



**Public Utilities
Commission**

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CASE NUMBER: 17-0032-EL-AIR, 17-0033-EL-ATA, 17-0034-EL-AAM

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FILED BY: Jeanne Kingery

FILED ON BEHALF OF: Duke Energy Ohio, Inc.

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BEFORE

THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of)	
Duke Energy Ohio, Inc., for an)	Case No. 17-32-EL-AIR
Increase in Electric Distribution Rates.)	
In the Matter of the Application of)	
Duke Energy Ohio, Inc., for Tariff)	Case No. 17-33-EL-ATA
Approval.)	
In the Matter of the Application of)	
Duke Energy Ohio, Inc., for Approval)	Case No. 17-34-EL-AAM
to Change Accounting Methods.)	

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
<u> X </u>	Other: Depreciation

March 16, 2017

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Attachment:

JJS-1: Regulatory proceedings where John J. Spanos has submitted testimony

I. INTRODUCTION

1 **Q. PLEASE STATE YOUR NAME AND ADDRESS.**

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

4 **Q. ARE YOU ASSOCIATED WITH ANY FIRM?**

5 A. Yes. I am associated with the firm of Gannett Fleming Valuation and Rate
6 Consultants, LLC (Gannett Fleming).

7 **Q. HOW LONG HAVE YOU BEEN ASSOCIATED WITH GANNETT
8 FLEMING?**

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

10 **Q. WHAT IS YOUR POSITION WITH THE FIRM?**

11 A. I am Senior Vice President.

12 **Q. WHAT IS YOUR EDUCATIONAL BACKGROUND?**

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

16 **Q. PLEASE STATE YOUR QUALIFICATIONS.**

17 A. I have over 30 years of depreciation experience, which includes giving expert
18 testimony in over 240 cases before 40 regulatory commissions, including the Public
19 Utilities Commission of Ohio (PUCO). Please see Attachment JJS-1 for a detailed
20 list of regulatory proceedings in which I have submitted testimony.

21 **Q. DO YOU BELONG TO ANY PROFESSIONAL SOCIETIES?**

22 A. Yes. I am a member and past President of the Society of Depreciation

1 Professionals and a member of the American Gas Association/Edison Electric
2 Institute Industry Accounting Committee.

3 **Q. DO YOU HOLD ANY SPECIAL CERTIFICATION AS A**
4 **DEPRECIATION EXPERT?**

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

9 **Q. PLEASE OUTLINE YOUR EXPERIENCE IN THE FIELD OF**
10 **DEPRECIATION.**

11 A. In June 1986, I was employed by Gannett Fleming Valuation and Rate
12 Consultants, Inc., as a Depreciation Analyst. During the period from June 1986
13 through December 1995, I helped prepare numerous depreciation and original cost
14 studies for utility companies in various industries. I helped perform depreciation
15 studies for the following telephone companies: United Telephone of
16 Pennsylvania, United Telephone of New Jersey, and Anchorage Telephone
17 Utility. I helped perform depreciation studies for the following companies in the
18 railroad industry: Union Pacific Railroad, Burlington Northern Railroad, and
19 Wisconsin Central Transportation Corporation.

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

1 Electric System.

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

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

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

15 In each of the above studies, I assembled and analyzed historical and
16 simulated data, performed field reviews, developed preliminary estimates of
17 service life and net salvage, calculated annual depreciation, and prepared reports
18 for submission to state public utility commissions or federal regulatory agencies. I
19 performed these studies under the general direction of William M. Stout, P.E.

20 In January 1996, I was assigned to the position of Supervisor of
21 Depreciation Studies. In July 1999, I was promoted to the position of Manager,
22 Depreciation and Valuation Studies. In December 2000, I was promoted to the
23 position as Vice-President of Gannett Fleming Valuation and Rate Consultants,

1 Inc., and in April 2012, I was promoted to my present position as Senior Vice
2 President of the Valuation and Rate Division of Gannett Fleming Inc. (now doing
3 business as Gannett Fleming Valuation and Rate Consultants, LLC). In my current
4 position I am responsible for conducting all depreciation, valuation and original
5 cost studies, including the preparation of final exhibits and responses to data
6 requests for submission to the appropriate regulatory bodies.

7 Since January 1996, I have conducted depreciation studies similar to those
8 previously listed, including assignments for Pennsylvania-American Water
9 Company; Aqua Pennsylvania; Kentucky-American Water Company; Virginia-
10 American Water Company; Indiana-American Water Company; Hampton Water
11 Works Company; Omaha Public Power District; Enbridge Pipe Line Company;
12 Inc.; Columbia Gas of Virginia, Inc.; Virginia Natural Gas Company National
13 Fuel Gas Distribution Corporation - New York and Pennsylvania Divisions; The
14 City of Bethlehem - Bureau of Water; The City of Coatesville Authority; The City
15 of Lancaster - Bureau of Water; Peoples Energy Corporation; The York Water
16 Company; Public Service Company of Colorado; Enbridge Pipelines; Enbridge
17 Gas Distribution, Inc.; Reliant Energy-HLP; Massachusetts-American Water
18 Company; St. Louis County Water Company; Missouri-American Water
19 Company; Chugach Electric Association; Alliant Energy; Oklahoma Gas &
20 Electric Company; Nevada Power Company; Dominion Virginia Power; NUI -
21 Virginia Gas Companies; Pacific Gas & Electric Company; PSI Energy; NUI -
22 Elizabethtown Gas Company; Cinergy Corporation - CG&E; Cinergy
23 Corporation - ULH&P; Columbia Gas of Kentucky; South Carolina Electric &

1 Gas Company; Idaho Power Company; El Paso Electric Company; Aqua North
2 Carolina; Aqua Ohio; Aqua Texas, Inc.; Ameren Missouri; Central Hudson Gas &
3 Electric; Centennial Pipeline Company; CenterPoint Energy-Arkansas;
4 CenterPoint Energy – Oklahoma; CenterPoint Energy – Entex; CenterPoint
5 Energy - Louisiana; NSTAR – Boston Edison Company; Westar Energy, Inc.;
6 United Water Pennsylvania; PPL Electric Utilities; PPL Gas Utilities; Wisconsin
7 Power & Light Company; TransAlaska Pipeline; Avista Corporation; Northwest
8 Natural Gas; Allegheny Energy Supply, Inc.; Public Service Company of North
9 Carolina; South Jersey Gas Company; Duquesne Light Company; MidAmerican
10 Energy Company; Laclede Gas; Duke Energy Company; E.ON U.S. Services Inc.;
11 Elkton Gas Services; Anchorage Water and Wastewater Utility; Kansas City
12 Power and Light; Duke Energy North Carolina; Duke Energy South Carolina;
13 Monongahela Power Company; Potomac Edison Company; Duke Energy Ohio
14 Gas; Duke Energy Kentucky; Duke Energy Indiana; Northern Indiana Public
15 Service Company; Tennessee-American Water Company; Columbia Gas of
16 Maryland; Bonneville Power Administration; NSTAR Electric and Gas Company;
17 EPCOR Distribution, Inc.; B. C. Gas Utility, Ltd; Entergy Arkansas; Entergy
18 Texas; Entergy Mississippi; Entergy Louisiana; Entergy Gulf States Louisiana; the
19 Borough of Hanover; Louisville Gas and Electric Company; Kentucky Utilities
20 Company; Madison Gas and Electric; Central Maine Power; PEPCO; PacifiCorp;
21 Minnesota Energy Resource Group; Jersey Central Power & Light Company;
22 Cheyenne Light, Fuel and Power Company; United Water Arkansas; Central
23 Vermont Public Service Corporation; Green Mountain Power; Portland General

1 Electric Company; Atlantic City Electric; Nicor Gas Company; Black Hills
2 Power; Black Hills Colorado Gas; Black Hills Kansas Gas; Black Hills Service
3 Company; Black Hills Utility Holdings; Public Service Company of Oklahoma;
4 City of Dubois; Peoples Gas Light and Coke Company; North Shore Gas
5 Company; Connecticut Light and Power; New York State Electric and Gas
6 Corporation; Rochester Gas and Electric Corporation; Greater Missouri
7 Operations; Tennessee Valley Authority; Omaha Public Power District;
8 Indianapolis Power & Light Company; Vermont Gas Systems, Inc.; Metropolitan
9 Edison; Pennsylvania Electric; West Penn Power; Pennsylvania Power; PHI
10 Service Company - Delmarva Power and Light; Atmos Energy Corporation;
11 Citizens Energy Group; and Alabama Gas Corporation.

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

16 **Q. HAVE YOU SUBMITTED TESTIMONY TO ANY STATE UTILITY**
17 **COMMISSION ON THE SUBJECT OF UTILITY PLANT**
18 **DEPRECIATION?**

19 A. Yes. I have submitted testimony to the Pennsylvania Public Utility Commission;
20 the Commonwealth of Kentucky Public Service Commission; the Public Utilities
21 Commission of Ohio; the Nevada Public Utility Commission; the Public Utilities
22 Board of New Jersey; the Missouri Public Service Commission; the
23 Massachusetts Department of Telecommunications and Energy; the Alberta

1 Energy & Utility Board; the Idaho Public Utility Commission; the Louisiana
2 Public Service Commission; the State Corporation Commission of Kansas; the
3 Oklahoma Corporate Commission; the Public Service Commission of South
4 Carolina; Railroad Commission of Texas – Gas Services Division; the New York
5 Public Service Commission; Illinois Commerce Commission; the Indiana Utility
6 Regulatory Commission; the California Public Utilities Commission; the Federal
7 Energy Regulatory Commission (“FERC”); the Arkansas Public Service
8 Commission; the Public Utility Commission of Texas; Maryland Public Service
9 Commission; Washington Utilities and Transportation Commission; The
10 Tennessee Regulatory Commission; the Regulatory Commission of Alaska;
11 Minnesota Public Utility Commission; Utah Public Service Commission; District
12 of Columbia Public Service Commission; the Mississippi Public Service
13 Commission; Delaware Public Service Commission; Virginia State Corporation
14 Commission; Colorado Public Utility Commission; Oregon Public Utility
15 Commission; South Dakota Public Utilities Commission; Wisconsin Public
16 Service Commission; Wyoming Public Service Commission; Maine Public Utility
17 Commission; Iowa Utility Board; Connecticut Public Utilities Regulatory
18 Authority; New Mexico Public Regulation Commission and the North Carolina
19 Utilities Commission. Please see Attachment JJS-1 for a list of the regulatory
20 proceedings in which I have submitted testimony.

21 **Q. HAVE YOU HAD ANY ADDITIONAL EDUCATION RELATING TO**
22 **UTILITY PLANT DEPRECIATION?**

23 **A.** Yes. I have completed the following courses conducted by Depreciation Programs,

1 Inc.: "Techniques of Life Analysis," "Techniques of Salvage and Depreciation
2 Analysis," "Forecasting Life and Salvage," "Modeling and Life Analysis Using
3 Simulation," and "Managing a Depreciation Study." I have also completed the
4 "Introduction to Public Utility Accounting" program conducted by the American
5 Gas Association.

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

8 A. I sponsor the depreciation study performed for Duke Energy Ohio (Duke Energy
9 Ohio or the Company).

II. DEPRECIATION STUDY

10 **Q. PLEASE DEFINE THE CONCEPT OF DEPRECIATION.**

11 A. Depreciation refers to the loss in service value not restored by current
12 maintenance, incurred in connection with the consumption or prospective
13 retirement of utility plant in the course of service from causes that can be
14 reasonably anticipated or contemplated, against which the Company is not
15 protected by insurance. Among the causes to be given consideration are wear and
16 tear, decay, action of the elements, inadequacy, obsolescence, changes in the art,
17 changes in demand and the requirements of public authorities.

18 **Q. DID YOU PREPARE THE DEPRECIATION STUDY FILED BY DUKE**
19 **ENERGY OHIO IN THIS PROCEEDING?**

20 A. Yes. I prepared the depreciation study submitted by Duke Energy Ohio with its
21 filing in this proceeding. My report is entitled: "2016 Depreciation Study -
22 Calculated Annual Depreciation Accruals Related to Electric and Common Plant as

1 of September 30, 2016". This report sets forth the results of my depreciation study
2 for Duke Energy Ohio.

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

6 A. Yes.

7 **Q. PLEASE DESCRIBE THE CONTENTS OF YOUR REPORT.**

8 A. My report is presented in nine parts. Part I, Introduction, presents the scope and
9 basis for the depreciation study. Part II, Estimation of Survivor Curves, includes
10 descriptions of the methodology of estimating survivor curves. Part III and IV set
11 forth the analysis for determining life and net salvage estimation. Part V,
12 Calculation of Annual and Accrued Depreciation includes the concepts of
13 depreciation and amortization using the whole life. Part VI, Results of Study,
14 presents a description of the results and a summary of the depreciation
15 calculations. Parts VII, VIII and IX include graphs and tables that relate to the
16 service life and net salvage analyses, and the detailed depreciation calculations.

17 The table on pages VI-4 and VI-5 presents the estimated survivor curve, the
18 net salvage percent, the original cost as of September 30, 2016, the calculated
19 annual depreciation accrual and rate and the calculated accrued depreciation for each
20 account or subaccount. The section beginning on page VII-2 presents the results of
21 the retirement rate analyses prepared as the historical bases for the service life
22 estimates. The section beginning on page VIII-2 presents the results of the salvage

1 analysis. The section beginning on page IX-2 presents the depreciation calculations
2 related to surviving original cost as of September 30, 2016.

3 **Q. PLEASE EXPLAIN HOW YOU PERFORMED YOUR DEPRECIATION**
4 **STUDY.**

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

9 For Accounts 1910, 1911, 1930, 1940, 1950, 1970 and 1980 in Common
10 Plant; and for Accounts 3910, 3911, 3940, 3970 and 3980 in General Plant, I used
11 the straight line whole life method of amortization. The account numbers
12 identified throughout my testimony represent those in effect as of September 30,
13 2016. The annual amortization is based on amortization accounting that
14 distributes the cost of fixed capital assets over the amortization period selected for
15 each account and vintage.

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

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

1 **Q. PLEASE DESCRIBE THE FIRST PHASE OF THE DEPRECIATION**
2 **STUDY, IN WHICH YOU ESTIMATED THE SERVICE LIFE AND NET**
3 **SALVAGE CHARACTERISTICS FOR EACH DEPRECIABLE GROUP.**

4 A. The service life and net salvage study consisted of compiling historical data from
5 records related to Duke Energy Ohio plant; analyzing these data to obtain historical
6 trends of survivor characteristics; obtaining supplementary information from
7 management and operating personnel concerning practices and plans as they relate
8 to plant operations; and interpreting the above data and the estimates used by other
9 electric utilities to form judgments of average service life and net salvage
10 characteristics.

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

13 A. I analyzed the Company's accounting entries that record plant transactions during
14 the period 1956 through 2016. The transactions included additions, retirements,
15 transfers, sales and the related balances. The Company records included surviving
16 dollar value by year installed for each plant account as of September 30, 2016.

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

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

1 **Q. PLEASE DESCRIBE HOW YOU USED THE RETIREMENT RATE**
2 **METHOD TO ANALYZE DUKE ENERGY OHIO'S SERVICE LIFE**
3 **DATA.**

4 A. I applied the retirement rate analysis to each different group of property in the study.
5 For each property group, I used the retirement rate data to form a life table that,
6 when plotted, shows an original survivor curve for that property group. Each
7 original survivor curve represents the average survivor pattern experienced by the
8 several vintage groups during the experience band studied. The survivor patterns do
9 not necessarily describe the life characteristics of the property group; therefore,
10 interpretation of the original survivor curves is required in order to use them as valid
11 considerations in estimating service life. The Iowa type survivor curves were used to
12 perform these interpretations.

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

16 A. Iowa type curves are a widely-used group of survivor curves that contain the range
17 of survivor characteristics usually experienced by utilities and other industrial
18 companies. The Iowa curves were developed at the Iowa State College Engineering
19 Experiment Station through an extensive process of observing and classifying the
20 ages at which various types of property used by utilities and other industrial
21 companies had been retired.

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

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

3 The estimated survivor curve designations for each depreciable property
4 group indicate the average service life, the family within the Iowa system to which
5 the property group belongs, and the relative height of the mode. For example, the
6 Iowa 55-R1 indicates an average service life of fifty-five years; a right-moded, or
7 R, type curve (the mode occurs after average life for right-moded curves); and a
8 low height, 1, for the mode (possible modes for R type curves range from 1 to 5).

9 **Q. WHAT APPROACH DID YOU USE TO ESTIMATE THE LIVES OF**
10 **SIGNIFICANT STRUCTURES?**

11 A. I used the life span technique to estimate the lives of significant buildings to
12 which concurrent retirement of the entire facility is anticipated. In this technique,
13 the survivor characteristics of such facilities are described by the use of interim
14 survivor curves and estimated probable retirement dates.

15 The interim survivor curves describe the rate of retirement related to the
16 replacement of elements of the facility, such as, for a building, the retirements of
17 plumbing, heating, doors, windows, roofs, etc., that occur during the life of the
18 facility. The probable retirement date provides the rate of final retirement for each
19 year of installation for the facility by truncating the interim survivor curve for each
20 installation year at its attained age at the date of probable retirement. The use of
21 interim survivor curves truncated at the date of probable retirement provides a
22 consistent method for estimating the lives of the several years of installation for a

1 particular facility inasmuch as a single concurrent retirement for all years of
2 installation will occur when it is retired.

3 **Q. HAS GANNETT FLEMING USED THIS APPROACH IN OTHER**
4 **PROCEEDINGS?**

5 A. Yes, we have used the life span technique in performing depreciation studies
6 presented to and accepted by many public utility commissions across the United
7 States and Canada, including Ohio. This technique is currently being utilized by
8 Duke Energy Ohio in the same manner recommended in this case.

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

12 A. I will use Account 3650, Overhead Conductors and Devices, as an example
13 because it is the largest depreciable group and represents 20% of depreciable
14 plant.

15 The retirement rate method was used to analyze the survivor
16 characteristics of this property group. Aged plant accounting data was compiled
17 from 1956 through 2016 and analyzed in periods that best represent the overall
18 service life of this property. The life tables for the 1956-2016 and 1976-2016
19 experience bands are presented on pages VII-36 through VII-41 of the report. The
20 life tables display the retirement and surviving ratios of the aged plant data
21 exposed to retirement by age interval. For example, page VII-36 shows
22 \$3,430,921 retired at age 0.5 with \$556,248,685 exposed to retirement.
23 Consequently, the retirement ratio is .0062 and the surviving ratio is 0.9938. The

1 life tables, or original survivor curves, are plotted along with the estimated smooth
2 survivor curve, the 55-R0.5 on page VII-35.

3 **Q. PLEASE DESCRIBE HOW YOU ESTIMATED NET SALVAGE**
4 **PERCENTAGES.**

5 A. I estimated the net salvage percentages by incorporating the historical data for the
6 period 1978 through 2016 and considered estimates for other electric companies.

