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MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. ER-2007-0002

DIRECT TESTIMONY

OF

JOHN F. WIEDMAYER

ON

BEHALF OF

UNION ELECTRIC COMPANY
d/b/a AmerenUE

St. Louis, Missouri
July, 2006

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DIRECT TESTIMONY

OF

JOHN F. WIEDMAYER

CASE NO. ER-2007-0002

I. INTRODUCTION

Q. Please state your name and address.

A. My name is John F. Wiedmayer. My business address is 1010 Adams Avenue, Audubon, Pennsylvania 19403.

Q. Are you associated with any firm?

A. Yes. I am associated with the firm of Gannett Fleming, Inc.

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

A. I have been associated with the firm since I graduated from college in June, 1986.

Q. What is your position with the firm?

A. I am Project Manager, Depreciation Studies of Gannett Fleming's Valuation and Rate Division.

Q. What is your educational background?

A. I have a Bachelor of Arts degree in Engineering from Lafayette College and a Master of Business Administration from the Pennsylvania State University.

Q. Do you belong to any professional societies?

A. Yes. I am a member of the National and Pennsylvania Societies of Professional Engineers and the Society of Depreciation Professionals. I am currently the past

President of the Society of Depreciation Professionals. In 2005, I served as President of the Society of Depreciation Professionals.

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.

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. I held that position from June, 1986 through December, 1995. In January, 1996, I was assigned to the position of Supervisor of Depreciation Studies. In August 2004, I was promoted to my present position as Project Manager of Depreciation Studies. I am responsible for conducting depreciation and valuation studies, including the preparation of testimony, exhibits, and responses to data requests for submission to the appropriate regulatory bodies. My additional duties include determining final life and salvage estimates, conducting field reviews, presenting recommended depreciation rates to management for their consideration and supporting such rates before regulatory bodies.

During the course of my employment with Gannett Fleming I have assisted in the preparation of numerous depreciation studies for utility companies in various industries. I assisted in the preparation of depreciation studies for the following telephone companies: Alberta Government Telephone, Telus, and United Telephone of Pennsylvania. I assisted in the preparation of depreciation studies for the following companies in the railroad industry: CSX Transportation, Union Pacific Railroad, Burlington Northern Railroad, Burlington

Northern Santa Fe Railway, Amtrak, Norfolk & Western, Southern Railway, and Norfolk Southern Corporation.

I assisted in the preparation of depreciation studies for the following organizations in the electric industry: AmerenUE, Arizona Public Service Company, UGI Utilities, Penelec, Metropolitan Edison, the City of Red Deer, Nova Scotia Power, Newfoundland Power, Owen Electric Cooperative, Bangor Hydro Electric Company, Maine Public Service Company, Michigan Electric Transmission Company, PECO, Jackson Electric Cooperative Corporation, Houston Lighting and Power, TXU, Maritime Electric, Nolin Rural Electric Cooperative, AmerenCIPS, AmerenCILCO, AmerenIP, and the City of Calgary - Electric System.

I assisted in the preparation of depreciation studies for the following gas companies: UGI Utilities, North Penn Gas, Equitable Gas, Centra Gas Alberta, Questar Gas and Dominion East Ohio.

In each of the above studies, I assembled and analyzed historical and simulated data, performed field reviews, developed preliminary estimates of service lives and net salvage, calculated annual depreciation, and prepared reports for submission to state public utility commissions or other regulatory agencies.

Q. Have you previously testified on the subject of utility plant depreciation?

A. Yes. I have submitted testimony to the Kentucky Public Service Commission, the Newfoundland and Labrador Board of Commissioners of Public Utilities, the Nova Scotia Utility and Review Board, the Federal Energy Regulatory Commission, the Utah Public Service Commission and the Arizona Corporation Commission.

Q. Have you received 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." In 2000, I became an instructor at the Society of Depreciation Professional annual conference lecturing on "Salvage Concepts," "Depreciation Models," and "Data Requirements for a Depreciation Study."

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

A. The purpose of my testimony is to sponsor the depreciation study conducted for Union Electric Company d/b/a AmerenUE (the "Company" or "AmerenUE"). The depreciation study report titled, "Depreciation Study – Calculated Annual Depreciation Accruals Related to Electric Plant at December 31, 2005" is attached hereto as Schedule JFW-E1. My testimony will address (1) the methods and procedures I used in the depreciation study, (2) the statistical analyses of service life and salvage data I performed, (3) my estimates of survivor curves and net salvage percents, (4) my calculation of depreciation accrual rates, (5) my proposed amortization of the reserve variance and (6) several examples of the manner in which the study results are presented in the depreciation study report. A summary of my testimony is included as Attachment A.

