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DE-OHIO EXHIBIT ___

BEFORE

PUCO THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of Duke Energy Ohio for an Increase in Electric Distribution Rates	)	Case No. 08-709-EL-AIR
In the Matter of the Application of Duke Energy Ohio for Tariff Approval	)	Case No. 08-710-EL-ATA
In the Matter of the Application of Duke Energy Ohio for Approval to Change Accounting Methods	)	Case No. 08-711-EL-AAM

DIRECT TESTIMONY OF

JOHN J. SPANOS

ON BEHALF OF

DUKE ENERGY OHIO

_____ Management policies, practices, and organization

_____ Operating income

_____ Rate Base

_____ Allocations

_____ Rate of return

_____ Rates and tariffs

__X__ Other: Depreciation

August 8, 2008

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Testimony sponsoring Duke Energy Ohio's depreciation study.

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I. INTRODUCTION AND PURPOSE

Q. PLEASE STATE YOUR NAME AND ADDRESS.

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

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?

A. I have been associated with the firm since college graduation in June 1986.

Q. WHAT IS YOUR POSITION WITH THE FIRM?

A. I am a Vice President of the Valuation and Rate Division.

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 of the Society of Depreciation Professionals and 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 and December 2007.

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 industry: Chugach Electric Association, Duke Energy Ohio (DE-Ohio or Company), Duke Energy Kentucky (DE-Kentucky), Northwest Territories Power Corporation, and the City of Calgary - Electric System.

I helped perform depreciation studies for the following pipeline companies: Trans Canada 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 companies: Columbia Gas of Pennsylvania, Columbia Gas of Maryland, The Peoples Natural

Gas Company, T. W. Phillips Gas & Oil Company, DE-Ohio, DE-Kentucky, Lawrenceburg Gas Company, and Penn Fuel Gas, Inc.

I helped perform depreciation studies for the following water companies: Indiana-American Water Company, Customers 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 my present position as Vice-President of Gannett Fleming Valuation and Rate Consultants, Inc. and I became 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, 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, SCANA, Inc., Idaho Power Company, El Paso Electric Company, 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., 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, Duke Energy Carolinas, DE-Ohio Gas, DE-Kentucky, Bonneville Power

Administration, NSTAR Electric and Gas Company, EPCOR Distribution, Inc., and B. C. Gas Utility, Ltd. 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. WHAT IS THE EXTENT OF YOUR FORMAL INSTRUCTION WITH RESPECT TO UTILITY PLANT DEPRECIATION?

A. I have completed the "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" programs conducted by Depreciation Programs, Inc. Also, I have completed the "Introduction to Public Utility Accounting" program conducted by the American Gas Association.

Q. HAVE YOU SUBMITTED TESTIMONY TO ANY STATE UTILITY COMMISSIONS 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, The Tennessee Regulatory Commission, the Regulatory Commission of Alaska, and the North Carolina Utilities Commission.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A. I sponsor the depreciation study performed for DE-Ohio submitted as Supplemental Filing Requirement C (20).

II. DEPRECIATION STUDY

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.

Q. DID YOU PREPARE THE DEPRECIATION STUDY FILED BY DE-OHIO IN THIS PROCEEDING?

A. Yes. I prepared the depreciation study submitted by DE-Ohio with its filing in this proceeding. My report is entitled: "Depreciation Study - Calculated Annual Depreciation Accruals Related to Electric and Common Plant as of December 31, 2007." This report sets forth the results of my depreciation study for DE-Ohio.

Q. IN PREPARING THE DEPRECIATION STUDY, DID YOU FOLLOW GENERALLY ACCEPTED PRACTICES IN THE FIELD OF DEPRECIATION VALUATION?

A. Yes.

Q. PLEASE DESCRIBE THE CONTENTS OF YOUR REPORT.

A. My report is presented in three parts. Part I, Introduction, presents the scope and basis for the depreciation study. Part II, Methods Used in Study, includes descriptions of the basis of the study, the estimation of survivor curves and net salvage and the calculation of annual and accrued depreciation. Part III, Results of Study, presents a description of the results, summaries of the depreciation calculations, graphs and tables that relate to the service life and net salvage analyses, and the detailed depreciation calculations.