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

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

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

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

17 **Q. PLEASE DESCRIBE AMORTIZATION ACCOUNTING.**

18 A. In amortization accounting, units of property are capitalized in the same manner as
19 they are in depreciation accounting. Amortization accounting is used for accounts
20 with a large number of units, but small asset values; therefore, depreciation
21 accounting is difficult for these assets because periodic inventories are required to
22 properly reflect plant in service. Consequently, retirements are recorded when a
23 vintage is fully amortized rather than as the units are removed from service. That is,

1 there is no dispersion of retirement. All units are retired when the age of the vintage
2 reaches the amortization period. Each plant account or group of assets is assigned a
3 fixed period which represents an anticipated life which the asset will render full
4 benefit. For example, in amortization accounting, assets that have a 20-year
5 amortization period will be fully recovered after 20 years of service and taken off
6 the Company books, but not necessarily removed from service. In contrast, assets
7 that are taken out of service before 20 years remain on the books until the
8 amortization period for that vintage has expired.

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

11 A. Amortization accounting is only appropriate for certain Common and General Plant
12 accounts. These accounts are 1910, 1911, 1930, 1940, 1950, 1970 and 1980 for
13 Common Plant, and 3910, 3911, 3940, 3970 and 3980 for General Plant, which
14 represent approximately nine percent of depreciable plant.

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

18 A. I will use Account 3640, Poles, Towers and Fixtures, as an example because it is
19 one of the largest depreciable groups and represents 11% of depreciable plant.

20 As described on page 8 of this testimony, the retirement rate method was
21 used to analyze the survivor characteristics of this property group. The life tables
22 for the 1956-2016 and 1976-2016 experience bands are plotted along with the
23 estimated smooth survivor curve, the 55-R1 on page VII-28.

1 The net salvage percent is presented on pages VIII-9 and VIII-10. The
2 percentage is based on the result of annual gross salvage minus the cost to remove
3 plant assets as compared to the original cost of plant retired during the period
4 1978 through 2016. The 39-year period experienced \$10,081,108 (\$9,780,669 -
5 \$19,861,778) in net salvage for \$47,904,242 plant retired. The result is negative
6 net salvage of 21 percent ($\$10,081,108 / \$47,904,242$). While the result was
7 negative 21 percent, recent trends have shown indications of negative 52 percent.
8 Therefore, based on industry ranges, historical indications and Company
9 expectations, I determined that a negative 25 percent was the most appropriate
10 estimate for this account.

11 My calculation of the annual depreciation related to the original cost as of
12 September 30, 2016, of electric plant is presented on pages IX-40 through IX-42.
13 The calculation is based on the 55-R1 survivor curve, 25 percent negative net
14 salvage and the attained age. The tabulation sets forth the installation year, the
15 original cost, calculated accrued depreciation, average life, life expectancy and
16 annual accrual amount and rate. These totals are brought forward to the table on
17 page VI-4.

18 **Q. ARE THERE ANY OTHER AMORTIZATIONS INCLUDED IN THE**
19 **DEPRECIATION STUDY?**

20 A. Yes. All standard meters and leased meters were replaced by year end 2014 with
21 only meter instrumentation assets remaining. A depreciation rate for the remaining
22 life could not be calculated to insure full recovery as a reserve amortization was
23 established. Therefore, an additional 2.75-year amortization for Account 3700,

1 Meters, and 3701, Meters – Leased, has been included on page III-4 of the
2 Depreciation Study. The 2.75 years is the remaining amortization of the 10 years
3 that was originally ordered by the Commission in Case No. 08-709-EL-AIR.

4 **Q. CAN YOU DISCUSS THE REPLACEMENT PLAN FOR ACCOUNT 3702?**

5 A. Yes. The assets in Account 3702, Meters – Utility of Future, represent the first
6 generation of new technology meters. These meters are going to be replaced by
7 end of year 2022, and an advanced meter will be installed. Therefore, the life
8 characteristics for Account 3702 in the depreciation study include the replacement
9 of the Echelon meters within the account through 2022. The 8-S2.5 survivor curve
10 represents the full life cycle for the existing meters for the period 2008-2022.

11 **Q. ARE THERE ANY OTHER PROGRAMS THAT CHANGE THE**
12 **RECOVERY PATTERN OF ASSET CLASSES RELATED TO METERS?**

13 A. Yes. Accounts 1970, Communication Equipment and 3970, Communication
14 Equipment have been segregated into two categories. The first group in each
15 account is the standard communication equipment which will maintain the 15-
16 year amortization period. The second group within each account represents
17 communication nodes. All of these nodes are being replaced by year-end 2022.
18 These communication nodes represent assets which are associated with the
19 Echelon meters and will be removed when the new Itron meters are installed.

III. CONCLUSION

1 **Q. WAS THE DEPRECIATION STUDY FILED BY DUKE ENERGY OHIO**
2 **IN THIS PROCEEDING PREPARED BY YOU OR UNDER YOUR**
3 **DIRECTION AND CONTROL?**

4 **A. Yes.**

5 **Q. WAS ATTACHMENT JJS-1 PREPARED BY YOU OR UNDER YOUR**
6 **DIRECTION AND CONTROL?**

7 **A. Yes.**

8 **Q. SHOULD THE DEPRECIATION RATES CONTAINED IN THE STUDY**
9 **FILED BY DUKE ENERGY OHIO IN THIS PROCEEDING BE**
10 **APPROVED BY THE COMMISSION FOR DUKE ENERGY OHIO'S**
11 **CALCULATION OF ITS FUTURE DEPRECIATION EXPENSE?**

12 **A. Yes.**

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

14 **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	R-00984375	City of Bethlehem – Bureau of Water	Original Cost and Depreciation
02.	1998	R-00984567	City of Lancaster	Original Cost and Depreciation
03.	1999	R-00994605	The York Water Company	Depreciation
04.	2000	DTE 00-105	Massachusetts-American Water Company	Depreciation
05.	2001	R-00016114	City of Lancaster	Original Cost and Depreciation
06.	2001	R-00017236	The York Water Company	Depreciation
07.	2001	R-00016339	Pennsylvania-American Water Company	Depreciation
08.	2001	01-1228-GA-AIR	Cinergy Corp – Cincinnati Gas & Elect Co.	Depreciation
09.	2001	2001-092	Cinergy Corp – Union Light, Heat & Power Co.	Depreciation
10.	2002	R-00016750	Philadelphia Suburban Water Company	Depreciation
11.	2002	2002-00145	Columbia Gas of Kentucky	Depreciation
12.	2002	GF02040245	NUI Corporation/Elizabethtown Gas Co.	Depreciation
13.	2002	IPC-E-03-7	Idaho Power Company	Depreciation
14.	2003	R-0027975	The York Water Company	Depreciation
15.	2003	R-0027975	Cinergy Corp – PSI Energy, Inc.	Depreciation
16.	2003	R-00038304	Pennsylvania-American Water Co.	Depreciation
17.	2003	WR-2003-0500	Missouri-American Water Co.	Depreciation
18.	2003	ER-03-1274-000	NSTAR-Boston Edison Company	Depreciation
19.	2003	BPU 03080683	South Jersey Gas Company	Depreciation
20.	2003	03-10001	Nevada Power Company	Depreciation
21.	2003	U-27676	CenterPoint Energy – Arkla	Depreciation
22.	2003	R-00038805	Pennsylvania Suburban Water Company	Depreciation
23.	2004	1306821	EPCOR Distribution, Inc.	Depreciation
24.	2004	R-00038168	National Fuel Gas Distribution Corp (PA)	Depreciation
25.	2004	R-00049255	PPL Electric Utilities	Depreciation
26.	2004	R-00049165	The York Water Company	Depreciation
27.	2004	PUC 200400187	CenterPoint Energy – Arkla	Depreciation
28.	2004	04-680-El-AIR	Cinergy Corp. – Cincinnati Gas and Electric 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>
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
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- 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	Depreciation
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

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>
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
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

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>
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
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

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>
128.	2011	IN URC	43114 IGCC 45	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
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	KCP&L 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,	Consolidated Edison of New York	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>
162.	2013	13-S-0032	Peoples TWP LLC	Depreciation
163.	2013	2013-2355886	Tennessee American Water	Depreciation
164.	2013	12-0504	Central Maine Power Company	Depreciation
165.	2013	2013-168	PHI Service Co. – PEPCO	Depreciation
166.	2013	Case 1103	Cheyenne Light, Fuel and Power Co.	Depreciation
167.	2013	2003-ER-13	Kentucky Utilities	Depreciation
168.	2013	ER13- -0000	MidAmerican Energy Company	Depreciation
169.	2013	ER13- -0000	PPL Utilities	Depreciation
170.	2013	ER13- -0000	Duquesne Light Company	Depreciation
171.	2013	R-2013-2372129	Jersey Central Power and Light Co.	Depreciation
172.	2013	ER12111052	Bethlehem, City of – Bureau of Water	Depreciation
173.	2013	R-2013-2390244	Oklahoma, Public Service Company of	Depreciation
174.	2013	UM 1679	Nicor Gas Company	Depreciation
175.	2013	13-0500	PacifiCorp	Depreciation
176.	2013	20000-427-EA-13	PacifiCorp	Depreciation
177.	2013	13-035-02	PacifiCorp	Depreciation
178.	2013	UM 1647	Dubois, City of	Depreciation
179.	2013	2013-2350509	North Shore Gas Company	Depreciation
180.	2014	14-0224	Duquesne Light Company	Depreciation
181.	2014	ER14-	Black Hills Power Company	Depreciation
182.	2014	EL14-026	Black Hills Power Company	Depreciation
183.	2014	20002-91-ER-14	Black Hills Power Company	Depreciation
184.	2014	2014-2428304	Hanover, Borough of – Municipal Water Works	Depreciation
185.	2014	2014-2406274	Columbia Gas of Pennsylvania	Depreciation
186.	2014	14-0225	Peoples Gas Light and Coke Company	Depreciation
187.	2014	ER-2014-0258	Ameren Missouri	Depreciation
188.	2014	14-BHCG-502-RTS	Black Hills Service Company	Depreciation
189.	2014	14-BHCG-502-RTS	Black Hills Utility Holdings	Depreciation
190.	2014	14-BHCG-502-RTS	Black Hills Kansas Gas	Depreciation
191.	2014	2014-2418872	Lancaster, City of – Bureau of Water	Depreciation
192.	2014	14-0701-E-D	First Energy – MonPower/PotomacEdison	Depreciation
193.	2014	PUC-2014-00045	Aqua Virginia	Depreciation
194.	2014	PUE-2013	Virginia American	Depreciation
	2014	PUD201400229	Oklahoma Gas and Electric	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>
195.	2014	UM1679	Portland General Electric	Depreciation
196.	2014	Cause No. 44576	Indianapolis Power & Light	Depreciation
197.	2014	DPU. 14-150	NSTAR Gas	Depreciation
198.	2014	14-05-06	Connecticut Light and Power	Depreciation
199.	2014	ER-2014-0370	Kansas City Power & Light	Depreciation
200.	2014	2014-00371	Kentucky Utilities Company	Depreciation
201.	2014	2014-00372	Louisville Gas and Electric Company	Depreciation
202.	2015	R-2015-2462723	United Water Pennsylvania Inc.	Depreciation
203.	2015	R-2015-2468056	Columbia Gas of Pennsylvania	Depreciation
204.	2015	15-E-0283/15-G-0284	New York State Electric and Gas Corporation	Depreciation
205.	2015	15-E-0285/15-G-0286	Rochester Gas and Electric Corporation	Depreciation
206.	2015	WR-2015-0301/SR-2015-0302	Missouri American Water Company	Depreciation
207.	2015	PUD 201500208	Oklahoma, Public Service Company of	Depreciation
208.	2015	15-0676-W-42T	West Virginia American Water Company	Depreciation
209.	2015	2015-2469275	PPL Electric Utilities	Depreciation
210.	2015	Cause No. 44688	Northern Indiana Public Service Company	Depreciation
211.	2015	14-1929-EL-RDR	First Energy-Ohio Edison/Cleveland Electric/ Toledo Edison	Depreciation
212.	2015	15-00127-UT	El Paso Electric	Depreciation
213.	2015	PUC-44941; SOAH 473-15-5257	El Paso Electric	Depreciation
214.	2015	3370-DU-104	Madison Gas and Electric Company	Depreciation
215.	2015	PUD 201500273	Oklahoma Gas and Electric	Depreciation
216.	2015	Doc. No. 2015-00418	Kentucky American Water Company	Depreciation
217.	2015	Doc. No. G-5, Sub 565	Public Service Company of North Carolina	Depreciation
218.	2016		Puget Sound Energy	Depreciation
219.	2016	Case No. 16-W-0130	Suez Water New York, Inc.	Depreciation
220.	2016	ER-2016-0156	KCPL – Greater Missouri	Depreciation
221.	2016		Wisconsin Public Service Commission	Depreciation
222.	2016	Case No. 2016-00026	Kentucky Utilities Company	Depreciation
223.	2016	Case No. 2016-00027	Louisville Gas and Electric Company	Depreciation
224.	2016		Aqua Ohio	Depreciation
225.	2016	Case 9417	Columbia Gas of Maryland	Depreciation
226.	2016	2016-00162	Columbia Gas of Kentucky	Depreciation
227.	2016	16-0649	Delmarva Power and Light Co. – Gas	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>
228.	2016	DE PSC	16-0650	Delmarva Power and Light Co. – Electric	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
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	KCP&L 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.	2017	MA DPU	D.P.U. 17-05	NSTAR Electric Company and Western Massachusetts Electric Company	Depreciation

BEFORE

THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of)
Duke Energy Ohio, Inc., for an) Case No. 17-32-EL-AIR
Increase in Electric Distribution Rates.)

In the Matter of the Application of)
Duke Energy Ohio, Inc., for Tariff) Case No. 17-33-EL-ATA
Approval.)

In the Matter of the Application of)
Duke Energy Ohio, Inc., for Approval) Case No. 17-34-EL-AAM
to Change Accounting Methods.)

DIRECT TESTIMONY OF

JOHN L. SULLIVAN, III,

ON BEHALF OF

DUKE ENERGY OHIO, INC.

<input type="checkbox"/>	Management policies, practices, and organization
<input type="checkbox"/>	Operating income
<input type="checkbox"/>	Rate base
<input type="checkbox"/>	Allocations
<input type="checkbox"/>	Rate of return
<input type="checkbox"/>	Rates and tariffs
<input checked="" type="checkbox"/>	Other: Capital Structure

March 16, 2017

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I. INTRODUCTION AND PURPOSE

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. My name is John L. Sullivan, III, and my business address is 550 S. Tryon Street,
3 Charlotte, North Carolina 28202.

4 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

5 A. I am employed by Duke Energy Business Services LLC (DEBS) as Director,
6 Corporate Finance and Assistant Treasurer. I am also the Assistant Treasurer of
7 Duke Energy Ohio, Inc. (Duke Energy Ohio or the Company). DEBS provides
8 various administrative and other services to Duke Energy Ohio and other affiliated
9 companies of Duke Energy Corporation (Duke Energy).

10 **Q. PLEASE BRIEFLY SUMMARIZE YOUR EDUCATION AND**
11 **PROFESSIONAL EXPERIENCE.**

12 I received a Bachelor of Arts degree from the University of North Carolina-
13 Chapel Hill in 1995 and an MBA degree from Wake Forest University in 2000.
14 From 2000 to 2009, I worked in Bank of America's Global Corporate &
15 Investment Banking unit, providing corporate finance, capital markets and
16 strategic advisory services to energy and power clients. In 2009, I joined Duke
17 Energy as a General Manager in the Treasury group. In 2010, I moved to Duke
18 Energy's Corporate Development group where I served as a Director responsible
19 for managing various strategic transactions for the company's regulated and
20 commercial businesses. In January 2016, I returned to Duke Energy's Treasury
21 department and assumed my current role.

1 **Q. PLEASE SUMMARIZE YOUR RESPONSIBILITIES AS DIRECTOR,**
2 **CORPORATE FINANCE AND ASSISTANT TREASURER.**

3 A. I am responsible for financing the operations of Duke Energy and its subsidiary
4 utilities. This includes the issuance of new debt and equity securities, and
5 obtaining other sources of external funds. My responsibilities also include
6 financial risk management for Duke Energy and its subsidiaries. Additionally, I
7 maintain relationships with Duke Energy's commercial banks, the fixed income
8 investor community and the credit rating agencies.

9 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE PUBLIC**
10 **UTILITIES COMMISSION OF OHIO?**

11 A. No.

12 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THESE**
13 **PROCEEDINGS?**

14 A. My testimony will address Duke Energy Ohio's financial objectives, capital
15 structure, and cost of capital. I will also discuss the current credit ratings and
16 forecasted capital needs of Duke Energy Ohio. Throughout my testimony, I will
17 emphasize the importance of Duke Energy Ohio's continued ability to meet its
18 financial objectives and maintain strong credit quality. In that regard, I sponsor
19 Schedules D-1A, D-1B, D-2A, D-2B, D-3A, D-3B, D-4A, and D-4B and page 3
20 of Schedules D-5A and D-5B. I also sponsor Supplemental Filing Requirement
21 (C)(2).

II. DUKE ENERGY OHIO'S FINANCIAL OBJECTIVES

1 **Q. WHAT ARE DUKE ENERGY OHIO'S FINANCIAL OBJECTIVES?**

2 A. The Company at all times seeks to maintain its financial strength and flexibility,
3 including its strong investment-grade credit ratings, thereby ensuring reliable access
4 to capital on reasonable terms. Financial strength and access to capital are necessary
5 for Duke Energy Ohio to provide cost-effective, safe, and reliable service to its
6 customers. Specific targets that support financial strength and flexibility include: 1)
7 maintaining an equity component of the capital structure that is within the rating
8 agencies' guidelines for Duke Energy Ohio's credit rating; 2) maintaining strong
9 credit quality; 3) ensuring timely recovery of prudently incurred costs; 4)
10 maintaining sufficient cash flows to meet obligations; and 5) maintaining a
11 sufficient return on equity to fairly compensate shareholders for their invested
12 capital. The ability to attract capital (both debt and equity) on reasonable terms is
13 vitally important to the Company and its customers, and each of these targets helps
14 the Company meet its overall financial objectives.

15 **Q. WHAT RATEMAKING TREATMENT IS BEING REQUESTED IN THIS**
16 **PROCEEDING AND HOW WILL THE COMPANY'S FINANCIAL**
17 **OBJECTIVES BE IMPACTED?**

18 A. As explained by Company witness James P. Henning, Duke Energy Ohio is
19 requesting an overall rate increase of less than one percent, equating to an increase
20 in overall distribution revenue of approximately \$15.4 million. As part of this
21 request, supported by the analysis and testimony of Duke Energy Ohio witness Dr.
22 Roger Morin, the Company is requesting an allowed ROE of 10.4 percent. The

1 proposed capitalization in this request comprises 49.25 percent long-term debt and
2 50.75 percent equity. Approval of the Company's request in this case will support
3 its financial objectives by ensuring timely cash recovery of its prudently incurred
4 costs.

III. CREDIT QUALITY & CREDIT RATINGS

5 **Q. PLEASE EXPLAIN CREDIT QUALITY AND CREDIT RATINGS, AND**
6 **HOW THEY ARE DETERMINED.**

7 A. Credit quality (or creditworthiness) is a term used to describe a company's overall
8 financial health and its willingness and ability to repay all financial obligations in
9 full and on time. An assessment of Duke Energy Ohio's creditworthiness is
10 performed by Standard & Poor's (S&P) and Moody's Investors Service (Moody's),
11 and results in Duke Energy Ohio's credit ratings and outlook.