Q. What is the purpose of the depreciation study?

A. The purpose of the depreciation study is to determine the annual depreciation accrual rates applicable to AmerenUE's electric plant as of December 31, 2005.

Q. Please define the concept of depreciation.

A. Depreciation refers to 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 that can be reasonably anticipated or contemplated, against which the company is not protected by insurance. Among the causes to be given consideration are wear and tear, decay, action of the elements, inadequacy, obsolescence, changes in the art, changes in demand and the requirements of public authorities.

II. OUTLINE OF DEPRECIATION STUDY REPORT

Q. Does Schedule JFW-E1 accurately portray the results of your depreciation study as of December 31, 2005?

A. Yes.

Q. In preparing the depreciation study, did you follow generally accepted practices in the field of depreciation?

A. Yes.

Q. Please describe the contents of your report.

A. The depreciation study report consists of three parts. Part I, Introduction, includes brief descriptions of the basis of the study and a summary of the study results. Part II, Methods Used in the Estimation of Depreciation, presents detailed discussions of survivor curves, methods of life analysis including an example of the retirement rate method, group procedures for calculating annual and accrued depreciation including the true-up provision for monitoring the book accumulated depreciation. Part III, Results of Study, includes a qualification and description of the results, and summaries of the detailed

depreciation calculations. Appendices A through C include graphs and tables that relate to the service life and net salvage analyses, and detailed depreciation calculations.

The tables on pages III-4 through III-8 present summaries of the depreciation calculations as of December 31, 2005. Appendix A presents the results of the retirement rate analyses prepared as the historical bases for the service life estimates. Appendix B presents the results of the net salvage analyses. Appendix C presents the detailed depreciation calculations related to surviving original cost as of December 31, 2005. The detailed depreciation calculations present the annual and accrued depreciation amounts by account and vintage year. The whole life annual accrual rate is also set forth on the tables in Appendix C.

Q. Are any aspects of your depreciation study supported by any other witness in this proceeding?

A. Yes. AmerenUE witness William M. Stout is providing direct testimony in support of adopting the life span approach to straight-line whole life depreciation, the accrual of both interim and terminal net salvage during the life of power plants, and the life span for AmerenUE's power plants. I have incorporated Mr. Stout's recommendations regarding these items into my depreciation study.

Q. Please summarize your recommendations and their bases.

A. I recommend that the Commission approve the annual depreciation accrual rates presented in Schedule 1 of Schedule JFW-E1 and the remaining life amortization of the variance between the calculated accrued depreciation and the book accumulated depreciation that I have determined and presented in Schedule 2 of Schedule JFW-E1.

The annual depreciation accrual rates and the reserve variance amortization that I am recommending are based on standard professional and industry practices using estimates of survivor curves and net salvage percents. These estimates are based on informed judgment that incorporates statistical analyses of historical retirement data, field reviews of the property, discussions with management regarding the outlook for plant, and a review of the estimates made for other electric utilities. Further, my estimated survivor characteristics for Production Plant incorporate estimated dates of final retirement that are consistent with industry experience and the outlook of AmerenUE management.

III. METHODS AND PROCEDURES USED IN THE STUDY

Q. What was the basis for determining the annual depreciation related to electric plant as of December 31, 2005?

A. A study of service life and net salvage was prepared which incorporated available historical data through 2005. The survivor curve and net salvage estimates resulting from the study are the bases of the calculated annual and accrued depreciation as of December 31, 2005. The straight-line method, average service procedure and the average remaining life basis using the survivor curve and net salvage estimates and attained ages were applied by depreciable group to electric plant as of December 31, 2005 to calculate depreciation. Use of the remaining life basis recognizes the current status of the accumulated provision for depreciation and aims to allocate the previously unallocated service value over the remaining life.

Q. Please outline the steps you took to perform the depreciation study.

A. I reviewed the available sources of data, observed the electric plant during a field survey, and discussed past causes of retirement and the outlook for future retirements

with AmerenUE engineering and operations management. I specified the data to be extracted and coded for the historical analyses, supervised the statistical analyses of data, and calculated depreciation.

