76,323                        | 240,264                        | 28.79               | 8,345                    |
| 2009                        | 93,551.30               | 18,382                       | 19,972                        | 73,579                         | 29.73               | 2,475                    |
| 2010                        | 124,698.36              | 21,300                       | 23,142                        | 101,556                        | 30.68               | 3,310                    |
| 2011                        | 97,411.98               | 14,111                       | 15,332                        | 82,080                         | 31.64               | 2,594                    |
| 2012                        | 152,701.29              | 18,118                       | 19,685                        | 133,016                        | 32.61               | 4,079                    |
| 2013                        | 103,608.78              | 9,605                        | 10,436                        | 93,173                         | 33.57               | 2,775                    |

SUEZ WATER RHODE ISLAND

ACCOUNT 334 METER AND METER INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| YEAR<br>(1)                 | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 37-R3 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0     |                         |                              |                               |                                |                     |                          |
| 2014                        | 139,783.65              | 9,256                        | 10,056                        | 129,728                        | 34.55               | 3,755                    |
| 2015                        | 210,644.35              | 8,369                        | 9,093                         | 201,551                        | 35.53               | 5,673                    |
| 2016                        | 190,004.40              | 2,516                        | 2,734                         | 187,271                        | 36.51               | 5,129                    |
|                             | 2,949,829.94            | 841,108                      | 913,858                       | 2,035,972                      |                     | 75,627                   |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 26.9 2.56

SUEZ WATER RHODE ISLAND

ACCOUNT 335 HYDRANTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31,2016

| YEAR<br>(1)                 | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|-----------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 65-R4 |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. -20   |                         |                              |                               |                                |                     |                          |
| 1958                        | 2,000.00                | 1,918                        | 2,111                         | 289                            | 13.06               | 22                       |
| 1959                        | 1,816.93                | 1,721                        | 1,894                         | 286                            | 13.69               | 21                       |
| 1960                        | 3,243.87                | 3,034                        | 3,339                         | 554                            | 14.34               | 39                       |
| 1961                        | 5,859.83                | 5,409                        | 5,952                         | 1,080                          | 15.00               | 72                       |
| 1962                        | 4,044.04                | 3,683                        | 4,053                         | 800                            | 15.67               | 51                       |
| 1963                        | 914.67                  | 821                          | 903                           | 195                            | 16.36               | 12                       |
| 1964                        | 3,239.03                | 2,867                        | 3,155                         | 732                            | 17.05               | 43                       |
| 1965                        | 4,980.57                | 4,344                        | 4,780                         | 1,197                          | 17.76               | 67                       |
| 1966                        | 4,201.11                | 3,608                        | 3,970                         | 1,071                          | 18.48               | 58                       |
| 1967                        | 4,410.96                | 3,730                        | 4,105                         | 1,188                          | 19.20               | 62                       |
| 1968                        | 2,761.00                | 2,297                        | 2,528                         | 785                            | 19.94               | 39                       |
| 1969                        | 3,475.00                | 2,843                        | 3,129                         | 1,041                          | 20.69               | 50                       |
| 1970                        | 1,207.00                | 970                          | 1,067                         | 381                            | 21.46               | 18                       |
| 1971                        | 2,480.20                | 1,958                        | 2,155                         | 821                            | 22.23               | 37                       |
| 1972                        | 4,244.00                | 3,289                        | 3,619                         | 1,474                          | 23.02               | 64                       |
| 1973                        | 9,610.00                | 7,308                        | 8,042                         | 3,490                          | 23.81               | 147                      |
| 1975                        | 3,743.00                | 2,734                        | 3,009                         | 1,483                          | 25.44               | 58                       |
| 1976                        | 3,142.00                | 2,247                        | 2,473                         | 1,297                          | 26.27               | 49                       |
| 1977                        | 16,519.00               | 11,552                       | 12,713                        | 7,110                          | 27.12               | 262                      |
| 1978                        | 23,791.00               | 16,264                       | 17,898                        | 10,651                         | 27.97               | 381                      |
| 1979                        | 5,672.00                | 3,787                        | 4,167                         | 2,639                          | 28.83               | 92                       |
| 1980                        | 17,029.00               | 11,098                       | 12,213                        | 8,222                          | 29.70               | 277                      |
| 1981                        | 20,103.20               | 12,775                       | 14,058                        | 10,066                         | 30.58               | 329                      |
| 1982                        | 27,981.00               | 17,321                       | 19,061                        | 14,516                         | 31.47               | 461                      |
| 1983                        | 23,321.00               | 14,049                       | 15,461                        | 12,524                         | 32.37               | 387                      |
| 1984                        | 48,555.00               | 28,434                       | 31,291                        | 26,975                         | 33.28               | 811                      |
| 1985                        | 72,579.00               | 41,270                       | 45,416                        | 41,679                         | 34.20               | 1,219                    |
| 1986                        | 41,127.00               | 22,687                       | 24,966                        | 24,386                         | 35.12               | 694                      |
| 1987                        | 19,429.00               | 10,384                       | 11,427                        | 11,888                         | 36.05               | 330                      |
| 1988                        | 37,461.00               | 19,371                       | 21,317                        | 23,636                         | 36.99               | 639                      |
| 1989                        | 8,263.00                | 4,129                        | 4,544                         | 5,372                          | 37.93               | 142                      |
| 1990                        | 26,319.00               | 12,692                       | 13,967                        | 17,616                         | 38.88               | 453                      |
| 1991                        | 25,140.00               | 11,682                       | 12,856                        | 17,312                         | 39.83               | 435                      |
| 1992                        | 7,269.00                | 3,249                        | 3,575                         | 5,148                          | 40.79               | 126                      |
| 1993                        | 6,534.00                | 2,805                        | 3,087                         | 4,754                          | 41.75               | 114                      |
| 1994                        | 11,227.00               | 4,618                        | 5,082                         | 8,390                          | 42.72               | 196                      |
| 1995                        | 11,905.00               | 4,684                        | 5,155                         | 9,131                          | 43.69               | 209                      |
| 1996                        | 27,691.00               | 10,398                       | 11,443                        | 21,786                         | 44.66               | 488                      |
| 1997                        | 11,128.15               | 3,977                        | 4,377                         | 8,977                          | 45.64               | 197                      |
| 1998                        | 2,973.18                | 1,009                        | 1,110                         | 2,458                          | 46.62               | 53                       |
| 1999                        | 7,366.41                | 2,366                        | 2,604                         | 6,236                          | 47.60               | 131                      |
| 2000                        | 13,350.25               | 4,047                        | 4,454                         | 11,566                         | 48.58               | 238                      |
| 2001                        | 20,177.06               | 5,748                        | 6,325                         | 17,887                         | 49.57               | 361                      |