12 Many qualitative and quantitative factors go into this assessment. Qualitative
13 aspects may include Duke Energy Ohio's regulatory climate, its track record for
14 delivering on its commitments, the strength of its management team, corporate
15 governance, its operating performance, and its service territory. Quantitative
16 measures are primarily based on operating cash flow and focus on Duke Energy
17 Ohio's ability to meet its fixed obligations (interest expense in particular) on the
18 basis of internally generated cash and the level at which Duke Energy Ohio
19 maintains debt balances. The percentage of debt to total capital is another example
20 of a quantitative measure. Creditors and credit rating agencies view both qualitative
21 and quantitative factors in the aggregate when assessing the credit quality of a
22 company.

1 **Q. WHAT IS THE ROLE OF REGULATION IN THE DETERMINATION OF**
2 **THE FINANCIAL STRENGTH OF A UTILITY COMPANY?**

3 A. Investors, investment analysts, and the rating agencies regard regulation as one of
4 the most important factors in assessing a utility company's financial strength.
5 These stakeholders want to be confident a utility company operates in a stable
6 regulatory environment that will allow the company to recover prudently incurred
7 costs and earn a reasonable return on investments necessary to meet the demand,
8 reliability, and service requirements of its customers. Important considerations
9 include the allowed rate of return, cash quality of earnings, timely recovery of
10 capital investments, stability of earnings, and strength of its capital structure.
11 Positive consideration is also given for utilities operating in states where the
12 regulatory process is streamlined and outcomes are equitably balanced between
13 customers and investors.

14 **Q. HOW ARE DUKE ENERGY OHIO'S OUTSTANDING SECURITIES**
15 **CURRENTLY RATED BY THE CREDIT RATING AGENCIES?**

16 A. As of the date of this testimony, S&P and Moody's rated Duke Energy Ohio's
17 outstanding debt as follows:

Rating Agency	S&P	Moody's
Senior Secured	A	A2
Senior Unsecured	A-	Baa1
Outlook	Stable	Stable

18 **Q. WHY IS IT IMPORTANT FOR DUKE ENERGY OHIO TO HAVE**
19 **STRONG INVESTMENT-GRADE CREDIT RATINGS?**

20 A. To assure reliable and cost-effective service, and to fulfill its obligations to serve

1 customers, the Company must continuously plan and execute major capital projects.
2 This is the nature of regulated capital-intensive industries like electric and gas
3 utilities. The Company must be able to operate and maintain its business without
4 interruption and refinance maturing debt on time, regardless of financial market
5 conditions. The financial markets continue to experience periods of volatility, most
6 recently driven by the uncertainty surrounding fiscal, monetary and foreign policy
7 under a new administration. Duke Energy Ohio must be able to finance its needs
8 throughout such periods and strong investment-grade credit ratings provide the
9 Company greater assurance of continued access to the capital markets on reasonable
10 terms during periods of volatility.

11 **Q. WHAT STRENGTHS AND WEAKNESSES HAVE THE AGENCIES**
12 **IDENTIFIED WITH RESPECT TO DUKE ENERGY OHIO?**

13 A. With respect to the regulated transmission and distribution businesses of Duke
14 Energy Ohio, the rating agencies believe the Ohio regulatory environment generally
15 supports long-term credit quality with timely and sufficient recovery of prudently
16 incurred costs and expenses. Following the Company's sale of its merchant
17 generation assets in 2015, S&P updated the Company's business risk profile to the
18 highest rating of "Excellent." Generally speaking, the credit rating agencies have
19 identified the following Strengths and Challenges when assessing the credit quality
20 of Duke Energy Ohio:

- 21 • Credit Strengths:
 - 22 ○ Entirely regulated transmission and distribution business;

- 1 ○ Current Electric Security Plan (ESP) includes credit supportive
- 2 riders; and
- 3 ○ Financial metrics expected to remain appropriate for current ratings.
- 4 • Credit Challenges:
- 5 ○ Uncertainty regarding recovery of Ohio Valley Electric Corporation
- 6 (OVEC) contract costs; and
- 7 ○ Sizeable capital program.

8 The rating agencies speak to the importance of a constructive regulatory framework
9 and the outcomes of future rate cases as areas of focus. Such comments highlight the
10 importance of the outcome of these proceedings in supporting credit quality and the
11 Company's financial objectives.

IV. CAPITAL STRUCTURE AND COST OF CAPITAL

12 **Q. WHAT IS DUKE ENERGY OHIO'S PROPOSED CAPITAL STRUCTURE?**

13 A. As mentioned earlier in my testimony, Duke Energy Ohio's proposed capital
14 structure comprises 49.25 percent long-term debt and 50.75 percent equity, after
15 making adjustments for purchase accounting and other items. The Company
16 believes this proposed capital structure is appropriate for Duke Energy Ohio, as it
17 introduces an appropriate amount of risk due to leverage and minimizes the
18 weighted average cost of capital to customers. Approval of the proposed capital
19 structure will help Duke Energy Ohio maintain its credit quality to meet its ongoing
20 business objectives. This level is also consistent with the Company's target credit
21 ratings.

1 **Q. WHAT IS DUKE ENERGY OHIO'S COST OF EQUITY?**

2 A. Company witness Dr. Morin testifies that the Company's cost of equity is in the
3 range of 10.1 percent to 10.7 percent. The Company supports Dr. Morin's analysis
4 and is requesting 10.4 percent as the Company's allowed ROE.

5 **Q. WHAT ROLE DO EQUITY INVESTORS PLAY IN THE FINANCING OF**
6 **DUKE ENERGY OHIO, AND HOW WILL THE OUTCOME OF THIS**
7 **CASE IMPACT THESE INVESTORS?**

8 A. Equity investors provide the foundation of a company's capitalization by
9 providing significant amounts of capital, for which an appropriate economic
10 return is required. Duke Energy Ohio compensates equity investors for the risk of
11 their investment by targeting fair and adequate returns, a stable dividend policy,
12 and earnings growth — these are necessary to preserve ongoing access to equity
13 capital. Returns to equity investors are realized only after all operating expenses
14 and fixed payment obligations (including debt principal and interest) of the
15 Company have been paid. Because equity investors are the last in priority to a
16 company's assets, their investment is at most risk should the company suffer any
17 underperformance. For this reason, equity investors require a higher return on
18 investment. Equity investors expect utilities like Duke Energy Ohio to recover
19 their prudently incurred costs and earn a fair and reasonable return for their
20 investors. The Company's proposal in these proceedings supports this investor
21 requirement.

1 **Q. WHAT EFFECT DO CAPITAL STRUCTURE AND RETURN ON EQUITY**
2 **HAVE ON CREDIT QUALITY?**

3 A. Capital structure and return on equity are important components of credit quality.
4 Equity capital is subordinate to debt capital, thereby providing cushion and safer
5 returns for debt investors. Accordingly, equity capital is a more expensive form of
6 capital. The Company seeks to maintain a level of equity in the capital structure
7 that ensures high credit quality, while minimizing its overall cost of capital. An
8 adequate ROE will allow the Company to generate earnings and cash flows to
9 properly compensate equity investors for their capital at risk while protecting debt
10 investors with a higher degree of credit quality. High credit quality improves
11 financial flexibility by providing more readily available access to the capital
12 markets on reasonable terms, and ultimately lower debt financing costs.

13 **Q. DO YOU BELIEVE THAT DUKE ENERGY OHIO'S CAPITAL**
14 **STRUCTURE HAS AN ADEQUATE EQUITY COMPONENT TO ENABLE**
15 **THE COMPANY TO ACHIEVE ITS FINANCIAL STRENGTH AND**
16 **CREDIT QUALITY OBJECTIVES?**

17 A. Yes. Duke Energy Ohio's equity component, as supported in these proceedings,
18 enables it to maintain current credit ratings and financial strength and flexibility.
19 This level of equity enables the Company to operate through different business
20 cycles while also providing cushion to the Company's lenders and bondholders. The
21 Company's current and future capital expenditures require the need for a strong
22 equity component of the Company's capital structure in order to maintain access to
23 capital funding at reasonable terms.

1 **Q. WHAT IS DUKE ENERGY OHIO'S AVERAGE COST OF LONG-TERM**
2 **DEBT?**

3 A. Duke Energy Ohio's weighted-average cost of long-term debt as of June 30, 2016, is
4 5.16 percent. This long-term debt cost reflects an adjustment to eliminate the
5 influence of the interest rate associated with pollution control bonds issued by a
6 subsidiary of the Company. The adjustment assumes the interest rate for pollution
7 controls bonds is equal to the weighted cost of all other long-term debt (5.16%). As
8 this proceeding does not involve the Company's former generation business, and the
9 pollution control bonds directly relate to generation assets, the special interest rate
10 for these bonds has been ignored. While the interest rate for these bonds has been
11 adjusted, the total debt in the capital structure has not been changed.

12 The adjustment to remove the impact of pollution control bonds is the same
13 adjustment made in all of the Company's prior rate cases that were filed after its
14 generating business was deregulated.

V. **DUKE ENERGY OHIO'S CAPITAL REQUIREMENTS**

15 **Q. WHAT ARE DUKE ENERGY OHIO'S CAPITAL REQUIREMENTS**
16 **DURING THE 2017-2018 TIME PERIOD?**

17 A. As demonstrated in the Company's S Schedule, Duke Energy Ohio faces substantial
18 capital needs over the next several years to upgrade aging infrastructure and further
19 invest in energy efficiency. Duke Energy Ohio's capital expenditure is projected to
20 be approximately \$1.05 billion during the period 2017-2018 (as reflected in
21 Supplemental Schedule S-1). During this same period, the Company has
22 approximately \$4 million in debt maturities.

1 **Q. HOW WILL DUKE ENERGY OHIO'S CAPITAL REQUIREMENTS BE**
2 **FUNDED?**

3 A. Duke Energy Ohio's capital requirements are expected to be funded from internal
4 cash generation, the issuance of debt, and equity funding from Duke Energy. It is
5 important to note Duke Energy makes quarterly dividend payments to its equity
6 shareholders. Accordingly, Duke Energy's operating subsidiaries are expected to
7 distribute approximately 70 percent of their earnings over the long-run to support
8 Duke Energy's dividend payments.

VI. SCHEDULES, FILING REQUIREMENTS AND
INFORMATION SPONSORED BY WITNESS

9 **Q. PLEASE DESCRIBE SUPPLEMENTAL FILING REQUIREMENT (C)(2).**

10 A. Supplemental Filing Requirement (C)(2) is a copy of the prospectus from the most
11 recent common stock offering and bond offering.

12 **Q. PLEASE DESCRIBE SCHEDULES D-1A AND D-1B.**

13 A. Schedule D-1A is a summary showing the calculation of the rate of return on rate
14 base being proposed in this case for Duke Energy Ohio. Schedule D-1B is a similar
15 summary of the rate of return using Duke Energy's capital structure. The
16 accumulated deferred income tax and accumulated deferred investment tax credit
17 balances were derived from Schedule B-6, supported by Company Witness Lisa M.
18 Bellucci. The adjustments to the capital structure were provided by Company
19 witness David L. Doss. I sponsor the information being used for the calculation of
20 the debt component and Company witness Dr. Morin provided the rate of ROE.

21 **Q. PLEASE DESCRIBE SCHEDULES D-2A AND D-2B.**

22 A. Schedule D-2A provides details about the short-term debt position for Duke Energy

1 Ohio as of June 30, 2016. Schedule D-2B provides details about the short-term debt
2 position for Duke Energy as of June 30, 2016.

3 **Q. PLEASE DESCRIBE SCHEDULES D-3A AND D-3B.**

4 A. Schedule D-3A provides the details about the long-term debt position and cost of
5 Duke Energy Ohio's long-term debt as of June 30, 2016, which were used to
6 calculate the rate of return. Certain adjustments to the Company's long-term debt
7 were provided by Company witness Doss. Schedule D-3B provides details about the
8 long-term debt position and cost of long-term debt for Duke Energy as of June 30,
9 2016.

10 **Q. PLEASE DESCRIBE SCHEDULES D-4A AND D-4B.**

11 A. Schedule D-4A is used to provide the cost of preferred stock used to calculate the
12 rate of return; however, this schedule is submitted in blank form because Duke
13 Energy Ohio does not have preferred stock. Schedule D-4B provides similar
14 information for Duke Energy and, like Duke Energy Ohio, there is no preferred
15 stock outstanding.

16 **Q. PLEASE DESCRIBE SCHEDULES D-5A AND D-5B.**

17 A. I sponsor page 3 of Schedule D-5A, which calculates the fixed charge coverage ratio
18 for Duke Energy Ohio for the last ten historical periods and the test period. Page 3
19 of Schedule D-5B, which I also sponsor, shows the credit ratings history for several
20 of Duke Energy's rated entities over the last ten years and shows the calculation of
21 Duke Energy's fixed charge coverage ratio over that same time period.

VII. CONCLUSION

1 **Q. WERE SUPPLEMENTAL FILING REQUIREMENT (C)(2) AND**
2 **SCHEDULES D-1A, D-1B, D-2A, D-2B, D-3A, D-3B, D-4A, D-4B, AND**
3 **PAGE THREE OF SCHEDULE D-5A AND D-5B PREPARED BY YOU OR**
4 **UNDER YOUR SUPERVISION?**

5 **A. Yes.**

6 **Q. IS THE INFORMATION YOU SPONSORED IN THOSE**
7 **SUPPLEMENTAL FILING REQUIREMENTS AND SCHEDULES**
8 **ACCURATE TO THE BEST OF YOUR KNOWLEDGE AND BELIEF?**

9 **A. Yes.**

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

11 **A. Yes.**

BEFORE

THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of)
Duke Energy Ohio, Inc., for an) Case No. 17-32-EL-AIR
Increase in Electric Distribution Rates.)

In the Matter of the Application of)
Duke Energy Ohio, Inc., for Tariff) Case No. 17-33-EL-ATA
Approval.)

In the Matter of the Application of)
Duke Energy Ohio, Inc., for Approval) Case No. 17-34-EL-AAM
to Change Accounting Methods.)

DIRECT TESTIMONY OF
WILLIAM DON WATHEN JR.
ON BEHALF OF
DUKE ENERGY OHIO, INC.

<u> </u>	Management policies, practices, and organization
<u> </u>	Operating income
<u> </u>	Rate Base
<u> </u>	Allocations
<u> </u>	Rate of return
<u> X </u>	Rates and tariffs
X	Other: Rate Case Drivers

March 16, 2017

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Attachment:

WDW-1: Excerpt from Ohio Edison's Distribution Capital Recovery Rider Filing

I. INTRODUCTION

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. My name is William Don Wathen Jr., and my business address is 139 East Fourth
3 Street, Cincinnati, Ohio 45202.

4 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

5 A. I am employed by Duke Energy Business Services LLC (DEBS), as Director of
6 Rates and Regulatory Strategy for Ohio and Kentucky. DEBS provides various
7 administrative and other services to Duke Energy Ohio, Inc., (Duke Energy Ohio or
8 Company) and other affiliated companies of Duke Energy Corporation (Duke
9 Energy).

10 **Q. PLEASE BRIEFLY DESCRIBE YOUR EDUCATION AND**
11 **PROFESSIONAL EXPERIENCE.**

12 A. I received Bachelor Degrees in Business and Chemical Engineering, and a Master of
13 Business Administration Degree, all from the University of Kentucky. After
14 completing graduate studies, I was employed by Kentucky Utilities Company as a
15 planning analyst. In 1989, I began employment with the Indiana Utility Regulatory
16 Commission as a senior engineer. From 1992 until mid-1998, I was employed by
17 SVBK Consulting Group, where I held several positions as a consultant, focusing
18 principally on utility rate matters. I was hired by Duke Energy (then Cinergy
19 Services, Inc.), in 1998, as an Economic and Financial Specialist in the Budgets and
20 Forecasts Department. In 1999, I was promoted to the position of Manager,
21 Financial Forecasts. In August 2003, I was named to the position of Director - Rates.
22 On December 1, 2009, I took the position of General Manager and Vice President of

1 Rates, Ohio and Kentucky. On July 3, 2012, as a result of the merger between
2 Duke Energy and Progress Energy Corp., my title changed to Director of Rates
3 and Regulatory Strategy for Ohio and Kentucky.

4 **Q. PLEASE DESCRIBE YOUR RESPONSIBILITIES AS DIRECTOR OF**
5 **RATES AND REGULATORY STRATEGY FOR OHIO AND KENTUCKY.**

6 A. As Director of Rates and Regulatory Strategy for Ohio and Kentucky, I am
7 responsible for all state and federal rate matters involving Duke Energy Ohio and
8 its subsidiary, Duke Energy Kentucky, Inc.

9 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE PUBLIC**
10 **UTILITIES COMMISSION OF OHIO?**

11 A. Yes. I have previously testified in a number of cases before the Public Utilities
12 Commission of Ohio (Commission) and other regulatory commissions.

13 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THESE**
14 **PROCEEDINGS?**

15 A. On behalf of Duke Energy Ohio, I provide testimony on some of the background
16 for its request to increase base electric distribution revenues. I also support the
17 reasonableness of this request, as well as the Company's request for certain
18 additional relief and its request to extend and expand its distribution capital
19 investment rider. Additionally, I discuss some of the implications of the
20 Company's evolving SmartGrid program; the Company's proposal to implement
21 a new rider to recover costs associated with complying with regulatory mandates;

1 and the overall reasonableness of the request. Finally, I provide background on
2 Duke Energy Ohio's requested rate increase and the drivers for Duke Energy
3 Ohio's current revenue deficiency.

**II. BACKGROUND AND DRIVERS FOR
REQUESTED RATE INCREASE**

4 **Q. WHEN DID THE COMMISSION APPROVE DUKE ENERGY OHIO'S**
5 **CURRENT ELECTRIC DISTRIBUTION RATES?**

6 A. The Company's current base electric distribution rates were approved by the
7 Commission on May 1, 2013, in Case No. 12-1682-EL-AIR, *et al.* The test period
8 in that proceeding was the twelve months ended December 31, 2012, and the date
9 certain for valuing rate base was March 31, 2012. The current rates went into
10 effect on May 6, 2013.

11 **Q. WHY IS DUKE ENERGY OHIO FILING A DISTRIBUTION RATE CASE**
12 **AT THIS TIME?**

13 A. Although the Company's cost of providing electric distribution service does
14 exceed its current revenue, the primary reason for filing the case, at this time, as
15 discussed in the testimony of Company witness James P. Henning, is to fulfill a
16 requirement in Case No. 10-2326-GE-RDR. As part of this Application, the
17 Company is proposing to "roll into" base rates the revenue requirement associated
18 with its SmartGrid investment as of the date certain in this case and to discontinue
19 its SmartGrid Rider (Rider DR-IM). The Company proposes to eliminate Rider
20 DR-IM when new rates are in place as a result of an order in this case or once the
21 costs currently approved for recovery in Case No. 16-1404-EL-RDR have been
22 fully recovered, whichever date is later.