Q. Briefly describe the steps you took to conduct the service life and net salvage study.

A. I assembled and compiled historical data from the continuing property and other records of AmerenUE; I analyzed the data to obtain historical trends of survivor and salvage characteristics; I obtained supplementary information from AmerenUE's management and operating personnel concerning past practices and future plans as they relate to plant operations; and I selected appropriate survivor curves and net salvage percents.

IV. STATISTICAL ANALYSES OF DATA

Q. What historical data did you analyze for the purpose of estimating the service lives and net salvage characteristics of AmerenUE's electric plant?

A. The service life data consisted of the entries made by AmerenUE to record electric plant transactions from the earliest available year through 2005. For most plant accounts, the plant accounting data comprised the period 1923 through 2005. The transactions included additions, retirements, transfers, acquisitions and the related balances. I classified data by depreciable group, type of transaction, the year in which the transaction took place, and the year in which the plant was installed.

The net salvage data consisted of the entries to accumulated depreciation. The transactions included retirements, cost of removal and gross salvage.

Q. What method did you use to analyze the 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. The retirement rate method is described in Part II of the depreciation study report.

Q. Please describe how you used the retirement rate method to analyze AmerenUE's service life data.

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. The survivor patterns do not necessarily describe the life characteristics of the property group; therefore, 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. Iowa type curves are a widely used group of survivor curves that contain the range of survivor characteristics usually experienced by utility and other industrial properties. 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 were used in this study to describe the forecasted rates of retirement based on the observed rates of retirement and the outlook for future retirements.

The estimated survivor curve designations for each depreciable group indicate the average service life, the family within the Iowa system and the relative height of the mode. For example, the Iowa 34-R2 indicates an average service life of thirty-four years for the depreciable group; a Right, or R, type curve (i.e., the mode occurs to the right of or after average life for right modal curves); and a relatively low height, 2, for the mode (possible modes for R type curves range of 0.5 to 5).

Q. What method of analysis was used in the study of net salvage?

A. The method of analysis for net salvage consisted of expressing annual amounts of gross salvage and cost of removal as percents of the related retirement amounts. The annual amounts and percents were smoothed through the use of a three-year moving average. The most recent five-year average also was computed.

Q. Did you prepare the schedules of net salvage amounts and percents presented in Appendix B of the depreciation study report?

A. Yes, I did.

V. SURVIVOR CURVE AND NET SALVAGE ESTIMATES

Q. What were the bases for your estimates of survivor curves and net salvage?

A. The survivor curve and net salvage estimates were based on my judgment which incorporated the analyses of historical data, a review of utility policies and outlook

with engineering and operations management, and comparisons of survivor curve and net salvage estimates from studies of other electric utilities.

Q. Are the factors which you considered in the estimation of survivor curve and net salvage percents presented in the depreciation study report?

A. Yes. The factors which I considered in estimating survivor curves and net salvage percents are set forth in Part II of the report.

VI. CALCULATION OF DEPRECIATION

Q. What method of depreciation was used to calculate the annual depreciation as of December 31, 2005?

A. The straight-line method, average service procedure and remaining life basis was used to calculate the annual and accrued depreciation.

Q. Why is this method and procedure appropriate for AmerenUE?

A. The straight-line method is used throughout the regulated utility industry to describe the loss in service value of utility property. The average service life procedure is widely used throughout the electric industry and has been approved for AmerenUE by the Missouri Public Service Commission.

Q. Please describe the average service life procedure.

A. When considering more than a single item of property, a group procedure is appropriate because normally all of the items within a group do not have identical lives, but have lives that are dispersed over a range of time. In the average service life procedure, a constant accrual rate based on the average life of all property in the group is applied to the surviving property. The accrued depreciation is based on the average service life of the

group and the average remaining life of each vintage within the group derived from the area under the survivor curve between the attained age of the vintage and the maximum age.

Q. Did you calculate the annual depreciation rates and accrued depreciation amounts?

A. Yes, the annual and accrued depreciation calculations summarized in Part III of the depreciation study report and detailed in Appendix C were prepared under my supervision.

VII. RESERVE VARIANCE AMORTIZATION

Q. Please explain what you mean by the term "Reserve Variance Amortization".

A. The reserve variance amortization is a way to adjust annual depreciation expense in order to align the book reserve with the calculated accrued depreciation or theoretical reserve. The reserve variance is the difference between the company's book accumulated depreciation (i.e., book reserve) and the theoretical reserve. A reduction in the reserve variance is achieved by either increasing or decreasing the amortization amounts depending on whether a reserve excess or deficiency exists.