SUEZ WATER RHODE ISLAND

ACCOUNT 335 HYDRANTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| YEAR<br>(1)  | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|--|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 65-R4  |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. -20  |                         |                              |                               |                                |                     |                          |
| 2002   | 28,226.61               | 7,525                        | 8,281                         | 25,591                         | 50.56               | 506                      |
| 2003   | 20,880.09               | 5,185                        | 5,706                         | 19,350                         | 51.55               | 375                      |
| 2004   | 10,584.15               | 2,435                        | 2,680                         | 10,021                         | 52.54               | 191                      |
| 2005   | 34,467.66               | 7,299                        | 8,032                         | 33,329                         | 53.53               | 623                      |
| 2006   | 11,804.20               | 2,282                        | 2,511                         | 11,654                         | 54.53               | 214                      |
| 2007   | 26,461.03               | 4,631                        | 5,096                         | 26,657                         | 55.52               | 480                      |
| 2008   | 15,285.25               | 2,393                        | 2,633                         | 15,709                         | 56.52               | 278                      |
| 2009   | 22,748.83               | 3,146                        | 3,462                         | 23,837                         | 57.51               | 414                      |
| 2010   | 21,231.21               | 2,544                        | 2,800                         | 22,677                         | 58.51               | 388                      |
| 2011   | 25,238.88               | 2,558                        | 2,815                         | 27,472                         | 59.51               | 462                      |
| 2012   | 46,908.21               | 3,889                        | 4,280                         | 52,010                         | 60.51               | 860                      |
| 2013   | 50,748.06               | 3,279                        | 3,609                         | 57,289                         | 61.50               | 932                      |
| 2014   | 38,010.89               | 1,754                        | 1,930                         | 43,683                         | 62.50               | 699                      |
| 2015   | 79,054.61               | 2,189                        | 2,409                         | 92,457                         | 63.50               | 1,456                    |
| 2016   | 28,233.15               | 261                          | 287                           | 33,593                         | 64.50               | 521                      |
|  | 1,058,166.29            | 386,547                      | 425,382                       | 844,417                        |                     | 18,333                   |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 46.1 1.73 |                         |                              |                               |                                |                     |                          |