1 Importantly, however, the Company's Application in this case requests an
2 increase in overall electric distribution revenues, inasmuch as the Company's
3 earned return on its investment in the electric distribution system is not providing
4 a fair and reasonable compensation to its investors. Since the time of the last rate
5 case, the Company has made significant investment in its electric distribution
6 system. Although the Company does have a Distribution Capital Investment Rider
7 (Rider DCI)¹ that provides some relief from the regulatory lag that inevitably
8 comes with growth in investment, the Commission limited the applicability of
9 Rider DCI to only a portion² of the significant investment being made by the
10 Company in its distribution system. Furthermore, Rider DCI does not include
11 recovery of incremental operation and maintenance (O&M) expenses. Mr.
12 Henning provides additional testimony with regard to the drivers for the
13 Company's filing.

14 **Q. HOW DOES THE COMPANY'S ONGOING GRID MODERNIZATION**
15 **PROGRAM IMPACT THE COMPANY'S OVERALL BASE REVENUE**
16 **REQUIREMENT BEING REQUESTED IN THESE PROCEEDINGS?**

17 A. As discussed above, the Company was required to file this base distribution rate
18 case as part of a settlement reached in another case that was approved by the
19 Commission. Since the inception of the Company's SmartGrid program, recovery
20 of the revenue requirement for deployment of SmartGrid has been achieved
21 exclusively via a tracker mechanism; namely, Rider DR-IM. Consistent with how

¹ Rider DCI was approved by the Commission in *In the Matter of the Application of Duke Energy Ohio for Authority to Establish a Standard Service Offer Pursuant to Section 4928.143, Revised Code, in the Form of an Electric Security Plan, Accounting Modifications and Tariffs for Generation Service*, Case No. 14-841-EL-SSO, *et al.* (hereinafter ESP III).

² ESP III, Opinion and Order, at pg. 72 (April 2, 2015).

1 the Commission has addressed similar capital-related riders, such as the
2 Company's Rider AMRP (accelerated main replacement program), the Company
3 requests, as part of this case, that the revenue requirement for its SmartGrid
4 investment be "rolled into" base rates, eventually discontinuing the existing Rider
5 DR-IM. It is important to understand, however, that the mere act of combining
6 rider recovery for SmartGrid with base rate recovery of other distribution
7 investment, all else being equal, has no impact on the overall amount of revenue
8 being collected from customers for base electric distribution service.

9 As will be addressed in my testimony and in the testimony of other
10 witnesses, other factors, such as O&M, costs of capital, and investment in general
11 and common plant, also impact the overall electric distribution revenue
12 requirements. In addition, revisions to the cost of service and proposed changes to
13 rate design also impact individual customers even if the overall base distribution
14 revenue requirement is unchanged.

III. ADDITIONAL RELIEF BEING SOUGHT

15 **Q. IS THE COMPANY SEEKING RELIEF IN THIS APPLICATION IN**
16 **ADDITION TO ADJUSTING ITS BASE RATES?**

17 A. Yes. As a base rate application is an opportunity for the utility and other interested
18 parties to holistically review Duke Energy Ohio's operations and financial
19 condition, the Company is making a number of proposals in this case. Company
20 witness Henning provides an overview of certain proposals intended to benefit
21 customers and provide them with more control and choice in respect of their utility
22 experience. Below, I identify other proposals that are intended to improve its

1 regulatory model with the Commission, to add some efficiencies to the regulatory
2 process, and to provide for additional protections to the Company's financial
3 integrity, all with the ultimate goal of continuing to provide safe and reliable
4 service to customers. The following is a summary of these proposals.

- 5 • Continuation of Rider DCI – Duke Energy Ohio is seeking Commission
6 approval to continue its Rider DCI with certain modifications intended to
7 address certain deficiencies in the existing recovery mechanism and to
8 ensure consistency with similar mechanisms approved for other electric
9 distribution utilities (EDUs).
- 10 • Evolution of SmartGrid – Duke Energy Ohio is proposing to address the
11 changing technology impacting the Company's SmartGrid deployment.
12 Several Company witnesses discuss the projects Duke Energy Ohio has
13 undergoing and planned to fulfill the Commission's objectives and the
14 ever-increasing demands of its customers and competitive retail electric
15 service (CRES) providers operating in its territory.
- 16 • Regulatory Mandates Rider – Duke Energy Ohio is seeking Commission
17 approval to establish a Regulatory Mandates Rider (Rider RM), similar to
18 a mechanism approved for at least one other utility,³ to recover
19 incremental costs associated with changes in federal, state, or local
20 regulations or laws, including directives from the Commission, that result
21 in costs that are not being recovered in base rates.

³ *In the Matter of the Application of Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company for Authority to Provide for a Standard Service Offer Pursuant to R.C. 4928.143 in the Form of an Electric Security Plan*, Case No. 14-1297-EL-SSO , Opinion and Order, at pg. 93 (March 31, 2016)(hereinafter, FE ESP III).

- 1 • Miscellaneous – Other noteworthy issues being addressed in this rate case
2 include:
- 3 - Straight Fixed-Variable (SFV) Rate design. See testimony of Company
4 witness James A. Riddle for additional details.
- 5 - Distribution Decoupling Rider. See testimony of Company witness
6 Riddle for additional details.
- 7 - Storm costs. See testimony of Company witness Peggy A. Laub for
8 additional details.
- 9 - New products and services. See testimony of Company witness
10 Alexander “Sasha” J. Weintraub, Ph.D., for additional details regarding
11 the Company’s proposal for certain new products and services.
- 12 - Enhanced lighting service. See testimony of Company witness Riddle
13 for a description of additions to the Company’s current lighting tariffs
14 to include new LED options.
- 15 - Public Education and Information Campaign. Duke Energy Ohio is
16 proposing to include in its revenue requirements funding for a public
17 information and education campaign as described in more detail in the
18 testimony of Company witness Henning.

IV. DUKE ENERGY OHIO’S PROCESS AND METHODOLOGY
FOR PREPARATION OF ITS RATE CASE

- 19 **Q. WHAT IS THE OVERALL GOAL OF THE RATEMAKING PROCESS?**
- 20 A. The overall goal of the ratemaking process is to give the regulated utility the
21 opportunity to recover all of its prudently incurred operating expenses and to earn
22 a fair return on its capital invested in the business. The Ohio Revised Code

1 succinctly recognizes traditional ratemaking. In particular, as informed by
2 counsel, R.C. 4905.22 states that all charges for service shall be just and
3 reasonable and not more than allowed by law or by order of the Commission.
4 That is precisely the objective of the normal ratemaking process and such a goal is
5 achieved by charging rates that fairly assign the costs of service to the customers
6 in a manner that, as practicably as possible, reflects the costs of serving those
7 customers.

8 **Q. HOW DOES DUKE ENERGY OHIO PREPARE AN ELECTRIC**
9 **DISTRIBUTION RATE CASE?**

10 A. The lengthy and often complicated electric distribution rate case preparation
11 process essentially consists of three primary steps: (1) determine the annual
12 electric distribution revenue requirement; (2) develop a cost-of-service study that
13 assigns and allocates the electric distribution revenue requirement to each retail
14 rate schedule based on the applicable cost to serve; and (3) design the retail rates
15 and rate schedules to yield the necessary retail revenue requirement. In addition,
16 the filing of a base rate case provides an opportunity to review existing tariffs to
17 see if there are needed changes, and to propose additional regulatory mechanisms
18 that may be appropriate in the current regulatory environment.

19 **Q. PLEASE GIVE AN OVERVIEW OF THE REVENUE REQUIREMENT**
20 **DETERMINATION PROCESS EMPLOYED BY DUKE ENERGY OHIO.**

21 A. Duke Energy Ohio's revenue requirement process focuses on determining: (1) the
22 current level of capital invested by the Company for the purpose of providing safe
23 and reliable electric distribution service; (2) the appropriate capital structure and

1 cost of capital needed to compensate investors for financing the investment
2 needed to provide electric distribution service; and (3) the ongoing “normalized”
3 level of annual expenses related to operating and maintaining the electric
4 distribution business. Company witness Laub supports the determination of Duke
5 Energy Ohio’s jurisdictional revenue requirement.

6 **Q. PLEASE GIVE AN OVERVIEW OF THE RETAIL COST-OF-SERVICE**
7 **STUDY PROCESS EMPLOYED BY DUKE ENERGY OHIO.**

8 A. The electric distribution cost-of-service study assigns each component of revenue
9 requirement formula to the various retail rate classes. The components are directly
10 assigned, or allocated, based on operational and/or accounting data, with the
11 objective being to allocate costs to customers in a manner that reflects the costs
12 the Company incurs to serve them. The testimony of Company witness James E.
13 Ziolkowski discusses Duke Energy Ohio’s electric distribution cost-of-service
14 study and the Company’s proposal to address existing subsidies and excesses
15 among rate classes.

16 **Q. WHAT ARE THE OBJECTIVES OF THE RATE DESIGN PROCESS?**

17 A. The primary objectives of the rate design process are to develop rates that: (1)
18 provide the utility with the opportunity to recover its annual revenue requirement;
19 and (2) distribute the revenue recovery among customers within each retail rate
20 schedule in a manner that is consistent with the cost of providing those customers
21 with electric distribution service. Through these proceedings, Duke Energy Ohio
22 will also be addressing the Commission’s directive to propose a significant
23 change in rate structure in the form of straight fixed-variable rate design for

1 residential customers. Company witness Riddle supports Duke Energy Ohio's
2 proposed rate design, including the Company's proposal for straight fixed-
3 variable rate design as required by the Commission.⁴

4 **Q. COMPANY WITNESS JOHN L. SULLIVAN, III, SPONSORS DUKE**
5 **ENERGY OHIO'S CONSOLIDATED CAPITAL STRUCTURE AS OF**
6 **THE DATE CERTAIN IN THIS CASE, JUNE 30, 2016. WHY IS DUKE**
7 **ENERGY OHIO RECOMMENDING USING DUKE ENERGY OHIO'S**
8 **CAPITAL STRUCTURE FOR ESTABLISHING RATES IN THESE**
9 **PROCEEDINGS?**

10 A. In addition to the long-standing precedent in Ohio to use the operating company's
11 capital structure rather than the capital structure of the operating company's parent,
12 Duke Energy Ohio believes its consolidated capital structure is the appropriate
13 capital structure to use as the basis for setting Duke Energy Ohio's electric
14 distribution rates. The use of an alternative capitalization, such as Duke Energy's
15 capital structure, would cause the rates in these proceedings to be impacted by a
16 number of factors unrelated to Duke Energy Ohio's electric distribution operations.
17 For instance, Duke Energy's capitalization and its cost of capital reflect the practices
18 of and events in its regulated operations in other states, as well as its non-regulated
19 operations in the United States and overseas. Duke Energy Ohio continues to believe
20 that, for purposes of establishing retail rates, it is still appropriate to use the Duke
21 Energy Ohio capital structure rather than a capital structure influenced by affiliates
22 that are not regulated by the Commission. This policy follows the rationale used in

⁴ *In the Matter of Aligning Electric Distribution Utility Rate Structure*, Case No. 10-3126-EL-UNC, Finding and Order, at pg. 20 (Aug. 21, 2013).

1 Duke Energy Ohio's most recent base rate cases, wherein the Company has
2 acknowledged the Staff's recommendations, made in Case No. 02-2627-AU-COI.⁵

3 **Q. IS THE COMPANY MAKING ANY ADJUSTMENTS TO ITS**
4 **CONSOLIDATED CAPITAL STRUCTURE FOR RATE SETTING**
5 **PURPOSES?**

6 A. Yes. As described in the testimony of Company witness David J. Doss, Duke
7 Energy Ohio's consolidated capital structure, as of June 30, 2016, has been
8 adjusted to eliminate any remaining purchase accounting impacts associated with
9 the Duke Energy/Cinergy Corp merger⁶ and to eliminate the impact of formerly
10 owning generating assets transferred to Duke Energy Ohio from Duke Energy
11 North America.

12 **Q. AFTER ADJUSTING THE ACTUAL CAPITAL STRUCTURE TO**
13 **ELIMINATE THE IMPACT OF PURCHASE ACCOUNTING, WHAT IS**
14 **THE CAPITALIZATION OF DUKE ENERGY OHIO FOR PURPOSES OF**
15 **THESE PROCEEDINGS?**

16 A. Duke Energy Ohio's consolidated capital structure at June 30, 2016, as adjusted, is
17 approximately 49.25 percent debt and 50.75 percent common equity. This is
18 shown on Schedule D-1.

19 It should be noted that the equity ratio underlying the Company's
20 requested revenue requirement is well above the minimum established by the

⁵ See *In the Matter of the Commission Investigation of the Financial Viability of Ohio's Regulated Public Utilities*, Case No. 02-2627-AU-COI, Staff Report (January 29, 2004).

⁶ *In the Matter of the Joint Application of Cinergy Corp., on Behalf of The Cincinnati Gas & Electric Company, and Duke Energy Holding Corp. for Consent and Approval of a Change of Control of The Cincinnati Gas & Electric Company*, Case No. 05-732-EL-MER, *et al.*, Finding and Order (December 21, 2005).

1 Federal Energy Regulatory Commission (FERC) and this Commission. The
2 FERC and this Commission imposed a minimum limit on the equity ratio of 30
3 percent. The limit reflects the FERC orders that approved the Duke
4 Energy/Cinergy merger⁷ and the Commission orders that approved an accounting
5 modification to address the impact of required accounting treatment for the
6 purchase accounting associated with the Duke Energy/Cinergy merger from
7 2006.⁸

V. RIDER DCI

8 **Q. PLEASE DESCRIBE THE COMPANY'S EXISTING RIDER DCI.**

9 A. In its April 2, 2015, Opinion and Order in Case No. 14-841-EL-SSO, *et al.*, the
10 Commission approved a mechanism to allow the Company to modernize its
11 distribution system and to be more "proactive" in its distribution maintenance
12 program. The Commission went on to say that it was "detrimental to the state's
13 economy to require the utility to be reactionary or allow the performance
14 standards to take a negative turn before we encourage the EDU to proactively and
15 efficiently replace and modernize infrastructure."⁹

16 Rider DCI provides a mechanism for Duke Energy Ohio to more timely
17 recover the costs of proactively modernizing its distribution system. Rider DCI
18 allows the Company to collect the incremental revenue requirement (return,
19 depreciation, and property tax) associated with investment in distribution rate

⁷ *The Cincinnati Gas and Electric Company d/b/a Duke Energy Ohio and The Union Light, Heat and Power Company, d/b/a Duke Energy Kentucky*, FERC Order, EL06-66-000.

⁸ *In the Matter of Duke Energy Ohio's Application for Change in Accounting Methods*, Case No. 09-620-GE-AAM and *In the Matter of Duke Energy Ohio, Inc.'s Application to Change Accounting Methods*, Case No. 11-5985-GE-AAM.

⁹ ESP III, Opinion and Order, at pg. 71 (April 2, 2015).

1 base for a current period as compared to the revenue requirement (return,
2 depreciation, and property taxes) on the rate base used in the most recent base
3 distribution rate case. The “most recent base distribution rate case” is Case No.
4 12-1682-EL-AIR, *et al.*

5 **Q. DOES THE COMPANY’S APPLICATION FOR NEW BASE**
6 **DISTRIBUTION RATES IMPACT RIDER DCI?**

7 A. Yes. When new rates are approved and implemented as part of this rate case,
8 Duke Energy Ohio’s base rates will be based on its investment in distribution-
9 related facilities through June 30, 2016. Because the existing approved Rider DCI
10 compares current period revenue requirements for distribution capital investment
11 to a “base” level using the March 31, 2012, investment, once new rates are
12 approved in this case, Rider DCI will have to be updated to reflect a different
13 baseline. Going forward from that point, Rider DCI will be calculated by
14 measuring the revenue requirement approved for Rider DCI for future periods
15 against what will be a new base period investment. Insofar as the date certain for
16 establishing rate base in this case is June 30, 2016, Rider DCI for future periods
17 will be based on comparing current period eligible distribution-related rate base to
18 the eligible distribution-related rate base as of June 30, 2016, as opposed to March
19 31, 2012, as is done in the existing Rider DCI calculation.

1 **Q. OTHER THAN THE CHANGE TO UPDATE THE DATE CERTAIN FOR**
2 **DETERMINING INCREMENTAL CAPITAL ADDITIONS, IS THE**
3 **COMPANY PROPOSING ANY OTHER MODIFICATIONS TO THE**
4 **RIDER DCI CALCULATION?**

5 A. Yes. Although the Commission's approval of Rider DCI was a welcome
6 innovation in Duke Energy Ohio's regulatory framework, encouraging proactive
7 investment in utility infrastructure, it still does not completely recognize all of the
8 significant investment required on behalf of Duke Energy Ohio's shareholders in
9 order to deliver the safe, reliable, and efficient electric distribution service, as was
10 intended by the Commission. Encouraging the Company to be proactive in
11 investing in its grid should extend to all investments being made by the Company
12 to meet that goal including the significant investments required in plant that is
13 categorized as general, intangible, and common.

14 As the Company described in its most recent electric security plan (ESP),
15 a significant portion of the investment required to provide distribution service is
16 excluded from Rider DCI. Although the Company proposed to include
17 incremental rate base classified as "general," "intangible," and "common" plant,
18 directly attributable to distribution service, in Rider DCI, the Commission's
19 approval of Rider DCI explicitly excluded this component.

20 Duke Energy Ohio is requesting that the Commission modify the Rider
21 DCI calculation to include incremental investment in general, intangible, and
22 common plant directly related to the provision of distribution service.

1 **Q. WHY DOES THE COMPANY BELIEVE IT IS APPROPRIATE TO**
2 **INCLUDE DISTRIBUTION-RELATED GENERAL, INTANGIBLE, AND**
3 **COMMON PLANT IN RIDER DCI?**

4 A. A significant portion of the Company's investment in general, intangible, and
5 common plant is integral to the Company's ability to provide safe, reliable, and
6 efficient electric service. For example, the Company has a significant investment
7 in communication equipment such as the nodes that are part of the SmartGrid
8 program. The investment in communication nodes are recorded in common plant
9 but indisputably such nodes are requisite to the operation of the Company's
10 electric distribution system. The FERC requirement to record such investment in
11 plant accounts other than Accounts 360 through 374 does not diminish the fact
12 that such investment is just as important to being proactive in the operation and
13 maintenance of the Company's distribution system.

14 **Q. IS THERE PRECEDENT FOR INCLUDING GENERAL AND**
15 **INTANGIBLE PLANT IN A DISTRIBUTION CAPITAL RIDER?**

16 A. Yes. The Commission has repeatedly approved distribution capital riders for
17 FirstEnergy Corp.'s Ohio EDUs (FirstEnergy) that include general and intangible
18 plant. As recently as March 31, 2016, the Commission re-approved FirstEnergy's
19 Delivery Capital Recovery Rider (Rider DCR).¹⁰ The calculation and intent of
20 Rider DCR are similar to the Company's Rider DCI with the significant
21 differences being that (1) FirstEnergy's Rider DCR is based on "forecasted" data
22 as opposed to the actual data used for Rider DCI, and (2) FirstEnergy's Rider
23 DCR includes distribution-related general and intangible plant. As Attachment

¹⁰ FE ESP III, Opinion and Order, at pp. 65-66, 92-93, 111, 120 (March 31, 2016).