The table on pages III-4 and III-5 presents the estimated survivor curve, the net salvage percent, the original cost as of December 31, 2007, the calculated annual depreciation accrual and rate, and the calculated accrued depreciation for each account or subaccount. The section beginning on page III-6 presents the results of the retirement rate analyses prepared as the historical bases for the service life estimates. The section beginning on page III-151 presents the results of the salvage

analysis. The section beginning on page III-190 presents the depreciation calculations related to surviving original cost as of December 31, 2007.

Q. PLEASE EXPLAIN HOW YOU PERFORMED YOUR DEPRECIATION STUDY.

A. I used the straight line whole life method of depreciation, with the average service life procedure. The annual depreciation is based on a method of depreciation accounting that seeks to distribute the cost of fixed capital assets over the useful life of each unit, or group of assets, in a systematic and reasonable manner.

For Accounts 1910, 1930, 1940, 1950, 1970, and 1980 in Common Plant, and for Accounts 3910, 3911, 3940, 3950, 3970, and 3980 in General Plant, I used the straight line whole life method of amortization. The account numbers identified throughout my testimony represent those in effect as of December 31, 2007. The annual amortization is based on amortization accounting that distributes the cost of fixed capital assets over the amortization period selected for each account and vintage.

Q. HOW DID YOU DETERMINE THE RECOMMENDED ANNUAL DEPRECIATION ACCRUAL RATES?

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

Q. PLEASE DESCRIBE THE FIRST PHASE OF THE DEPRECIATION STUDY, 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 DE-Ohio plant; analyzing these data to obtain historical trends of survivor characteristics; obtaining supplementary information from management and operating personnel concerning practices and plans as they relate to plant operations; and interpreting the above data and the estimates used by other electric utilities to form judgments of average service life and net salvage characteristics.

Q. WHAT HISTORICAL DATA DID YOU ANALYZE FOR THE PURPOSE OF ESTIMATING SERVICE LIFE CHARACTERISTICS?

A. I analyzed the Company's accounting entries that record plant transactions during the period 1956 through 2007. The transactions included additions, retirements, transfers, sales and the related balances. The Company records included surviving dollar value by year installed for each plant account as of December 31, 2007.

Q. WHAT METHOD DID YOU USE TO ANALYZE THIS SERVICE LIFE DATA?

A. I used the retirement rate method. This is the most appropriate method when retirement data covering a long period of time is available, because this method determines the average rates of retirement actually experienced by the Company during the period of time covered by the depreciation study.

Q. PLEASE DESCRIBE HOW YOU USED THE RETIREMENT RATE METHOD TO ANALYZE DE-OHIO'S SERVICE LIFE DATA.

A. I applied the retirement rate analysis to each different group of property in the study. For each property group, I used the retirement rate data to form a life table that, when plotted, shows an original survivor curve for that property group. Each original survivor curve 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 survivor curves is required in order to use them as valid considerations in estimating service life. The Iowa type survivor curves were used to perform these interpretations.

Q. WHAT IS AN "IOWA TYPE SURVIVOR CURVE" AND HOW DID YOU USE SUCH CURVES TO ESTIMATE THE SERVICE LIFE CHARACTERISTICS FOR EACH PROPERTY GROUP?

A. Iowa type curves are a widely-used group of survivor curves that contain the range of survivor characteristics usually experienced by utilities and other industrial companies. The Iowa curves were developed at the Iowa State College Engineering Experiment Station through an extensive process of observing and classifying the ages at which various types of property used by utilities and other industrial companies 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 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 property group indicate the average service life, the family within the Iowa system to which the property group belongs, and the relative height of the mode. For example, the Iowa 50-R1 indicates an average service life of fifty years; a right-moded, or R, type curve (the mode occurs after average life for right-moded curves); and a low height, 1, for the mode (possible modes for R type curves range from 1 to 5).

Q. PLEASE USE AN EXAMPLE TO DESCRIBE HOW YOU ESTIMATED THE AVERAGE SERVICE LIVES AND SURVIVOR CURVES UTILIZED IN THIS STUDY.

A. I will use Account 3680, Line Transformers, as an example because it is the largest depreciable group and represents 13% of depreciable plant.