SUEZ WATER RHODE ISLAND

ACCOUNT 339.1 MISCELLANEOUS INTANGIBLE PLANT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| YEAR<br>(1)                | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|----------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. 20-SQUARE |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0    |                         |                              |                               |                                |                     |                          |
| 2008                       | 216,940.06              | 92,200                       |                               | 216,940                        | 11.50               | 18,864                   |
| 2009                       | 7,447.68                | 2,793                        |                               | 7,448                          | 12.50               | 596                      |
| 2010                       | 7,056.00                | 2,293                        |                               | 7,056                          | 13.50               | 523                      |
|                            | 231,443.74              | 97,286                       |                               | 231,444                        |                     | 19,983                   |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 11.6 8.63

SUEZ WATER RHODE ISLAND

ACCOUNT 339.2 MISCELLANEOUS INTANGIBLE PLANT - OTHER EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| YEAR<br>(1)  | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|--|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 30-S2.5                                |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                      |                         |                              |                               |                                |                     |                          |
| 1985   | 2,946.00                | 2,335                        | 2,946                         |                                |                     |                          |
| 1988   | 7,290.00                | 5,502                        | 7,290                         |                                |                     |                          |
| 1990   | 7,364.00                | 5,341                        | 7,364                         |                                |                     |                          |
| 1992   | 9,354.00                | 6,476                        | 9,201                         | 153                            | 9.23                | 17                       |
| 1995   | 3,254.00                | 2,067                        | 2,937                         | 317                            | 10.94               | 29                       |
| 2008   | 77,858.72               | 21,878                       | 31,085                        | 46,774                         | 21.57               | 2,168                    |
|  | 108,066.72              | 43,599                       | 60,823                        | 47,244                         |                     | 2,214                    |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. |                         |                              |                               |                                |                     | 21.3 2.05                |

SUEZ WATER RHODE ISLAND

ACCOUNT 340.1 OFFICE FURNITURE AND EQUIPMENT - HARDWARE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31,2016

| YEAR<br>(1)  | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|--|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. 5-SQUARE  |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0  |                         |                              |                               |                                |                     |                          |
| 2006   | 2,146.25                | 2,146                        | 2,146                         |                                |                     |                          |
| 2008   | 4,301.46                | 4,301                        | 4,301                         |                                |                     |                          |
| 2009   | 1,441.34                | 1,441                        | 1,441                         |                                |                     |                          |
| 2010   | 28,042.74               | 28,043                       | 28,043                        |                                |                     |                          |
| 2011   | 28,116.60               | 28,117                       | 28,117                        |                                |                     |                          |
| 2012   | 20,107.84               | 18,097                       | 5,218                         | 14,890                         | 0.50                | 14,890                   |
| 2013   | 2,502.00                | 1,751                        | 505                           | 1,997                          | 1.50                | 1,331                    |
| 2014   | 5,246.31                | 2,623                        | 756                           | 4,490                          | 2.50                | 1,796                    |
| 2015   | 4,506.99                | 1,352                        | 390                           | 4,117                          | 3.50                | 1,176                    |
| 2016   | 6,973.21                | 697                          | 201                           | 6,772                          | 4.50                | 1,505                    |
|  | 103,384.74              | 88,568                       | 71,118                        | 32,267                         |                     | 20,698                   |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 1.6 20.02 |                         |                              |                               |                                |                     |                          |