1 WDW-1, I have included a copy of selected pages from Ohio Edison's most
2 recent Rider DCR update filing made on December 30, 2016, in Case No. 16-
3 1820-EL-RDR. I have only included the first few pages of the filing to illustrate
4 that FirstEnergy's Rider DCR does include general and intangible plant. On page
5 2 of the filing, Ohio Edison's November 30, 2016, Gross Plant for the Rider DCR
6 calculation is shown in Column (B), Line 2, to be \$3.3511 billion. On page 4, of
7 Schedule B-2.1 (Actual) of Attachment WDW-1, the total gross plant, including
8 general and intangible plant is \$3.3511 billion. Unquestionably, Ohio Edison is
9 including, with Commission approval, general and intangible plant in its Rider
10 DCR calculation.¹¹ It should be noted that FirstEnergy's other Ohio EDUs made
11 similar Rider DCR filings on the same date and also include general and
12 intangible plant in the calculation.¹²

13 **Q. IF THE INCLUSION OF GENERAL AND INTANGIBLE PLANT IN A**
14 **DISTRIBUTION CAPITAL INVESTMENT RIDER IS REASONABLE,**
15 **BECAUSE THE COMMISSION HAS ALREADY APPROVED SUCH A**
16 **PROVISION, IS THERE ANY REASON THAT THE COMMISSION**
17 **SHOULD NOT ALLOW THE SAME PROVISION FOR OTHER EDUS?**

18 A. No. The Commission deemed recovery of distribution-related general and
19 intangible plant to be a reasonable provision in FirstEnergy's ESP when it
20 approved Rider DCR. There is no reason to assume a request for similar treatment

¹¹ *In the Matter of the Application of Ohio Edison Company to Update Rider DCR*, Case No. 16-1820-EL-RDR, Rider DCR Update Filing (December 30, 2016).

¹² *In the Matter of the Application of The Cleveland Electric Illuminating Company to Update Rider DCR*, Case No. 16-1819-EL-RDR, Rider DCR Update Filing (December 30, 2016), and *In the Matter of the Application of The Toledo Edison Company to Update Rider DCR*, Case No. 16-1821-EL-RDR, Rider DCR Update Filing (December 30, 2016).

1 by a different EDU would be deemed any less reasonable.

2 In the interest of ensuring consistent and equitable treatment among the
3 Ohio EDUs, the Commission should allow Duke Energy Ohio to conform its
4 distribution investment rider to the Rider DCR approved for FirstEnergy, such
5 that Rider DCI would include general and intangible plant (and distribution-
6 related common plant). As part of its Mission Statement, the Commission states
7 that one way its mission is accomplished is by “enforcing a fair competitive
8 framework for all utilities.”¹³ As it relates to recovery of incremental revenue
9 requirements for distribution service, the goal of “fairness” suggests that the
10 Commission should approve Duke Energy Ohio’s request to modify its Rider DCI
11 so that it is not in an unfair competitive position with other EDUs.

12 **Q. IS DUKE ENERGY OHIO SEEKING TO MIRROR FIRSTENERGY’S**
13 **RIDER DCR CALCULATION?**

14 A. No. Duke Energy Ohio is not seeking to use forecasted data as is used in
15 FirstEnergy’s calculation; however, the Company is asking the Commission to
16 make Duke Energy Ohio’s Rider DCI consistent with FirstEnergy’s Rider DCR as
17 it relates to allowing the inclusion of distribution-related rate base accounted for
18 in other plant accounts such as general and intangible plant, and, as a combination
19 Company, also distribution-related common plant.

20 The issue of including electric distribution-related common plant was not
21 raised in other EDUs’ ESPs inasmuch as no other Ohio EDU has investment in

¹³ See PUCO Mission Statement at <https://www.puco.ohio.gov/puco/index.cfm/how-the-puco-works-for-you/mission-and-commitments/> (emphasis added).

1 common plant.¹⁴ However, that does not diminish the fact that a significant
2 portion of the investment in common plant is used exclusively for the benefit of
3 Duke Energy Ohio's electric distribution service.

4 **Q. DOES THE COMPANY HAVE ANY OTHER PROPOSALS WITH**
5 **RESPECT TO RIDER DCI?**

6 A. Yes. Given the growing national interest in battery technology as a distribution
7 resource, Duke Energy Ohio is asking that the Commission grant the Company
8 authority to include investments in battery storage technology in the Rider DCI. It
9 is uncertain whether investments in battery technology will be reflected in
10 distribution plant accounts; however, the Company intends to use such technology
11 to benefit its distribution system. The Company believes these investments would
12 be for distribution and would be classified as distribution; consequently, the
13 Company is seeking to recover any such investments via the Rider DCI,
14 regardless of what plant accounts are used for recording the investment.

15 **Q. IS THE COMPANY PROPOSING ANY CHANGES TO THE**
16 **COMMISSION'S REVIEW PROCESS FOR RIDER DCI?**

17 A. The Company proposes to continue to make quarterly filings in the same manner
18 it does currently. The first quarterly filing following Commission approval of new
19 base rates will reflect the updated rate base to June 30, 2016, as I described
20 earlier. Each Rider DCI filing will include support to update the rates for the
21 upcoming quarter based on actual rate base for the most recent quarter. The
22 Company expects that the Commission will continue engaging a third-party
23 auditor to review the Company's DCI filing to confirm the rate base subject to the

¹⁴ As reported on page 201 of the 2015 FERC Form 1 for each Ohio EDU.

1 rider. Any review of the reasonableness of expenditures will, as is customary in
2 utility reviews, be based on the facts and circumstances known to the Company at
3 the time the decision was made to make the relevant investments.

4 **Q. HOW DO YOU RECOMMEND COSTS FOR AN AUDIT OF RIDER DCI**
5 **BE ADDRESSED?**

6 A. The Company recommends that the costs of audit of Rider DCI be recovered
7 through that rider. Allowing Duke Energy Ohio to recover the audit costs is not
8 only reasonable and fair but it is another example of aligning the regulatory
9 treatment afforded to Duke Energy Ohio with other EDUs, namely FirstEnergy,
10 which is allowed to recover audit fees in its Rider DCR. The Commission has
11 allowed recovery of audit fees in other cases as well, such as Duke Energy Ohio's
12 Alternative Energy Recovery Rider (Rider AER-R) and its expired Fuel and
13 Purchased Power Rider (Rider FPP).

VI. EVOLUTION OF SMARTGRID

14 **Q. NOW THAT THE COMPANY HAS FULLY DEPLOYED SMARTGRID,**
15 **IS IT FINISHED WITH MODERNIZING THE GRID?**

16 A. As other Duke Energy Ohio witnesses discuss in their direct testimony, the
17 Company is required to make significant additional expenditures to maintain the
18 progress already achieved and to continue modernizing the distribution grid. Duke
19 Energy Ohio witness Donald L. Schneider, Jr. for example, describes plans the
20 Company has to address the imminent obsolescence of much of the advanced
21 metering technology that was deployed under the original SmartGrid program.

1 **Q. HOW IS THE COMPANY PROPOSING TO RECOVER THE COSTS OF**
2 **SMARTGRID AS IT CONTINUES TO EVOLVE?**

3 A. As it relates to the capital investments required to improve the Company's
4 SmartGrid, the Company's proposal to broaden Rider DCI to include distribution-
5 related common, general, and intangible plant will provide Duke Energy Ohio
6 with the means of continuing to make such investments without significant
7 degradation in its earnings.

8 Disallowing recovery of such costs via Rider DCI would likely slow the
9 Company's efforts toward modernization, potentially undermining its ability to
10 keep up with other EDUs in the state and undermining its ability to maintain its
11 financial integrity. Alternatively, the Commission could approve another rider or
12 modify and extend the existing SmartGrid Rider (Rider DR-IM) for this purpose.
13 However, Duke Energy Ohio does not believe that is necessary if the Company's
14 proposed changes to Rider DCI are approved. The Company's proposal, if
15 approved, will mean one fewer riders on customers' bills.

16 **Q. WITH REGARD TO THE POTENTIAL COSTS TO ACCOMMODATE**
17 **THE COMMISSION'S EXPECTATIONS IN RESPECT OF DATA**
18 **EXCHANGE, IS THE COMPANY PROPOSING ANY RELEVANT COST**
19 **RECOVERY IN THIS PROCEEDING?**

20 A. Yes. Duke Energy Ohio will seek full recovery of costs for expenses necessary, as
21 ordered or directed by the Commission, to enable an effective and meaningful
22 exchange of data in a way that properly protects customers and is reasonable

1 insofar as the Company is concerned.¹⁵ The form of recovery will be through the
2 proposed Regulatory Mandates Rider, as discussed below; through supplier tariff
3 charges, as applicable; or through Rider DCI, to the extent the such costs are
4 included in that rider.

VII. REGULATORY MANDATES RIDER

5 Q. **DESCRIBE THE COMPANY'S PROPOSAL TO IMPLEMENT A**
6 **REGULATORY MANDATES RIDER.**

7 A. Distribution utilities, both natural gas and electric, are subject to numerous
8 regulations and must answer to regulators at the federal, state, and local levels.
9 The pace of regulatory change has accelerated significantly in recent years,
10 forcing utilities to incur sometimes significant expense without commensurate or
11 timely rate recovery. Utilities, regulators, and consumer groups have, since the
12 beginning of regulation, argued about the "prudence" and "reasonableness" of
13 expenses for which recovery is being sought. As it happens, costs incurred to
14 comply with legal mandates are, *de facto*, prudently incurred insofar as it would
15 be imprudent for a utility not to comply with the law.

16 In the last few years, Duke Energy Ohio has been subjected to a number of
17 new laws, regulations, Commission directives, and other legal mandates,
18 requiring expenditures on the part of its shareholders that have not been recovered
19 in retail rates. For example, the Commission itself has established utility
20 requirements for customer choice, customer energy usage data, privacy, and
21 metering opt-out provisions that have required or will require expenditures from

¹⁵ *In the Matter of the Application of Duke Energy Ohio, Inc., to File for Tariff Approval*, Case No. 14-2209-EL-ATA.

1 Duke Energy Ohio but that have not yet been recovered through either base rates
2 or riders. Heretofore, utilities have opted to request deferrals of such expenses in
3 order to allow for future recovery of such costs. However, from a regulatory and
4 fairness perspective, it would be preferable to limit the need for deferrals and to
5 better align the timing of incurring such costs with the timing for their recovery.
6 Under the current paradigm, deferral authority, if sought by the utility and granted
7 by the Commission, may shift responsibility for costs as between customers. The
8 use of deferrals, albeit a necessary tool at times, is not always an option preferred
9 by the utility or by the Commission. Establishing the proposed Regulatory
10 Mandates Rider (Rider RM) will provide the Company a means of avoiding the
11 negative financial impacts of complying with mandates and will provide the
12 Commission a much more efficient mechanism by which to address such issues
13 without having to address repeated requests for deferrals.

14 **Q. ARE THERE ANY OTHER COSTS THAT THE COMPANY IS**
15 **PROPOSING TO INCLUDE IN THIS RIDER?**

16 A. Yes. On advice of counsel, R.C. 4928.141 requires Ohio's EDUs to provide a
17 standard service offer (SSO) to their retail customers through either an ESP or a
18 market rate offer. Whichever path the Company chooses, there are unavoidable
19 regulatory costs incurred by the Company to provide this SSO, including, but not
20 limited to, legal fees and consulting fees.

21 The Company's SSO is a benefit to all customers whether they shop or
22 not, as the very definition of an SSO is that is a service provided by a distribution

1 utility that is available to all customers.¹⁶ Customers are free to take SSO service
2 or to shop with CRES providers but, in either case, Duke Energy Ohio must be
3 ready to provide the SSO service. Certain CRES providers have debated in other
4 SSO proceedings whether the EDUs' costs to provide SSO service should be
5 borne by all customers or just by those who actually take SSO service but it is
6 important to note a significant difference between the obligations of CRES
7 providers and the EDUs: CRES providers voluntarily provide service to retail
8 customers; they can choose to offer generation service to customers under
9 whatever terms they choose or they can refuse to provide generation service to
10 any customers. No customer can demand that a CRES provider offer them
11 service. EDUs, on the other hand, do not have the right to deny service to any
12 retail customer. I am advised by counsel that, under Ohio law, Duke Energy Ohio
13 is legally required to make its SSO service available to all customers requesting
14 such service. Unlike the CRES providers, Duke Energy Ohio and the other Ohio
15 EDUs do not have the freedom to choose whom they serve. For this reason, all
16 customers have the benefit of have Duke Energy Ohio's SSO service as an option;
17 therefore, the costs incurred by the Company to provide for this service should be
18 recovered from all retail customers.

VIII. REASONABLENESS OF REQUEST

19 **Q. WOULD YOU SUMMARIZE THE MAGNITUDE OF THE INCREASES**
20 **CUSTOMERS ARE LIKELY TO SEE IF THE COMMISSION APPROVES**
21 **THE COMPANY'S REQUESTS IN THIS APPLICATION?**

22 **A.** As shown in Schedule E-5, sponsored by Company witness Riddle, most

¹⁶ R.C. 4928.141(A).

1 customers will see only modest increases or even decreases in their utility bills as
2 result of this case. Answering the Commission's request to propose straight-fixed
3 variable rates for residential does have greater impacts on customers with low
4 monthly usage but, even for those customers, the dollar impact of the increases of
5 this proposed change in base rates is relatively small.

6 **Q. WILL THE PROPOSED RATE INCREASE, IF APPROVED, RESULT IN**
7 **ANY SIGNIFICANT SHIFT IN HOW DUKE ENERGY OHIO'S RATES**
8 **COMPARE TO THE OTHER OHIO EDUS?**

9 A. No. The Commission's website includes a monthly summary of utility rates for all
10 electric, gas, and water utilities in the state. Included in the summary of rates is a
11 summary of sample electric bills for electric residential, commercial, and
12 industrial customers. Duke Energy Ohio's customers have enjoyed the lowest or
13 near the lowest bills of any utility for some time and will likely maintain that
14 position for the foreseeable future.

IX. CONCLUSION

15 **Q. HAVE YOU REVIEWED DUKE ENERGY OHIO'S APPLICATION IN**
16 **THESE PROCEEDINGS?**

17 A. Yes. I have also reviewed the testimony and exhibits of all Company witnesses. I
18 believe that the Company's total electric distribution revenue requirement is
19 properly computed, the costs of service are properly allocated to customer classes,
20 and the rate design is equitable.

1 **Q. DO YOU HAVE AN OPINION REGARDING WHETHER DUKE**
2 **ENERGY OHIO'S RATE REQUEST IS REASONABLE?**

3 A. Yes.

4 **Q. PLEASE STATE YOUR OPINION.**

5 A. Duke Energy Ohio's rate request is fair and reasonable. The date certain in Duke
6 Energy Ohio's last rate case was March 31, 2012, and the date certain for this
7 case is June 30, 2016. Despite more than four years of inflationary pressures,
8 Duke Energy Ohio is requesting an overall increase in rates that will result in less
9 than a one percent increase over the total electric rates. Through aggressive cost
10 management practices, the Company has been able to hold its increase request to
11 a reasonable level.

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

13 A. Yes.

December 30, 2016

Ms. Barcy McNeal
Commission Secretary
The Public Utilities Commission of Ohio
180 East Broad Street
Columbus, OH 43215

SUBJECT: Case Nos. 16-1820-EL-RDR
89-6006-EL-TRF

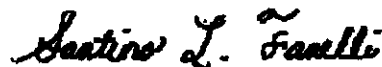
Dear Ms. McNeal:

In accordance with the Commission Order in Ohio Edison Company's Case No. 14-1297-EL-SSO Electric Security Plan proceeding, please file the attached schedules, bill impacts, and tariff pages on behalf of Ohio Edison Company related to the Delivery Capital Recovery Rider (Rider DCR). The attached schedules demonstrate that the year-to-date revenue is below the permitted annual cap for 2016 and provide detailed calculations related to plant in service, accumulated depreciation reserve, income taxes, commercial activity taxes, and property taxes, rate base, depreciation expense, and the resulting revenue requirement all as contemplated by the Order in Ohio Edison Company's Case No. 14-1297-EL-SSO Electric Security Plan proceeding.

Also included with the filing are estimated bill impacts for multiple usage levels for the different rate schedules reflecting the impact on current bills of the Rider DCR charges commencing on March 1, 2017.

Finally, attached is a tariff page that reflects the pricing update of Rider DCR. Please file one copy of the tariffs in each of the above mentioned Case Nos. 16-1820-EL-RDR and 89-6006-EL-TRF, and distribute two copies to the Staff. Thank you.