Q. How did you determine the reserve variance amortization for AmerenUE?

A. The reserve variance amortization for AmerenUE as of December 31, 2005 is calculated in Schedule 2 on pages III-9 through III-14 of the depreciation study report. Each account's reserve variance amortization shown in column 7 is the reserve variance in column 5 divided by the composite remaining life in column 6.

Q. Did you make any adjustments to the book accumulated depreciation amounts maintained at the plant account level?

A. Yes. The initial calculations revealed that the book accumulated depreciation for Distribution Plant exceeded the theoretical reserve by approximately $90 million or 6% of the calculated accrued depreciation ("CAD") amount, a.k.a., theoretical reserve. The accumulated depreciation for General Plant was under-accrued by approximately $81 million. That is, book reserve was less than the theoretical reserve by $81 million or 39% of the CAD. I reallocated the total book reserve amounts for Distribution and General Plant in proportion the theoretical reserve amounts calculated at the plant account level. The reserve variance amortizations presented on Schedule 2 in Schedule JFW-E1, are based on book reserve amounts that have been reallocated in the manner described above.

Q. Would you comment on the reserve imbalance and your proposed adjustment to the book reserve amounts?

A. The Company has been using the same depreciation accrual rates since 1983 so it is not surprising that several large reserve variances have developed. As a matter of practice, I recommend that electric companies update their depreciation rates at a minimum of every five years in connection with complete depreciation study that includes a service life and net salvage study. Companies that update their depreciation studies every five years are less prone to having large reserve variances develop. Also, conducting a depreciation study every five years is accepted industry practice and is consistent with the regulations of the Missouri Public Service Commission.[1]

[1] AmerenUE has complied with Missouri Public Service Commission regulations requiring periodic submission of depreciation studies, but depreciation rates were not changed after 1983.

The reserve variances were caused by depreciation accrual rates that were too high for Distribution Plant since the service lives were too short. Conversely, depreciation accrual rates for General Plant were too low since the service lives were too long. Generally, Distribution Plant assets are lasting longer due to improved maintenance practices and better equipment and protective devices; as a result Gannett Fleming is recommending longer lives for Distribution Plant. For example, the existing average service life estimate for Account 368, Line Transformers is 40 years and the proposed average service life estimate is 45 years.

The existing average service lives for certain General Plant accounts are extremely long and inappropriate, and Gannett Fleming is recommending shorter lives for General Plant. For example, in 1983 (the year in which AmerenUE's depreciation rates were last changed) personal computers ("PC") were grouped in Account 391, Office Furniture and Equipment, an account with a 28-year average service life and a depreciation accrual rate of 3.29 percent. Most companies currently depreciate their PC equipment over a 3 to 5 year period using annual accrual rates ranging from 20 to 33 percent. As a result of the accrual rate for PC equipment being too low, AmerenUE is significantly under accrued by nearly $42 million for PC equipment. AmerenUE has been monitoring the reserve variance but was precluded from changing accrual rates outside of a general rate case.

Also the average remaining life for PC equipment is very short, slightly less than 2 years. The reserve variance amortization amount calculated for PC equipment prior to the reserve reallocation was an increase to depreciation expense of approximately $26 million versus a reduction of $1,846 after the reserve reallocation. The average remaining lives in General Plant are much shorter than those in Distribution Plant and this produces significantly higher amortization amounts even though the reserve variance in total are

roughly offsetting (i.e., $90 million reserve excess in Distribution Plant versus $81 million reserve deficiency in General Plant). The total reserve variance amortization amount prior to the reserve reallocation that I am recommending was an increase to depreciation of approximately $50 million versus an increase of $8.5 million. By rebalancing the book reserve related to distribution and general plant, the Company's annual depreciation provision is reduced by approximately $41.5 million.

VIII. EXAMPLES OF PRESENTATION

Q. Please illustrate the procedure followed in your depreciation study and the manner in which it is presented in the depreciation study report using an account as an example.