SUEZ WATER RHODE ISLAND

ACCOUNT 340.2 OFFICE FURNITURE AND EQUIPMENT - SOFTWARE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| YEAR<br>(1)  | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|--|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. 5-SQUARE  |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0  |                         |                              |                               |                                |                     |                          |
| 2006   | 12,743.23               | 12,743                       | 12,743                        |                                |                     |                          |
| 2008   | 55,980.73               | 55,981                       | 55,981                        |                                |                     |                          |
| 2009   | 35,270.47               | 35,270                       | 35,270                        |                                |                     |                          |
| 2010   | 11,674.70               | 11,675                       | 11,675                        |                                |                     |                          |
| 2011   | 17,650.30               | 17,650                       | 17,650                        |                                |                     |                          |
| 2012   | 19,410.25               | 17,469                       | 2,559                         | 16,851                         | 0.50                | 16,851                   |
| 2013   | 65,410.00               | 45,787                       | 6,707                         | 58,703                         | 1.50                | 39,135                   |
| 2014   | 1,273.00                | 636                          | 93                            | 1,180                          | 2.50                | 472                      |
| 2016   | 4,433.00                | 443                          | 65                            | 4,368                          | 4.50                | 971                      |
|  | 223,845.68              | 197,654                      | 142,743                       | 81,103                         |                     | 57,429                   |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 1.4 |                         |                              |                               |                                |                     | 25.66                    |



SUEZ WATER RHODE ISLAND

ACCOUNT 340.21 OFFICE FURNITURE AND EQUIPMENT - CC & B - LIGHTHOUSE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| YEAR<br>(1)  | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|--|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. 8-SQUARE  |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0  |                         |                              |                               |                                |                     |                          |
| 2011   | 552,855.90              | 380,088                      | 395,586                       | 157,270                        | 2.50                | 62,908                   |
|  | 552,855.90              | 380,088                      | 395,586                       | 157,270                        |                     | 62,908                   |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 2.5 |                         |                              |                               |                                |                     | 11.38                    |

SUEZ WATER RHODE ISLAND

ACCOUNT 340.3 OFFICE FURNITURE AND EQUIPMENT - FURNITURE AND EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| YEAR<br>(1)                | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|----------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. 15-SQUARE |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0    |                         |                              |                               |                                |                     |                          |
| 2000                       | 10,639.40               | 10,639                       | 10,639                        |                                |                     |                          |
| 2006                       | 1,957.73                | 1,370                        | 198-                          | 2,156                          | 4.50                | 479                      |
| 2007                       | 29,022.75               | 18,381                       | 2,652-                        | 31,675                         | 5.50                | 5,759                    |
| 2011                       | 2,612.45                | 958                          | 138-                          | 2,750                          | 9.50                | 289                      |
| 2014                       | 6,275.61                | 1,046                        | 151-                          | 6,427                          | 12.50               | 514                      |
| 2016                       | 12,124.53               | 404                          | 59-                           | 12,183                         | 14.50               | 840                      |
|                            | 62,632.47               | 32,798                       | 7,441                         | 55,191                         |                     | 7,881                    |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 7.0 12.58

SUEZ WATER RHODE ISLAND

ACCOUNT 341 TRANSPORTATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| YEAR<br>(1)  | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|--|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 12-L3                                      |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0  |                         |                              |                               |                                |                     |                          |
| 2011   | 3,451.18                | 1,516                        | 460                           | 2,991                          | 6.73                | 444                      |
|  | 3,451.18                | 1,516                        | 460                           | 2,991                          |                     | 444                      |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 6.7 |                         |                              |                               |                                |                     | 12.87                    |

SUEZ WATER RHODE ISLAND

ACCOUNT 343 TOOLS, SHOP AND GARAGE EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31,2016

| YEAR<br>(1)                | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|----------------------------|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. 25-SQUARE |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0    |                         |                              |                               |                                |                     |                          |
| 1982                       | 2,062.00                | 2,062                        | 2,062                         |                                |                     |                          |
| 1991                       | 7,994.00                | 7,994                        | 7,994                         |                                |                     |                          |
| 1993                       | 3,803.00                | 3,575                        | 3,803                         |                                |                     |                          |
| 2000                       | 8,589.64                | 5,669                        | 8,542                         | 48                             | 8.50                | 6                        |
| 2003                       | 700.97                  | 379                          | 571                           | 130                            | 11.50               | 11                       |
| 2004                       | 2,677.06                | 1,339                        | 2,017                         | 660                            | 12.50               | 53                       |
| 2006                       | 5,940.87                | 2,495                        | 3,759                         | 2,182                          | 14.50               | 150                      |
| 2007                       | 1,559.04                | 592                          | 892                           | 667                            | 15.50               | 43                       |
| 2008                       | 2,553.52                | 868                          | 1,308                         | 1,246                          | 16.50               | 76                       |
| 2009                       | 1,260.30                | 378                          | 570                           | 690                            | 17.50               | 39                       |
| 2010                       | 3,069.34                | 798                          | 1,202                         | 1,867                          | 18.50               | 101                      |
| 2011                       | 71.38                   | 16                           | 24                            | 47                             | 19.50               | 2                        |
| 2012                       | 6,033.35                | 1,086                        | 1,636                         | 4,397                          | 20.50               | 214                      |
| 2013                       | 18,918.92               | 2,649                        | 3,992                         | 14,927                         | 21.50               | 694                      |
| 2014                       | 3,760.32                | 376                          | 567                           | 3,193                          | 22.50               | 142                      |
| 2015                       | 1,041.51                | 62                           | 93                            | 949                            | 23.50               | 40                       |
| 2016                       | 3,971.42                | 79                           | 119                           | 3,852                          | 24.50               | 157                      |
|                            | 74,006.64               | 30,417                       | 39,151                        | 34,856                         |                     | 1,728                    |