Sincerely,



Santino L. Fanelli
Director, Rates & Regulatory Affairs

Enclosures

Ohio Edison Company
Delivery Capital Recovery Rider (DCR)
March 2017 – May 2017 Filing
December 30, 2016

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Rider DCR
Rates for March - May 2017
Revenue Requirement Summary
(\$ millions)

Calculation of Annual Revenue Requirement Based on Estimated 2/28/2017 Rate Base

Line No.	Description	Source	CEI	OE	TE	TOTAL
1	Annual Revenue Requirement Based on Actual 11/30/2016 Rate Base	12/30/2016 Compliance Filing, Page 2, Column (f) Lines 36-39	\$ 108.8	\$ 115.1	\$ 27.3	\$ 250.8
2	Incremental Revenue Requirement Based on Estimated 2/28/2017 Rate Base	Calculation: 12/30/2016 Compliance Filing (Page 27, Column (f) Lines 36-39) minus Line 1	\$ 3.2	\$ 3.9	\$ 2.0	\$ 9.1
3	Annual Revenue Requirement Based on Estimated 2/28/2017 Rate Base	Calculation: SUM [Line 1 through Line 2]	\$ 111.8	\$ 119.0	\$ 29.2	\$ 260.1

The Cleveland Electric Illuminating Company: 16-1819-EL-RDR
 Ohio Edison Company: 16-1820-EL-RDR
 The Toledo Edison Company: 16-1821-EL-RDR

Rider DCR
Actual Distribution Rate Base Additions as of 11/30/2016
Revenue Requirement Calculation

(\$ millions)

* 5/31/2007 balances refer to the jurisdictional balances approved in Case 07-551-EL-AIR. Source: PUCO Staff workpapers supporting the PUCO Opinion & Order

	(A)	(B)	(C) = (B) - (A)	(D)		
Gross Plant						
(1)	CEI	1,927.1	2,955.1	1,028.1	Sch B2.1 (Actual) Line 45	
(2)	OE	2,074.0	3,351.1	1,277.1	Sch B2.1 (Actual) Line 47	
(3)	TE	771.5	1,159.9	388.5	Sch B2.1 (Actual) Line 44	
(4)	Total	4,772.5	7,466.2	2,693.6	Sum: [(1) through (3)]	
Accumulated Reserve						
(5)	CEI	(773.0)	(1,269.2)	(496.2)	-Sch B3 (Actual) Line 46	
(6)	OE	(803.0)	(1,317.4)	(514.4)	-Sch B3 (Actual) Line 48	
(7)	TE	(376.8)	(591.1)	(214.3)	-Sch B3 (Actual) Line 45	
(8)	Total	(1,952.8)	(3,177.7)	(1,224.9)	Sum: [(5) through (7)]	
Net Plant In Service						
(9)	CEI	1,154.0	1,685.9	531.9	(1) + (5)	
(10)	OE	1,271.0	2,033.7	762.7	(2) + (6)	
(11)	TE	394.7	568.9	174.2	(3) + (7)	
(12)	Total	2,819.7	4,288.4	1,468.7	Sum: [(9) through (11)]	
ADIT						
(13)	CEI	(246.4)	(466.7)	(220.3)	- ADIT Balances (Actual) Line 3	
(14)	OE	(197.1)	(569.6)	(372.5)	- ADIT Balances (Actual) Line 3	
(15)	TE	(10.3)	(151.4)	(141.1)	- ADIT Balances (Actual) Line 3	
(16)	Total	(453.8)	(1,187.7)	(733.9)	Sum: [(13) through (15)]	
Rate Base						
(17)	CEI	907.7	1,219.2	311.5	(9) + (13)	
(18)	OE	1,073.9	1,464.1	390.2	(10) + (14)	
(19)	TE	384.4	417.5	33.1	(11) + (15)	
(20)	Total	2,366.0	3,100.8	734.8	Sum: [(17) through (19)]	
Depreciation Exp						
(21)	CEI	60.0	95.2	35.2	Sch B-3.2 (Actual) Line 46	
(22)	OE	62.0	100.9	38.9	Sch B-3.2 (Actual) Line 48	
(23)	TE	24.5	38.0	13.5	Sch B-3.2 (Actual) Line 45	
(24)	Total	146.5	234.1	87.6	Sum: [(21) through (23)]	
Property Tax Exp						
(25)	CEI	65.0	102.7	37.7	Sch C-3.10a (Actual) Line 4	
(26)	OE	57.4	89.0	31.6	Sch C-3.10a (Actual) Line 4	
(27)	TE	20.1	30.0	9.9	Sch C-3.10a (Actual) Line 4	
(28)	Total	142.4	221.7	79.2	Sum: [(25) through (27)]	
Revenue Requirement						
	Rate Base	Return 8.48%	Deprec	Prop Tax	Rev. Req.	
(29)	CEI	311.5	26.4	35.2	37.7	99.3
(30)	OE	390.2	33.1	38.9	31.6	103.6
(31)	TE	33.1	2.8	13.5	9.9	26.2
(32)	Total	734.8	62.3	87.6	79.2	229.1
Capital Structure & Returns						
	% mix	rate	wtd rate			
(33)	Debt	51%	6.54%	3.3%		
(34)	Equity	49%	10.50%	5.1%		
(35)				8.48%		
Revenue Requirement with Tax						
	(a) Equity Return	(b) Tax Rate	(c) Income Tax	(d) CAT 0.26%	(e) Taxes	(f) Rev. Req. + Tax
(36)	CEI	16.0	35.95%	9.0	0.3	9.3
(37)	OE	20.1	35.85%	11.2	0.3	11.5
(38)	TE	1.7	35.70%	0.9	0.1	1.0
(39)	Total	37.8		21.2	0.7	21.8

(a) = Weighted Cost of Equity x Rate Base
 (b) = Current composite income tax rates

(c) = (a) x (1 / (1-(b)) - 1)
 (d) = (Rev. Req. + (c)) x (1/(1-.26%) - 1)

(e) = (c) + (d)
 (f) = (e) + Rev. Req. from Lines 29-31

Ohio Edison Company: 16-1820-EL-RDR
11/30/2016 Actual Plant in Service by Accounts and Subaccounts

Schedule B-2.1 (Actual)
Page 1 of 4

NOTE: Column A contains actual plant in service balances as of 11/30/2016, adjusted to remove the cumulative pre-2007 impact of a change in pension accounting and incorporate recommendations from the March 2013, April 2014, April 2015, and April 2016 Rider DGR Audit Reports. Column B shows jurisdictional allocation factors from Case No. 07-551-EL-AJR. Additional details on the adjustments in Column D are provided on the "Summary of Exclusions per Case No. 14-1297-EL-SSO: Actual 11/30/2016 Plant in Service Balances" workpaper.

Line No.	Account No.	Account Title	Total Company (A)	Allocation % (B)	Allocated Total (C) = (A) * (B)	Adjustments (D)	Adjusted Jurisdiction (E) = (C) + (D)
TRANSMISSION PLANT							
1	350	Land & Land Rights	\$ 95,248,930	100%	\$ 95,248,930	\$ (86,973,963)	\$ 8,274,967
2	352	Structures & Improvements	\$ 11,951,054	100%	\$ 11,951,054		\$ 11,951,054
3	353	Station Equipment	\$ 110,030,042	100%	\$ 110,030,042		\$ 110,030,042
4	354	Towers & Fixtures	\$ 276,919	100%	\$ 276,919		\$ 276,919
5	355	Poles & Fixtures	\$ 26,955,478	100%	\$ 26,955,478		\$ 26,955,478
6	356	Overhead Conductors & Devices	\$ 37,603,715	100%	\$ 37,603,715		\$ 37,603,715
7	357	Underground Conduit	\$ 1,540,142	100%	\$ 1,540,142		\$ 1,540,142
8	358	Underground Conductors & Devices	\$ 16,496,587	100%	\$ 16,496,587		\$ 16,496,587
9	359	Roads & Trails	\$ 34,404	100%	\$ 34,404		\$ 34,404
10		Total Transmission Plant	\$ 300,137,270	100%	\$ 300,137,270	\$ (86,973,963)	\$ 213,163,307

Ohio Edison Company: 16-1820-EL-RDR
11/30/2016 Actual Plant in Service by Accounts and Subaccounts

Schedule B-2.1 (Actual)
Page 2 of 4

NOTE: Column A contains actual plant in service balances as of 11/30/2016, adjusted to remove the cumulative pre-2007 impact of a change in pension accounting and incorporate recommendations from the March 2013, April 2014, April 2015, and April 2016 Rider DCR Audit Reports. Column B shows jurisdictional allocation factors from Case No. 07-551-EL-AIR. Additional details on the adjustments in Column D are provided on the "Summary of Exclusions per Case No. 14-1287-EL-SSO: Actual 11/30/2016 Plant in Service Balances" workpaper.

Line No.	Account No.	Account Title	Total Company (A)	Allocation % (B)	Allocated Total (C) = (A) * (B)	Adjustments (D)	Adjusted Jurisdiction (E) = (C) + (D)
<u>DISTRIBUTION PLANT</u>							
11	360	Land & Land Rights	\$ 12,591,730	100%	\$ 12,591,730		\$ 12,591,730
12	361	Structures & Improvements	\$ 15,131,410	100%	\$ 15,131,410		\$ 15,131,410
13	362	Station Equipment	\$ 258,053,084	100%	\$ 258,053,084		\$ 258,053,084
14	364	Poles, Towers & Fixtures	\$ 495,619,952	100%	\$ 495,619,952		\$ 495,619,952
15	365	Overhead Conductors & Devices	\$ 729,471,093	100%	\$ 729,471,093		\$ 729,471,093
16	366	Underground Conduit	\$ 66,896,471	100%	\$ 66,896,471		\$ 66,896,471
17	367	Underground Conductors & Devices	\$ 313,721,357	100%	\$ 313,721,357		\$ 313,721,357
18	368	Line Transformers	\$ 490,243,710	100%	\$ 490,243,710		\$ 490,243,710
19	369	Services	\$ 131,593,839	100%	\$ 131,593,839		\$ 131,593,839
20	370	Meters	\$ 152,685,526	100%	\$ 152,685,526		\$ 152,685,526
21	371	Installation on Customer Premises	\$ 24,520,639	100%	\$ 24,520,639		\$ 24,520,639
22	373	Street Lighting & Signal Systems	\$ 73,704,288	100%	\$ 73,704,288		\$ 73,704,288
23	374	Asset Retirement Costs for Distribution Plant	\$ 22,272	100%	\$ 22,272		\$ 22,272
24		Total Distribution Plant	\$ 2,764,255,372	100%	\$ 2,764,255,372	\$ -	\$ 2,764,255,372

Ohio Edison Company: 16-1820-EL-RDR
11/30/2016 Actual Plant in Service by Accounts and Subaccounts

Schedule B-2.1 (Actual)
Page 3 of 4

NOTE: Column A contains actual plant in service balances as of 11/30/2016, adjusted to remove the cumulative pre-2007 impact of a change in pension accounting and incorporate recommendations from the March 2013, April 2014, April 2015, and April 2016 Rider DCR Audit Reports. Column B shows jurisdictional allocation factors from Case No. 07-551-EL-AIR. Additional details on the adjustments in Column D are provided on the "Summary of Exclusions per Case No. 14-1297-EL-SSO: Actual 11/30/2016 Plant in Service Balances" workpaper.

Line No.	Account No.	Account Title	Total Company (A)	Allocation % (B)	Allocated Total (C) = (A) * (B)	Adjustments (D)	Adjusted Jurisdiction (E) = (C) + (D)
<u>GENERAL PLANT</u>							
25	389	Land & Land Rights	\$ 3,257,286	100%	\$ 3,257,286		\$ 3,257,286
26	390	Structures & Improvements	\$ 99,304,852	100%	\$ 99,304,852		\$ 99,304,852
27	390.3	Leasehold Improvements	\$ 108,959	100%	\$ 108,959		\$ 108,959
28	391.1	Office Furniture & Equipment	\$ 6,653,672	100%	\$ 6,653,672		\$ 6,653,672
29	391.2	Data Processing Equipment	\$ 9,165,919	100%	\$ 9,165,919		\$ 9,165,919
30	392	Transportation Equipment	\$ 2,238,571	100%	\$ 2,238,571		\$ 2,238,571
31	393	Stores Equipment	\$ 1,265,913	100%	\$ 1,265,913		\$ 1,265,913
32	394	Tools, Shop & Garage Equipment	\$ 15,467,820	100%	\$ 15,467,820		\$ 15,467,820
33	395	Laboratory Equipment	\$ 5,373,033	100%	\$ 5,373,033		\$ 5,373,033
34	396	Power Operated Equipment	\$ 3,952,498	100%	\$ 3,952,498		\$ 3,952,498
35	397	Communication Equipment	\$ 31,479,432	100%	\$ 31,479,432		\$ 31,479,432
36	398	Miscellaneous Equipment	\$ 413,561	100%	\$ 413,561		\$ 413,561
37	399.1	Asset Retirement Costs for General Plant	\$ 303,410	100%	\$ 303,410		\$ 303,410
38		Total General Plant	\$ 178,984,926	100%	\$ 178,984,926	\$ -	\$ 178,984,926

Ohio Edison Company: 16-1820-EL-RDR
11/30/2016 Actual Plant in Service by Accounts and Subaccounts

Schedule B-2.1 (Actual)
Page 4 of 4

NOTE: Column A contains actual plant in service balances as of 11/30/2016, adjusted to remove the cumulative pre-2007 impact of a change in pension accounting and incorporate recommendations from the March 2013, April 2014, April 2015, and April 2016 Rider DCR Audit Reports. Column B shows jurisdictional allocation factors from Case No. 07-551-EL-AIR. Additional details on the adjustments in Column D are provided on the "Summary of Exclusions per Case No. 14-1287-EL-SSO: Actual 11/30/2016 Plant in Service Balances" workpaper.

Line No.	Account No.	Account Title	Total Company (A)	Allocation % (B)	Allocated Total (C) = (A) * (B)	Adjustments (D)	Adjusted Jurisdiction (E) = (C) + (D)
<u>OTHER PLANT</u>							
39	301	Organization	\$ 89,746	100%	\$ 89,746		\$ 89,746
40	303	Intangible Software	\$ 77,229,262	100%	\$ 77,229,262		\$ 77,229,262
41	303	Intangible FAS 109 Transmission	\$ 2,023,278	100%	\$ 2,023,278		\$ 2,023,278
42	303	Intangible FAS 109 Distribution	\$ 1,593,443	100%	\$ 1,593,443		\$ 1,593,443
43	303	Intangible FAS 109 General	\$ 199,091	100%	\$ 199,091		\$ 199,091
44		Total Other Plant	\$ 81,134,821		\$ 81,134,821	\$ -	\$ 81,134,821
45		Company Total Plant	\$ 3,324,512,388	100%	\$ 3,324,512,388	\$ (86,973,963)	\$ 3,237,538,425
46		Service Company Plant Allocated*					\$ 113,560,685
47		Grand Total Plant (45 + 46)					\$ 3,351,099,110

* Source: Line 2 of the "Service Company Allocations to the Ohio Operating Companies (Actual)" workpaper.

BEFORE

THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of Duke Energy Ohio, Inc., for an Increase in Electric Distribution Rates.)))	Case No. 17-32-EL-AIR
In the Matter of the Application of Duke Energy Ohio, Inc., for Tariff Approval.)))	Case No. 17-33-EL-ATA
In the Matter of the Application of Duke Energy Ohio, Inc., for Approval to Change Accounting Methods.)))	Case No. 17-34-EL-AAM

DIRECT TESTIMONY OF

ALEXANDER "SASHA" J. WEINTRAUB, PH.D.

ON BEHALF OF

DUKE ENERGY OHIO, INC.

_____	Management policies, practices, and organization
_____	Operating income
_____	Rate Base
_____	Allocations
_____	Rate of return
_____	Rates and tariffs
<u> X </u>	Other: Programs and Services

March 16, 2017

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I. INTRODUCTION AND PURPOSE

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. My name is Alexander (Sasha) J. Weintraub, and my business address is 400
3 South Tryon Street, Charlotte, North Carolina 28202.

4 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

5 A. I am employed by Duke Energy Progress, LLC (Duke Energy Progress), as Senior
6 Vice President of Customer Solutions. Duke Energy Progress provides various
7 administrative and other services to Duke Energy Ohio, Inc. (Duke Energy Ohio),
8 and other affiliated companies of Duke Energy Corporation (Duke Energy).

9 **Q. PLEASE BRIEFLY DESCRIBE YOUR EDUCATION AND**
10 **PROFESSIONAL EXPERIENCE.**

11 A. I received a Bachelor of Science degree in Engineering from Rensselaer
12 Polytechnic Institute, a Master's degree in Mechanical Engineering from
13 Columbia University and a Ph.D. in Industrial Engineering from North Carolina
14 State University.

15 I assumed my current position as Senior Vice President of Customer
16 Solutions in October 2015. Previously, I was Senior Vice President of Market
17 Solutions for Duke Energy. In that role, I was responsible for economic
18 development, large business customers, rate design and analysis, customer
19 regulatory strategy and analytics, data analytics, and wholesale power sales for
20 Duke Energy. I have also served as Vice President of Fuels and Systems
21 Optimization for Duke Energy. In this role, I led the organization responsible for
22 the purchase and delivery of coal, natural gas, and oil to Duke Energy's

1 generation fleet, as well as the wholesale trading function related to power and
2 natural gas. I managed the fleet and system optimization, energy supply analytics,
3 and power trading and dispatch functions.

4 Prior to working at Duke Energy, I was employed by Progress Energy,
5 Inc. (Progress Energy). I joined Progress Energy in 1999 and held various
6 leadership roles, including Director of Business Operations and Strategic
7 Planning, and was employed as an operational auditor for Progress Energy
8 Service Company. From 2003 to 2005, I was Director of Coal Marketing and
9 Trading for Progress Fuel Corporation, a former subsidiary of Progress Energy,
10 where I managed the marketing activities of the unregulated coal and synthetic
11 fuel operations of Progress Energy. In 2005, I became Vice President of Fuels and
12 Power Optimization for Progress Energy. Following the Duke Energy/Progress
13 Energy merger in July 2012, I was named Vice President of Fuels and Systems
14 Optimization for Duke Energy.

15 **Q. PLEASE DESCRIBE YOUR DUTIES AS SENIOR VICE PRESIDENT,**
16 **CUSTOMER SOLUTIONS.**

17 A. As Senior Vice President of Customer Solutions, I am responsible for aligning
18 customer-focused products, programs, and services to deliver a personalized end-
19 to-end customer experience that positions Duke Energy to meet customers' ever
20 evolving needs. My duties include development of retail programs, enhanced
21 basic services initiative, rate design and analysis, customer regulatory strategy and
22 analytics, and data analytics for all of Duke Energy's regulated utility operations.

1 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE PUBLIC**
2 **UTILITIES COMMISSION OF OHIO?**

3 A. No.

4 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THESE**
5 **PROCEEDINGS?**

6 A. The purpose of my testimony is to discuss certain of the Company's proposals
7 that will position customers to have more control and choice in respect of their
8 energy usage and an increased opportunity to incorporate into their lives
9 products and services of benefit to them. These proposals have the ancillary
10 benefit of fostering the competitive market in that customers will have access to
11 information necessary to enable reasoned choices. To do this, I begin with a
12 discussion of Duke Energy's focus on customers through its Customer Care
13 Solutions Organization.

II. OVERVIEW OF CUSTOMER CARE SOLUTIONS

14 **Q. PLEASE EXPLAIN THE DUKE ENERGY CUSTOMER SOLUTIONS**
15 **ORGANIZATION AND ITS PURPOSE.**

16 A. The Duke Energy Customer Solutions Organization's purpose is to deliver a
17 personalized customer experience by aligning customer-focused programs and
18 services with offering customers greater convenience, control, and transparency.
19 The Customer Solutions Organization focuses on the collective customer base for
20 all of Duke Energy's utility operating companies, as well as the specific
21 jurisdictions, to find ways to enhance the overall customer experience. The goal
22 of my organization is to improve customer service and satisfaction

1 **Q. WHY IS THE DUKE ENERGY CUSTOMER SOLUTIONS**
2 **ORGANIZATION IMPORTANT?**

3 A. Duke Energy has more than 7.4 million retail customers representing a total
4 population of approximately 24 million across its seven state utility territories. As
5 technologies evolve and emerge, Duke Energy's customers have growing
6 expectations of their utility service provider. The Customer Solutions
7 Organization strives to find ways to meet those expectations and give customers
8 the ability to have greater control over how they use energy and interact with
9 Duke Energy.

10 Duke Energy's research has shown that its residential electric customers
11 are concerned about reliability, cost, predictability of cost, transitioning to cleaner
12 energy sources, and control. Duke Energy Ohio customers want better
13 communication from their utility. The Company must find ways to communicate
14 more proactively with its customers and to give them more options and control.
15 Supplying customers with more updates during outages, sending them bill alerts,
16 offering them alternative rate plans, and allowing them to choose their own
17 monthly payment date are all services that Duke Energy Ohio would like use in
18 order to meet those expectations and continue to be a trusted energy advisor.

19 As I will discuss later, and as also discussed by Company witnesses
20 Donald L. Schneider, Jr, the Company seeks to continue its leadership in the
21 industry with respect to a smart grid and to proactively ensure that the smart grid
22 investment continues to provide the services it has enabled since deployment.