A. I will use Account 355, Poles and Fixtures, to illustrate the manner in which the study was conducted. As the initial step of the service life study, aged plant account data were compiled for the years 1930 through 2005. These data have been coded in the course of AmerenUE's normal recordkeeping according to: 1) account or property group; 2) type of transaction; 3) year in which the transaction took place; and, 4) year in which the electric plant was placed in service. The retirements and other transactions were analyzed by the retirement rate method. The survivor curve estimate is based on the statistical analysis for the period 1930-2005. The original and smooth survivor curves are plotted on page A-59 of Appendix A in the depreciation study report. The original life table for the 1930-2005 experience band is set forth on pages A-60 and A-61. The net salvage estimate is based in part on the analysis of 1961 through 2005 removal cost and salvage experienced for Account 355 as shown on pages B-65 through B-67 of Appendix B in the depreciation study report.

The calculation of annual depreciation for the original cost of poles and pole fixtures at December 31, 2005 is presented by vintage, on pages C-82 and C-83 in the depreciation study report. The accrued depreciation was calculated by the average service life procedure using the Iowa 52-R4 survivor curve.

The total depreciation accrual on page C-83 of the depreciation study report was brought forward to column 7 of Schedule 1 on page III-6. The total calculated accrued depreciation on page C-83 was brought forward to column 4 of Schedule 2 on page III-9.

The calculated accrued depreciation was used to determine the reserve variance amortization in column 7 of Schedule 2 in the manner previously described. The reserve variance amortizations in column 7 of Schedule 2 were also presented in column 4 of Schedule 3, pages III-15 through III-18, and added to whole-life annual accruals in column 3 to determine the total annual depreciation for this account in column 5 of Schedule 3.

Q. Does this conclude your direct testimony?

A. Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of Union Electric Company d/b/a AmerenUE for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Company's Missouri Service Area.	)))))	Case No. ER-2007-0002

AFFIDAVIT OF JOHN F. WIEDMAYER

STATE OF PENNSYLVANIA)
) **ss**
COUNTY OF Montgomery)

John F. Wiedmayer, being first duly sworn on his oath, states:

1. My name is John F. Wiedmayer. I work in Audubon, Pennsylvania and I am a Project Manager with the firm of Gannett Fleming, Inc.

2. Attached hereto and made a part hereof for all purposes is my Direct Testimony on behalf of Union Electric Company d/b/a AmerenUE consisting of 16 pages, Attachment A and Schedule JFW-E1, all of which have been prepared in written form for introduction into evidence in the above-referenced docket.

3. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct.

John F. Wiedmayer, Jr.
John F. Wiedmayer

Subscribed and sworn to before me this 3rd day of July, 2006.

James Gibbons
Notary Public

My commission expires: 4/13/2010

COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL
JAMES R. GIBBONS, Notary Public
Lower Providence Twp., Montgomery County
My Commission Expires April 13, 2010

EXECUTIVE SUMMARY

John F. Wiedmayer

Project Manager, Depreciation Studies Practice
Gannett Fleming, Inc.

*** * * * * * * * * ***

The purpose of my testimony is to sponsor the depreciation study conducted for Union Electric Company d/b/a AmerenUE (the "Company" or "AmerenUE"), titled "Depreciation Study – Calculated Annual Depreciation Accruals Related to Electric Plant at December 31, 2005." The recommendations in the direct testimony of AmerenUE witness William M. Stout in support of adopting the life span approach to straight-line whole life depreciation, the accrual of both interim and terminal net salvage during the life of power plants, and the life span for AmerenUE's power plants are incorporated into my depreciation study.

My testimony addresses (1) the methods and procedures I used in the depreciation study, (2) the statistical analyses of service life and salvage data I performed, (3) my estimates of survivor curves and net salvage percents, (4) my calculation of depreciation accrual rates, (5) my proposed amortization of the reserve variance and (6) several examples of the manner in which the study results are presented in the depreciation study report. The specific annual depreciation accrual rates that I recommend the Commission approve are presented in Schedule 1 of Schedule JFW-E1 and the remaining life amortization of the variance between the calculated accrued depreciation and the book accumulated depreciation that I have determined are presented in Schedule 2 of Schedule JFW-E1.

These annual depreciation accrual rates and the reserve variance amortization are based on standard professional and industry practices using estimates of survivor curves and net salvage percents. These estimates are based on informed judgment that incorporates statistical analyses of historical retirement data, field reviews of the property, discussions with management regarding the outlook for plant, and a review of the estimates made for other electric utilities. Further, my estimated survivor characteristics for Production Plant incorporate estimated dates of final retirement that are consistent with industry experience and the outlook of AmerenUE management