The retirement rate method was used to analyze the survivor characteristics of this property group. Aged plant accounting data was compiled from 1956 through 2007 and analyzed in periods that best represent the overall service life of this property. The life table for the 1956-2007 experience band is presented on pages III-109 through III-111 of the report. The life table displays the retirement and surviving ratios of the aged plant data exposed to retirement by age interval. For example, page III-109 shows $3,728,116 retired at age 0.5 with $373,187,225 exposed to retirement. Consequently, the retirement ratio is .0100 and the surviving ratio is 0.9900. This life table, or original survivor curve, is plotted along with the estimated smooth survivor curve, the 40-R1 on page III-108.

Q. PLEASE DESCRIBE HOW YOU ESTIMATED NET SALVAGE PERCENTAGES.

A. I estimated the net salvage percentages by incorporating the historical data for the period 1978 through 2007 and considered estimates for other electric companies.

Q. PLEASE DESCRIBE THE SECOND PHASE OF THE PROCESS THAT YOU USED IN THE DEPRECIATION STUDY IN WHICH YOU CALCULATED ANNUAL DEPRECIATION ACCRUAL RATES.

A. After I estimated the service life and net salvage characteristics for each depreciable property group, I calculated the annual depreciation accrual rates for each group, using the straight line whole life method and the average service life procedure.

Q. PLEASE DESCRIBE THE STRAIGHT LINE WHOLE LIFE METHOD OF DEPRECIATION.

A. The straight line whole life method of depreciation allocates the original cost of the property, less future net salvage, in equal amounts to each year of service life.

Q. PLEASE DESCRIBE AMORTIZATION ACCOUNTING.

A. In amortization accounting, units of property are capitalized in the same manner as they are in depreciation accounting. Amortization accounting is used for accounts with a large number of units, but small asset values; therefore, depreciation accounting is difficult for these assets because periodic inventories are required to properly reflect plant in service. Consequently, retirements are recorded when a vintage is fully amortized rather than as the units are removed from service. That is, there is no dispersion of retirement. All units are retired when the age of the vintage reaches the amortization period. Each plant account or group of assets is assigned a

fixed period, which represents an anticipated life that the asset will render full benefit. For example, in amortization accounting, assets that have a 15-year amortization period will be fully recovered after 15 years of service and taken off the Company books, but not necessarily removed from service. In contrast, assets that are taken out of service before 15 years remain on the books until the amortization period for that vintage has expired.

Q. AMORTIZATION ACCOUNTING IS BEING IMPLEMENTED TO WHICH PLANT ACCOUNTS?

A. Amortization accounting is only appropriate for certain Common and General Plant accounts. These accounts are 1910, 1930, 1940, 1950, 1970, and 1980 for Common plant, and 3910, 3911, 3940, 3950, 3970, and 3980 for General plant, which represent less than two percent of depreciable plant.

Q. PLEASE USE AN EXAMPLE TO ILLUSTRATE HOW THE ANNUAL DEPRECIATION ACCRUAL RATE FOR A PARTICULAR GROUP OF PROPERTY IS PRESENTED IN YOUR DEPRECIATION STUDY.

A. I will use Account 3640, Poles, Towers and Fixtures, as an example because it is one of the largest depreciable group and represents 12% of depreciable plant.

As described on page 9 of this testimony, the retirement rate method was used to analyze the survivor characteristics of this property group. The life tables for the 1956-2007 and 1974-2007 experience bands are plotted along with the estimated smooth survivor curve, the 47-R1 on page III-86.

My calculation of the annual depreciation related to the original cost as of December 31, 2007, of electric plant is presented on pages III-248 through III-250.

The calculation is based on the 47-R1 survivor curve, 5% negative net salvage, and the attained age. The tabulation sets forth the installation year, the original cost, calculated accrued depreciation, average life, life expectancy, and annual accrual amount and rate. These totals are brought forward to the table on page III-5.

III. CONCLUSION

Q. WAS THE DEPRECIATION STUDY FILED BY DE-OHIO IN THIS PROCEEDING PREPARED BY YOU OR UNDER YOUR DIRECTION AND CONTROL?

A. Yes.

Q. SHOULD THE DEPRECIATION RATES CONTAINED IN THE STUDY FILED BY DE-OHIO IN THIS PROCEEDING BE APPROVED BY THE COMMISSION FOR DE-OHIO'S CALCULATION OF ITS FUTURE DEPRECIATION EXPENSE?

A. Yes.

Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?

A. Yes.