III. SPECIAL SERVICES

1 **Q. PLEASE PROVIDE AN OVERVIEW OF THE SPECIAL SERVICES**
2 **PROPOSAL THAT DUKE ENERGY OHIO IS MAKING IN THESE**
3 **PROCEEDINGS.**

4 A. Duke Energy Ohio is constantly and persistently focused on improving customer
5 service and satisfaction. One of the ways in which the Company seeks to improve
6 customer satisfaction is through the ability to offer its customers a number of
7 optional products and services that are independent from its provision of regulated
8 electric distribution service and completely unrelated to the provision of
9 competitive retail electric generation service. A number of Duke Energy Ohio's
10 sister utility operating companies located in other jurisdictions have found that
11 they are well-situated to meet customer needs by offering varied services such as
12 installing and performing maintenance on customer equipment, performing
13 assessments of outage or voltage problems, making a generator available during
14 construction, offering whole-house surge protection, and providing more granular
15 energy consumption-analysis services and reports. The utilities have also found
16 that customers electing to participate in these types of special services in general
17 have a higher level of customer satisfaction. Duke Energy Ohio believes that
18 offering these types of products and services to customers will provide value to
19 them and enable better customer experiences with respect to their energy
20 consumption. In order to alleviate concerns regarding the competitiveness of these
21 special services, the Company will safeguard customers' real-time awareness of
22 their competitive supplier options by requiring any customer requesting the

1 proposed unregulated products or services sign a work order stating that they have
2 been informed that these products or services are unregulated and that they can be
3 performed by other vendors.

4 **Q. HAS THE COMPANY PREVIOUSLY MADE A SIMILAR PROPOSAL?**

5 A. Yes.

6 **Q. PLEASE EXPLAIN.**

7 A. In 2013, in a stand-alone proceeding, the Company sought approval from the
8 Commission to make several changes to its corporate separation plan, including
9 adding authority to offer special services under its tariff. In that same case, the
10 Company proposed a corresponding tariff amendment. Although the Commission
11 approved the proposal, with minor amendments, the case was appealed to the
12 Ohio Supreme Court. It was reversed and remanded to the Commission for further
13 consideration.

14 **Q. WHY IS DUKE ENERGY OHIO MAKING A SIMILAR PROPOSAL IN**
15 **THIS CASE, WHEN THE REMAND IS STILL UNDER**
16 **CONSIDERATION?**

17 A. Although the products and services that would be offered are unchanged, the
18 Company seeks to include language, in the tariff, that would clarify and limit
19 those special services to ones that would advance the policies of the state of Ohio.
20 Further, including the proposal here is efficient, both procedurally and
21 substantively. Indeed, addressing, in these proceedings, tariff amendments that
22 incorporate the Commission's prior guidance permits a focus on the Company's
23 current intentions and not those previously advanced by it. Additionally, these

1 tariff revisions can now be evaluated in the context of other proposals similarly
2 intended to enhance the customer experience, thereby enabling a comprehensive
3 appreciation of the Company's offerings.

4 **Q. PLEASE EXPLAIN THE TYPES OF PRODUCTS AND SERVICES THAT**
5 **DUKE ENERGY OHIO WOULD OFFER UNDER THE PROPOSED**
6 **TARIFF.**

7 A. Duke Energy Ohio is interested in offering its customers products and services
8 that would allow customers, solely at their discretion, to leverage the Company's
9 expertise and knowledge around provision of electric utility service and energy
10 consumption. Such special customer services to be offered to residential and non-
11 residential customers may include, but are not limited to the following; design,
12 construction and maintenance of customer-owned substations; resolving power
13 quality problems on customer equipment; providing training programs for
14 construction, operation, and maintenance of electric facilities; performing or
15 providing for the provision of customer equipment maintenance, repair, or
16 installation; providing service entrance cable repair; providing restorative
17 temporary underground service; providing upgrades or increases to an existing
18 service connection at customer request; performing outage or voltage problem
19 assessment; disconnecting a customer-owned transformer at customer request;
20 loosening and refastening customer owned equipment; determining the location of
21 underground cables on customer premises; covering up lines for protection at
22 customer request; making a generator available to customer during construction to
23 avoid outage; providing pole-hold for customer to perform some activity;

1 providing a "service saver" device to provide temporary service during an outage;
2 resetting a customer-owned reclosure device; providing phase rotation of
3 customer equipment at customer request; conducting an evaluation at customer
4 request to ensure that customer equipment meets standards: upgrading the
5 customer to three phase service; providing whole-house surge protection, and
6 providing customized energy consumption analysis services, tools and reports.

7 **Q. HOW DOES THE OFFERING OF THESE PRODUCTS AND SERVICES**
8 **FURTHER THE POLICIES OF THE STATE OF OHIO?**

9 A. The provision of these non-generation related products and services allows
10 customers to voluntarily receive the benefits from the programs from a trusted
11 provider, while at the same time, not impacting the competitive market for the
12 provision of retail generation service that has been established in Ohio. As
13 informed by counsel, Ohio policies include several factors that would be furthered
14 by the Company's offering of these products and services. The offering would in
15 no way erode the Company's ability to ensure adequate, reliable, safe, efficient,
16 nondiscriminatory, and reasonably priced retail electric service. It would give
17 customers an additional choice of suppliers offering these products and services,
18 thereby increasing diversity of suppliers. It would encourage innovation in cost-
19 effective retail electric service including, but not limited to, demand side
20 management and waste energy recovery systems. It would help protect at-risk
21 populations. It would encourage the education of small business owners in Ohio
22 regarding the use of, and encourage the use of, energy efficiency programs and
23 alternative energy resources in their businesses. And it would facilitate the state's

1 effectiveness in the global economy.

2 **Q. PLEASE EXPLAIN WHY THE SPECIAL SERVICES COVERED BY THE**
3 **PROPOSED TARIFF SHOULD BE OFFERED BY THE ELECTRIC**
4 **DISTRIBUTION UTILITY, RATHER THAN BY AN AFFILIATE.**

5 A. Duke Energy Ohio believes that it is in the best position to provide these services
6 to its customers. Since these potential products and services, although in no way
7 tied to electric utility service, are related to the customers' electric consumption, it
8 is logical that they would seek these products from their electric distribution
9 utility. Seeking to provide these services through an affiliate would potentially be
10 confusing to customers.

11 **Q. DO OTHER ELECTRIC DISTRIBUTION UTILITIES IN OHIO OFFER**
12 **COMPETITIVE PRODUCTS OR SERVICES OTHER THAN RETAIL**
13 **ELECTRIC SERVICE?**

14 A. Yes.

15 **Q. PLEASE EXPLAIN.**

16 A. The Cleveland Electric Illuminating Company, The Toledo Edison Company, and
17 The Ohio Edison Company all have tariffs that are almost identical to that
18 proposed here. According to their public websites, they all offer a number of
19 competitive products and services. Similarly, Ohio Power Company offers
20 competitive products and services through its website.

1 **Q. WOULD THE COMPANY'S CORPORATE SEPARATION PLAN NEED**
2 **TO BE AMENDED AS A RESULT OF THE COMMISSION'S APPROVAL**
3 **OF THIS TARIFF PROVISION?**

4 A. Yes, it would, although the Company anticipates that such approval would occur
5 in a different proceeding.

IV. CUSTOMER PROGRAMS AND SERVICES

6 **Q. PLEASE DESCRIBE THE WORK THAT THE COMPANY IS**
7 **PROPOSING WITH REGARD TO ITS ADVANCED METERING**
8 **INFRASTRUCTURE (AMI).**

9 A. As explained in greater detail by Duke Energy Ohio witness Schneider, the
10 Company is faced with a challenge and an opportunity with respect to its smart
11 grid infrastructure. The evolution of grid modernization has developed such that
12 the Company proposes to transition its systems to all AMI mesh environment
13 meters (AMI Transition). While this is something that is inevitable due to the
14 need to accommodate evolving technology, it also presents an opportunity in that
15 it will allow the Company to utilize new capabilities to develop and offer new
16 programs, products, and services to customers that are simply not achievable
17 through the Company's existing meter and EDMS solution. Additionally, the
18 AMI transistion will advance retail competition for CRES providers as explained
19 by Duke Energy Ohio witness Scott B. Nicholson.

20 **Q. WHAT OPPORTUNITIES ARE PRESENTED BY THE TRANSITION TO**
21 **AN AMI MESH ENVIRONMENT?**

22 A. The Company has been identifying and developing a suite of Enhanced Basic

1 Services (EBSs) to provide to customers, which EBSs would be enabled by the
2 AMI Transition. These programs and services will give customers greater
3 convenience, choice, transparency, and control over their energy usage, while also
4 giving them the opportunity to budget and save both time and money. We are not
5 proposing these programs or services in this case. Rather we are introducing them
6 as possibilities for the future that will be an added benefit enabled by the AMI
7 Transition.

8 **Q. PLEASE EXPLAIN WHAT YOU MEAN BY EBS.**

9 A. EBSs are programs driven by customer value and by services that customers want
10 or need from their utility. As technology has developed, so too has the basic
11 desire of utility customers for greater control over their energy consumption and
12 billing. These programs and services are often mentioned in customer satisfaction
13 surveys as offerings that will enhance the customer experience and drive higher
14 satisfaction.

15 **Q. WHAT EBS PROGRAMS AND SERVICES ARE ENABLED WITH THE**
16 **AMI TRANSITION, SUCH THAT THEY WILL EVENTUALLY BE**
17 **AVAILABLE TO OHIO CUSTOMERS?**

18 A. The Company has been identifying and developing a suite of EBSs that the AMI
19 Transition enables and could be provided to Duke Energy Ohio residential electric
20 customers. Some of these programs that the Company is developing and that
21 residential electric customers could voluntarily participate in include:

22 *Pick Your Own Due Date* – An AMI-enabled program that allows
23 customers to choose a monthly due date that best aligns with their personal

1 situation.

2 *Prepaid Advantage* – A potential AMI-enabled efficiency program that
3 allows customers to prepay for electricity, thereby avoiding a security deposit,
4 late fees, or any reconnect fees.

5 *Usage Alerts* – An AMI-enabled program providing customers with a mid-
6 cycle report of their usage to date, along with projections of the end-of-cycle bill,
7 based on historical usage and weather data. Customers also have the opportunity
8 to opt in to receive threshold-based reports, this functionality allows a customer to
9 input their preferred threshold and receive notifications as they approach 75
10 percent and 100 percent of their preset threshold. Customers can receive these
11 messages via email and/or text message (SMS).

12 *Outage Alerts with AMI* – The Company has already provided proactive
13 outage and restoration messages to enrolled customers but, with the AMI
14 Transition, this functionality can be enhanced to provide even more timely and
15 granular information.

16 *Smart Meter Usage App* – The Company is investigating the possibility of
17 enhancing its existing MyHER efficiency program by offering customers an in-
18 home device that will communicate directly with the smart meter and provide
19 real-time feedback to the customer on energy usage. This functionality will
20 potentially take the engagement and education around energy efficiency and
21 energy usage behaviors to the next level.

1 **Q. WHEN WILL THESE PROGRAMS AND SERVICES BE AVAILABLE TO**
2 **DUKE ENERGY OHIO CUSTOMERS?**

3 A. The AMI technology discussed above and in Duke Energy Ohio witness
4 Schneider's testimony enables the development of these programs and services.
5 The programs and services will be available once the AMI Transition is
6 completed and the individual programs are fully developed. For example, Pick
7 Your Own Due Date will be available to customers at the pace of the AMI
8 Transition. Prepaid Advantage would need to be designed specifically for each
9 individual Duke Energy electric service jurisdiction, given the varying rules and
10 regulations within each state and giving consideration to ultimate feasibility in
11 certain jurisdictions. Usage Alerts could be offered to customers within six to
12 twelve months from the time the AMI Transition is started. The timing of the
13 Smart Meter Usage App is currently being evaluated.

14 **Q. WHICH CUSTOMERS WILL BE ABLE TO TAKE ADVANTAGE OF**
15 **THESE PROGRAMS?**

16 A. These programs could be offered to eligible residential and Small and Medium
17 Businesses. Eligibility will vary by program.

18 **Q. ARE THERE OTHER POTENTIAL PROGRAMS, PRODUCTS, AND**
19 **SERVICES THAT YOU FORESEE BECOMING ENABLED THROUGH**
20 **THE AMI TRANSITION BEING PROPOSED BY DUKE ENERGY OHIO?**

21 A. There is significant potential for the electric distribution grid through innovation
22 and technological advances. Thus, I anticipate that Duke Energy will explore new
23 products, services, and offerings that are a complement to, or enabled by, an

1 intelligent, interactive grid.

2 **Q. IS DUKE ENERGY OHIO SEEKING COMMISSION AUTHORIZATION**
3 **TO BEGIN OFFERING ALL OF THESE PROGRAMS IN THESE**
4 **PROCEEDINGS?**

5 A. No. As I discussed above, Duke Energy Ohio is not seeking the Commission's
6 authorization to begin offering all of these programs in these proceedings. Some
7 of the programs described, such as Pick Your Due Date, will be available upon
8 completion of the AMI Transition, while others, like Prepaid Advantage, if
9 feasible, will require additional design and implementation time. Duke Energy
10 Ohio recognizes that some of the programs described may require Commission
11 approval before the Company can offer the services to its customers. Accordingly,
12 the Company has not provided estimates for costs or benefits associated with
13 these programs and services in this filing. The descriptions of these programs are
14 offered to demonstrate some of the enhancements to customer service that would
15 add to the benefits enabled by the AMI transition to a mesh environment.

V. CONCLUSION

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

17 A. Yes.

BEFORE

THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of)	
Duke Energy Ohio, Inc., for an)	Case No. 17-32-EL-AIR
Increase in Electric Distribution Rates.)	
In the Matter of the Application of)	
Duke Energy Ohio, Inc., for Tariff)	Case No. 17-33-EL-ATA
Approval.)	
In the Matter of the Application of)	
Duke Energy Ohio, Inc., for Approval)	Case No. 17-34-EL-AAM
to Change Accounting Methods.)	

DIRECT TESTIMONY OF

JAMES E. ZIOLKOWSKI

ON BEHALF OF

DUKE ENERGY OHIO, INC.

_____	Management policies, practices, and organization
_____	Operating income
_____	Rate Base
_____	Allocations
_____	Rate of return
_____	Rates and tariffs
<u> X </u>	Other: Cost of Service Study

March 16, 2017

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I. INTRODUCTION

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. My name is James E. Ziolkowski, and my business address is 139 East Fourth
3 Street, Cincinnati, Ohio 45202.

4 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

5 A. I am employed by Duke Energy Business Services LLC (DEBS) as Director Rates
6 & Regulatory Planning. DEBS provides various administrative and other services
7 to Duke Energy Ohio, Inc., (Duke Energy Ohio) and other affiliated companies of
8 Duke Energy Corporation (Duke Energy).

9 **Q. PLEASE BRIEFLY DESCRIBE YOUR EDUCATION AND**
10 **PROFESSIONAL EXPERIENCE.**

11 A. I received a Bachelor of Science degree in Mechanical Engineering from the U.S.
12 Naval Academy in 1979 and a Master of Business Administration degree from
13 Miami University in 1988. I am also a licensed Professional Engineer in the state
14 of Ohio. I received certification as a Chartered Industrial Gas Consultant in 1994
15 from the Institute of Gas Technology and the American Gas Association. I have
16 attended the EUCI Cost of Service seminar.

17 After graduating from the Naval Academy, I attended the Naval Nuclear
18 Power School and other follow-on schools. I served as a nuclear-trained officer on
19 various ships in the U.S. Navy through 1986. From 1988 through 1990, I worked
20 for Mobil Oil Corporation as a Marine Marketing Representative in the New York
21 City area.

22 I joined The Cincinnati Gas & Electric Company (now Duke Energy

1 Ohio) in 1990 as a Product Applications Engineer, in which capacity I designed
2 and managed some of Duke Energy Ohio's demand side management programs,
3 including Energy Audits and Interruptible Rates. From 1996 until 1998, I was an
4 Account Engineer and worked with large customers to resolve various service-
5 related issues, particularly in the areas of billing, metering, and demand
6 management. In 1998, I joined the Rate Department, where I focused on rate
7 design and tariff administration. I was significantly involved with the unbundling
8 and design of Duke Energy Ohio's retail electric rates. I was appointed to my
9 current position in January 2014.

10 **Q. PLEASE DESCRIBE YOUR RESPONSIBILITIES AS DIRECTOR RATES**
11 **& REGULATORY PLANNING.**

12 A. As Director Rates & Regulatory Planning, I am responsible for cost of service
13 studies, tariff administration, billing, and revenue reporting issues in Ohio and
14 Kentucky. I also prepare filings to modify charges and terms in the retail tariffs of
15 both Duke Energy Ohio and Duke Energy Kentucky, Inc. (Duke Energy
16 Kentucky) and I develop rates for new services. During major rate cases, I help
17 with the design of the new base rates. Additionally, I frequently work with Duke
18 Energy Ohio's and Duke Energy Kentucky's customer contact and billing
19 personnel to answer rate-related questions, and to apply the retail tariffs to
20 specific situations. Occasionally, I meet with customers and Company
21 representatives to explain rates or provide rate training. I also prepare reports that
22 are required by regulatory authorities.

1 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE PUBLIC**
2 **UTILITIES COMMISSION OF OHIO?**

3 A. Yes.

4 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THESE**
5 **PROCEEDINGS?**

6 A. I sponsor the cost-of-service study, identified as Schedules E-3.2, E-3.2a and E-
7 3.2b. I also explain Duke Energy Ohio's proposal to correct rate disparities among
8 customer classes.

II. COST-OF-SERVICE STUDY

9 **Q. WHAT IS THE PURPOSE OF A COST-OF-SERVICE STUDY?**

10 A. A cost-of-service study is an analytical tool used in traditional utility rate design
11 to allocate costs to different classes of customers. When the process of preparing a
12 cost-of-service study is completed, the resulting class cost-of-service study can
13 (1) assist in determining the revenue requirement for the services offered by a
14 utility; (2) analyze, at a very detailed level, the costs imposed on the utility's
15 system by different classes of customers; (3) show the total costs the company
16 incurs in serving each retail rate class, as well as the rate of return on rate base
17 earned from each class during the test year; and (4) establish cost responsibility
18 that makes it possible to determine just and reasonable rates based on costs.

19 Schedule E-3.2 and the supporting E-3.2a and E-3.2b of the Company's
20 Application provide the electric cost-of-service study for the test year.

1 **Q. PLEASE DESCRIBE SCHEDULE E-3.2, INCLUDING E-3.2a AND E-3.2b,**
2 **THE COST-OF-SERVICE STUDY.**

3 A. The cost-of-service study contained in Schedule E-3.2 is an embedded, fully
4 allocated cost-of-service study by rate class for the twelve-month test period
5 ending March 31, 2017, as adjusted. I prepared the cost-of-service study using
6 information provided by other Duke Energy Ohio witnesses on Schedules B-1
7 through B-6, C-1 through C-4, and D-1. The cost-of-service study classifies
8 electric distribution-related cost items such as plant investment, operating
9 expenses, and taxes as either demand- or customer-related and then allocates the
10 same items to the various customer classes and calculates the revenue
11 responsibility of each class. Finally, the cost-of-service study calculates the
12 revenue responsibility of each class required to generate the recommended rate of
13 return.