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 20.2 2.33

SUEZ WATER RHODE ISLAND

ACCOUNT 345 POWER OPERATED EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| YEAR<br>(1)   | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|---|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. IOWA 18-L2.5                                     |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0   |                         |                              |                               |                                |                     |                          |
| 2009  | 15,685.42               | 6,091                        | 8,210                         | 7,475                          | 11.01               | 679                      |
|   | 15,685.42               | 6,091                        | 8,210                         | 7,475                          |                     | 679                      |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 11.0 |                         |                              |                               |                                |                     | 4.33                     |

SUEZ WATER RHODE ISLAND

ACCOUNT 346 COMMUNICATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| YEAR<br>(1)  | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|--|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. 15-SQUARE   |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0  |                         |                              |                               |                                |                     |                          |
| 2002   | 6,758.51                | 6,533                        | 3,187                         | 3,572                          | 0.50                | 3,572                    |
| 2006   | 1,435.98                | 1,005                        | 490                           | 946                            | 4.50                | 210                      |
| 2008   | 8,489.97                | 4,811                        | 2,347                         | 6,143                          | 6.50                | 945                      |
| 2009   | 95,722.68               | 47,861                       | 23,352                        | 72,371                         | 7.50                | 9,649                    |
| 2010   | 55,991.82               | 24,263                       | 11,838                        | 44,154                         | 8.50                | 5,195                    |
| 2011   | 34,305.02               | 12,579                       | 6,137                         | 28,168                         | 9.50                | 2,965                    |
| 2012   | 52,769.80               | 15,831                       | 7,724                         | 45,046                         | 10.50               | 4,290                    |
| 2015   | 4,504.93                | 450                          | 220                           | 4,285                          | 13.50               | 317                      |
| 2016   | 30,993.52               | 1,033                        | 504                           | 30,490                         | 14.50               | 2,103                    |
|  | 290,972.23              | 114,366                      | 55,799                        | 235,174                        |                     | 29,246                   |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 8.0 10.05 |                         |                              |                               |                                |                     |                          |

SUEZ WATER RHODE ISLAND

ACCOUNT 347 MISCELLANEOUS EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL  
RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2016

| YEAR<br>(1)  | ORIGINAL<br>COST<br>(2) | CALCULATED<br>ACCRUED<br>(3) | ALLOC. BOOK<br>RESERVE<br>(4) | FUTURE BOOK<br>ACCRUALS<br>(5) | REM.<br>LIFE<br>(6) | ANNUAL<br>ACCRUAL<br>(7) |
|--|-------------------------|------------------------------|-------------------------------|--------------------------------|---------------------|--------------------------|
| SURVIVOR CURVE.. 25-SQUARE                                   |                         |                              |                               |                                |                     |                          |
| NET SALVAGE PERCENT.. 0                                      |                         |                              |                               |                                |                     |                          |
| 2005   | 77,078.62               | 35,456                       | 16,470                        | 60,609                         | 13.50               | 4,490                    |
| 2008   | 2,598.74                | 884                          | 411                           | 2,188                          | 16.50               | 133                      |
|  | 79,677.36               | 36,340                       | 16,881                        | 62,797                         |                     | 4,623                    |
| COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. |                         |                              |                               |                                |                     | 13.6 5.80                |