14 **Q. PLEASE DESCRIBE HOW THE COST-OF-SERVICE STUDY IS**
15 **ORGANIZED IN SCHEDULES E-3.2 THROUGH E-3.2b.**

16 A. The schedules provided in the cost-of-service study are shown in the table below.
17 The detailed calculation and derivation of the allocation factors utilized in the
18 cost-of-service study are included in the work papers filed in these proceedings.

Table 1		
Schedule	Page No.	Description
Schedule 1	1	Summary of Results
Schedule 2	2	Gross Plant in Service
Schedule 3	3	Depreciation Reserve
Schedule 4	4	Net Electric Plant in Service
Schedule 4.1	5	Net Electric Plant
Schedule 5	6	Subtractive Rate Base Adjustments
Schedule 5.1	7	Additive Rate Base Adjustments
Schedule 5.2	8	Working Capital
Schedule 6	9	O&M Expenses
Schedule 6.1	10	O&M Expenses
Schedule 6.2	11	O&M Expenses
Schedule 7	12	Depreciation Expense
Schedule 8	13	Taxes Other Than Income Taxes
Schedule 9	14	Federal Income Tax Based on Return
Schedule 9.1	15	State Income Tax Based on Return
Schedule 10	16	Cost of Service Computation
Schedule 11	17	ROR, Tax Rates & Special Factors
Schedule 12	18	Allocation Factors
Schedule 12.1	19	Allocation Factors
Schedule 12.2	20	Allocation Factors

1 **Q. WHAT JURISDICTIONAL CUSTOMER CLASSES WERE USED IN THE**
2 **CLASS COST-OF-SERVICE STUDY?**

3 A. The jurisdictional classes used in the cost-of-service study are as follows:

4 Residential - Rates RS, RSLI, RS3P, ORH, and TD

5 Secondary Distribution Large - Rate DS

6 Secondary Distribution Large - Rate EH

7 Secondary Distribution Small - Rate DM

8 Secondary Distribution - Rates GS-FL and SFL-ADPL

9 Primary Distribution - Rate DP

10 Transmission - Rate TS

11 Lighting - Rates OL, UOLS, NSU, NSP, TL, SC, SE, and SL

1 **Q. WHAT ARE THE ELEMENTS OF A COST-OF-SERVICE STUDY?**

2 A. Much like the components of the overall revenue requirement, a cost-of-service
3 study consist of the following elements, which are allocated to each function,
4 classification, and rate class:

5 Operating and Maintenance (O&M) Expense
6 + Depreciation
7 + Other Taxes
8 + Federal and State Income Taxes
9 + Return (Rate Base x Rate of Return (ROR))
10 - Revenue Credits
11 = Class Revenue Requirement or Cost of Service.

12 **Q. PLEASE DESCRIBE SCHEDULE E-3.2.**

13 A. Schedule E-3.2 is a total class cost-of-service study that classifies the cost items
14 as either customer- or demand-related costs and then allocates the costs to the
15 various rate groups.

16 **Q. PLEASE DESCRIBE SCHEDULE E-3.2a.**

17 A. Schedule E-3.2a is a classified cost-of-service study that shows the demand
18 component of the classified costs allocated to the various rate groups.

19 **Q. PLEASE DESCRIBE SCHEDULE E-3.2b.**

20 A. Schedule E-3.2b is an allocated cost-of-service study that shows the customer
21 component of the classified costs allocated to the various rate groups.

1 **Q. WHAT GENERAL METHODOLOGY DID YOU USE FOR THE COST-**
2 **OF-SERVICE STUDY?**

3 A. First, I used electric distribution data that had already been functionalized in the
4 Company's revenue requirement calculation. I then classified the distribution
5 costs as either customer- or demand-related, or a combination of each in some
6 instances. Transformer costs, for example, as explained in more detail later in my
7 testimony, were split into customer- and demand-components, using the minimum
8 size method. Otherwise demand costs were allocated to customer class based on
9 the maximum non-coincident peak or average class group peak methodologies, as
10 appropriate. Customer-related costs are allocated to rate classes based upon the
11 appropriate customer-related allocator. Lastly, I allocated the demand and
12 customer costs to rate classes based on the cost causation guidelines published in
13 the NARUC "Electric Utility Cost Allocation Manual," my utility company
14 experience, and my knowledge of cost-of-service studies.

15 **Q. HOW DID YOU DERIVE THE CUSTOMER AND DEMAND**
16 **ALLOCATORS?**

17 A. The customer and demand allocators were developed by summarizing data
18 contained in Schedule E and in work papers WPE-3.2a through WPE-3.2h.
19 Specifically, the Company's load research data is contained in work paper WPE-
20 3.2b.

1 **Q. HOW WERE THE MAXIMUM NON-COINCIDENT PEAK AND**
2 **AVERAGE CLASS GROUP PEAK KW DEMAND VALUES DEVELOPED**
3 **FROM DUKE ENERGY OHIO'S CUSTOMER LOAD RESEARCH**
4 **DATA?**

5 A. Load research data and kWh sales levels for the twelve months ending December
6 31, 2015, were used to determine monthly peak day demand data. The monthly
7 demand information is included on pages 4 through 11 of work paper WPE-3.2b.
8 The following is an example of how the class group peak kW demand was
9 calculated for Rate RS for the month of January:

- 10 • Step 1 – Determine average demand by dividing the total kWh by the
11 number of hours in the month.
12 ○ $748,929,236 \text{ kWh} \div 744 \text{ hours} = 1,006,625 \text{ kW}$
- 13 • Step 2 – Determine the group peak demand by dividing average
14 demand from Step 1 by the class group peak load factor (from load
15 research data).
16 ○ $1,006,625 \div 56.470\% \text{ load factor} = 1,782,584 \text{ kW}$
- 17 • Step 3 – Add transmission and distribution line losses by multiplying
18 by the loss factor.
19 ○ $1,782,584 \text{ kW} \times 1.04735 \text{ loss factor} = 1,866,989 \text{ kW including}$
20 losses

21 This process was followed for each rate class for each month to determine each
22 rate class's monthly group peak. The average was calculated for the year to get
23 average class group peak by rate class. A similar procedure was used to develop

1 each class's maximum (single) non-coincident peak.

2 **Q. PLEASE DESCRIBE THE METHODOLOGY USED TO ALLOCATE**
3 **DISTRIBUTION PLANT TO THE VARIOUS CLASSES OF**
4 **CUSTOMERS.**

5 A. Several different allocation factors were used to allocate distribution plant to the
6 customer classes. First, distribution plant was grouped by the type of plant such as
7 substations, poles, conductors, etc., as shown on page 2 of Schedule E-3.2. Then it
8 was determined whether it was appropriate to use either a customer- or demand-
9 related allocation factor for each type of plant. Finally, each customer- or
10 demand-related cost was allocated to rate class.

11 Substations are considered 100 percent demand-related and were allocated
12 using the average class group coincident peak demand ratios for the twelve
13 months ending December 31, 2015. This factor takes into consideration the load
14 diversity by rate group at the distribution substation level.

15 Poles, towers and fixtures were first split into primary and secondary
16 voltages based on circuit-miles. They were then allocated between customer- and
17 demand-related using the minimum size method. The primary demand component
18 was allocated to customer classes using the primary distribution voltage ratio
19 (K205), which is the same as the class group peak demand ratio (K201). The
20 secondary demand component was allocated to customer classes using the
21 secondary distribution voltage ratio (K206), which excludes distribution primary
22 voltage. Both the primary and secondary customer components were allocated to
23 customer classes using the average number of customers for 2015 (K403). The

1 development of these allocation factors is shown on pages 2 and 3 of work paper
2 WPE-3.2a.

3 Conductors were first grouped as overhead and underground and then split
4 between primary and secondary voltages based on circuit-miles. They were then
5 allocated between customer and demand using the minimum size method. The
6 primary demand component of conductors was allocated to customer classes
7 using the primary distribution voltage ratio (K205), which is the same as the class
8 group peak demand ratio (K201). The secondary demand component of
9 conductors was allocated using secondary distribution voltage ratio (K206), which
10 excludes distribution primary voltage. Both the primary and secondary customer
11 components of conductors were allocated to customer classes using the average
12 number of customers for 2015 (K403). The development of these allocation
13 factors is shown on pages 2 and 3 of work paper WPE-3.2a.

14 Transformers were allocated between customer- and demand-related using
15 the minimum size method. Transformers, as well as other distribution plant
16 facilities, are considered to have a customer component because the number of
17 facilities needed on the system, are dependent on the number of customers. The
18 remaining costs are considered to be demand-related. I allocated the demand
19 portion of transformers among the customer classes using the maximum non-
20 coincident peak load ratio (K203). The maximum non-coincident peak demand
21 allocator is appropriate because transformers are sized to meet the maximum
22 demand and are close to the customer so there is little or no load diversity. I then
23 allocated the customer portion of transformers among the customer classes based

1 on the total number of customers (K404).

2 Services are considered 100 percent customer-related and were allocated
3 based on a weighted-average number of customers (K409). The weighting is
4 based on an engineering analysis that prices various service drop costs based on
5 demands. For example, it is twice as costly for a service drop at 100 kVA versus a
6 service drop at 25 kVA. Customers with an average demand of 100 kVA are
7 weighted at twice the cost of customers with an average demand of 25 kVA.

8 Meters, also 100 percent customer-related, were allocated to customer
9 classes based on a weighting similar to services (K405).

10 Street lights were directly assigned to the street lighting rate class.

11 **Q. HAVE YOU ALLOCATED DISTRIBUTION PLANT BETWEEN**
12 **CUSTOMER- AND DEMAND-RELATED COMPONENTS?**

13 A. Yes. Since there is theoretically a customer component of distribution facilities
14 that varies depending on the number of customers served, I have used minimum
15 size studies to split the costs related to poles, towers & fixtures (Account 364),
16 overhead conductors (Account 365), underground conductors (Accounts 366 and
17 367) and transformers (Account 368) between demand- and customer-related
18 components. The minimum size method assumes that there is a minimum size
19 distribution system that can be built to serve the minimum loading requirements
20 of a customer. This minimum size method is a recommended method for the
21 treatment of these costs, as presented in the Electric Utility Cost Allocation
22 Manual that is published by NARUC.

1 **Q. PLEASE DESCRIBE THE MINIMUM SIZE METHOD USED TO**
2 **ALLOCATE TRANSFORMER COSTS BETWEEN CUSTOMER- AND**
3 **DEMAND-RELATED COSTS.**

4 A. The minimum size study for transformers is shown on work paper WPE-3.2d,
5 pages 6 and 7. For transformers, the study involved determining the minimum
6 size transformer currently installed by Duke Energy Ohio. In this case, it is a 15
7 kVa transformer. Duke Energy Ohio's 2015 average installed cost of a 15 kVa
8 transformer was \$1,483.

9 I used asset accounting records to determine the number of overhead and
10 pad-mounted transformers installed each year from 1910 to June 2016. I then used
11 the Handy-Whitman Index for Utility Plant Materials (specifically line
12 transformers) to calculate the cost per transformer for each of the years 1910 to
13 June 2016, beginning with a 2016 Handy-Whitman index of 883 and 2016 cost of
14 \$1,483. For each year, I multiplied the number of transformers by the cost per
15 transformer to get the minimum size cost per year. I summarized each of the years
16 1910 to 2016 to arrive at the minimum size transformer cost of approximately
17 \$114 million. This was classified as a customer-related cost. The difference
18 between this customer-related cost and the balance in FERC Line Transformer
19 Account 368 is the demand component, resulting in allocation factors of 33.742
20 percent to customer and 66.258 percent to demand. I allocated all transformer-
21 related cost (plant, accumulated depreciation, Operating and Maintenance
22 (O&M), and depreciation expense) to customer and demand using these factors.

1 **Q. HAVE YOU COMPLETED MINIMUM SIZE STUDIES FOR OTHER**
2 **DISTRIBUTION FACILITIES OTHER THAN TRANSFORMERS?**

3 A. Yes. The following table lists the other distribution facilities for which I
4 performed minimum size studies:

<u>Class of Property</u>	<u>WPE-3.2d Reference</u>	<u>Minimum Size</u>	<u>Loaded Cost</u>	<u>Cost Per</u>
<u>Poles, Towers & Fixtures</u>				
Primary	pages 11-12	40 ft, Class 4, Wood	\$ 962	Pole
Secondary	pages 13-14	35 ft, Class 5, Wood	\$ 617	Pole
<u>Overhead Conductors</u>				
Primary	pages 15-16	1\0 Alum. Alloy Conductor	\$13,611	Mile of Conductor
Secondary	pages 17-18	#2 Aluminum Triplex, Steel Reinforced Neutral	\$15,628	Mile of Conductor
<u>Underground Conductors</u>				
Primary	pages 19-20	1\0 Aluminum	\$17,712	Mile of Conductor
Secondary	pages 21-22	2\0 Aluminum	\$15,388	Mile of Conductor

5 **Q. PLEASE DESCRIBE THE METHODOLOGY USED TO ALLOCATE**
6 **GENERAL AND INTANGIBLE PLANT, AS WELL AS COMMON AND**
7 **OTHER PLANT.**

8 A. I functionalized common and general plant based on functional salaries and
9 wages, as presented on pages 354-355 of Duke Energy Ohio's 2015 FERC Form
10 1 Annual Report. I then allocated the distribution component between demand-
11 and customer-related components based on the ratio of demand- and customer-
12 related distribution plant. I then used distribution KW and various weighted O&M
13 expense ratios to allocate each function to customer classes.

1 **Q WHAT METHOD DID YOU USE TO ALLOCATE OVERHEAD AND**
2 **UNDERGROUND DISTRIBUTION EXPENSES.**

3 A. *Distribution expenses for overhead and underground lines were split between*
4 *primary and secondary voltage, and between demand and customer, using the*
5 *same proportion that was applied to rate base for conductors.*

6 **Q. PLEASE EXPLAIN HOW YOU ALLOCATED ADMINISTRATIVE AND**
7 **GENERAL EXPENSES.**

8 A. I functionalized Administrative and General (A&G) expenses based on the same
9 functional salaries and wages used for general and common plant. After I
10 functionalized the expenses, I allocated the distribution component between demand
11 and customer components based on the ratio of demand and customer related
12 distribution plant and then allocated the expenses to rate classes based on the same
13 allocation factors used to allocate general and common plant.

14 **Q. DID YOU USE ANY OTHER ALLOCATION FACTORS IN THE COST OF**
15 **SERVICE STUDY?**

16 A. Yes, there are many plant and expense ratios that were developed internally in the
17 cost-of-service study. The cost-of-service study lists each item's allocation factor
18 under the column identified as "ALLO."

19 **Q. WHAT DO THE RESULTS OF THE COST-OF-SERVICE STUDY SHOW?**

20 A. Based on the allocation assumptions made and the rate of return of 7.82 percent
21 requested in these proceedings, the cost of service justifies a distribution revenue
22 increase of approximately \$15.4 million for the test period ending March 31, 2017,
23 as adjusted for known and measurable charges. Schedule E-3.2, page 1 of 20, is a

1 summary of the cost-of-service study, which supports the proposed deficiency.

2 **Q. HOW WERE THE RESULTS OF YOUR COST OF SERVICE STUDY**
3 **USED IN THESE PROCEEDINGS?**

4 A. The results of the fully allocated cost-of-service study by rate class were supplied to
5 Company witness James A. Riddle, who used this data to develop the proposed
6 revenue distribution and rate design for these proceedings.

III. DISTRIBUTION OF THE PROPOSED REVENUE INCREASE

7 **Q. DID THE COST-OF-SERVICE STUDY SHOW THAT THE INCREASE**
8 **REQUIRED FOR EACH CUSTOMER CLASS WAS PROPORTIONAL?**

9 A. No. The cost-of-service study revealed that there are significant differences among
10 the rate classes when comparing the actual return earned by each rate class to the
11 7.82 percent return on rate base being requested in this case. Put another way,
12 developing rates that generate the amount of revenue that equals the allocated
13 revenue requirement for each rate class will mean much greater increases for some
14 rate classes, in terms of percentages, than other classes. The present rates of return
15 by class, shown on work paper WPE-3.2g, indicate that there are significant
16 differences in returns earned by customer class. In order to ensure that each
17 customer class pays the actual cost to serve that class, and move each class to the
18 average rate of return, it would be necessary to eliminate 100 percent of the inter-
19 class subsidization that currently exists.

20 **Q. HOW DID THIS RATE DISPARITY ARISE?**

21 A. Rate disparities exist mostly due to the fact that, over the years, rates have not been
22 set based on the cost to serve customers as determined by a cost-of-service study.

1 Additionally, Duke Energy Ohio's last general electric distribution rate case was
2 filed in 2012 and resulted in a settlement in which the approved rates did not
3 correspond with the demonstrated cost of serving each rate class. For example, in the
4 2012 rate case, only 15% of the inter-class subsidization was eliminated.

5 **Q. HOW HAS THE COMPANY DEALT WITH INTER-CLASS SUBSIDATION**
6 **ISSUES IN PRIOR RATE PROCEEDINGS?**

7 A. Given the wide disparity that typically exists among rate classes, complete
8 elimination of the inter-class subsidization would cause a dramatic swing in rate
9 impacts between and among various rate classes. Although, it is a general tenet of
10 ratemaking that each class should, to the extent practicable, pay the costs of
11 providing service to that class, in past proceedings the Company has chosen to
12 invoke the rate making principle of gradualism to mitigate the volatility of
13 eliminating 100 percent of the inter-class subsidization. Therefore, in prior
14 proceedings, in order to mitigate the rate shock that can result from eliminating 100
15 percent of the inter-class subsidization (or rate disparities) among the rate classes,
16 the Company used a two-step process to distribute the proposed revenue increase.
17 The first step eliminated 15 percent of the inter-class subsidization between
18 customer classes based on present revenues. The second step allocated the proposed
19 rate increase to customer classes based on electric distribution original cost
20 depreciated (OCD) rate base.

1 **Q. HOW IS THE COMPANY PROPOSING TO DEAL WITH THE INTER-**
2 **CLASS SUBSIDIZATION ISSUE IN THE CURRENT RATE**
3 **PROCEEDING?**

4 A. In the current proceeding, the Company is again proposing to use a two-step process
5 to distribute the proposed revenue increase. The first step eliminates 19.15 percent of
6 the subsidy/excess revenues between customer classes based on present revenues.
7 The second step allocates the rate increase to customer classes based on electric
8 distribution original cost depreciated (OCD) rate base. By proposing to eliminate
9 only 19.15 percent of the subsidy/excess, the Company is choosing to invoke the
10 rate-making principle of gradualism, so to mitigate the volatility of 100 percent
11 subsidy/excess elimination.

IV. CONCLUSION

12 **Q. WERE SCHEDULES E-3.2, E-3.2a AND E-3.2b PREPARED BY YOU OR**
13 **UNDER YOUR DIRECTION AND SUPERVISION?**

14 A. Yes.

15 **Q. IS THE INFORMATION CONTAINED IN SCHEDULES E-3.2, E-3.2a**
16 **AND E-3.2b ACCURATE TO THE BEST OF YOUR KNOWLEDGE AND**
17 **BELIEF?**

18 A. Yes.

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

20 A. Yes.