

BEFORE
THE ILLINOIS COMMERCE COMMISSION

DIRECT TESTIMONY OF
JOHN J. SPANOS
ON BEHALF OF
MIDAMERICAN ENERGY COMPANY

DEPRECIATION

October 5, 2016

TABLE OF CONTENTS

<u>DESCRIPTION OF TESTIMONY</u>	<u>TESTIMONY PAGES</u>
I. Introduction.....	1
Purpose of Testimony	2
II. Description of the Contents of the Report	3
III. The First Phase of the Depreciation Study.....	5
IV. The Second Phase of the Depreciation Study	8
V. Conclusion	11

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 Hill,
3 Pennsylvania, 17011.

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 from
14 Carnegie-Mellon University and a Master of Business Administration from York
15 College.

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

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

20 **Q. DO YOU HOLD ANY SPECIAL CERTIFICATION AS A DEPRECIATION**
21 **EXPERT?**

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

26 **Q. CAN YOU OUTLINE YOUR EXPERIENCE IN THE FIELD OF**
27 **DEPRECIATION?**

28 A. Yes. I have 30 years of depreciation experience which includes giving expert
29 testimony in over 230 cases before 40 regulatory commissions, including this
30 Commission. Please refer to Exhibit JJS-1 for my qualifications.

31 **Q. HAVE YOU RECEIVED ANY ADDITIONAL EDUCATION RELATING TO**
32 **UTILITY PLANT DEPRECIATION?**

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

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

41 A. I sponsor the depreciation study of MidAmerican’s gas distribution and general plant.

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

43 A. Depreciation refers to the loss in service value not restored by current maintenance,
44 incurred in connection with the consumption or prospective retirement of utility plant

45 in the course of service from causes that can be reasonably anticipated or
46 contemplated, against which the Company is not protected by insurance. Among the
47 causes to be given consideration are wear and tear, decay, action of the elements,
48 inadequacy, obsolescence, changes in the art, changes in demand and the
49 requirements of public authorities.

50 **Q. PLEASE IDENTIFY YOUR EXHIBIT.**

51 A. My Exhibit is a report entitled, “2015 Depreciation Study - Calculated Annual
52 Depreciation Accruals Related to Gas Plant as of December 31, 2015.” This report
53 sets forth the results of my depreciation study for MidAmerican.

54 **Q. DOES THE EXHIBIT ACCURATELY PORTRAY THE RESULTS OF YOUR
55 DEPRECIATION STUDY AS OF DECEMBER 31, 2015?**

56 A. Yes.

57 **Q. IN PREPARING THE DEPRECIATION STUDY, DID YOU FOLLOW
58 GENERALLY ACCEPTED PRACTICES IN THE FIELD OF
59 DEPRECIATION AND VALUATION?**

60 A. Yes.

61 **II. DESCRIPTION OF THE CONTENTS OF THE REPORT**

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

63 A. My report is presented in nine parts. Part I, Introduction, presents the scope and basis
64 for the depreciation study. Part II, Estimation of Survivor Curves, includes
65 descriptions of the methodology of estimating survivor curves. Parts III and IV set
66 forth the analysis for determining life and net salvage estimation. Part V, Calculation
67 of Annual and Accrued Depreciation includes the concepts of depreciation and

68 amortization using the remaining life. Part VI, Results of Study, presents a
69 description of the results and a summary of the depreciation calculations. Parts VII,
70 VIII and IX include graphs and tables that relate to the service life and net salvage
71 analyses, and the detailed depreciation calculations.

72 The table on pages VI-5 through VI-7 presents the estimated survivor curve,
73 the net salvage percent, the original cost as of December 31, 2015, the book
74 depreciation reserve and the calculated annual depreciation accrual and rate for each
75 account or subaccount. The section beginning on page VII-2 presents the results of
76 the retirement rate analyses prepared as the historical bases for the service life
77 estimates. The section beginning on page VIII-2 presents the results of the salvage
78 analysis. The section beginning on page IX-2 presents the depreciation calculations
79 related to surviving original cost as of December 31, 2015.

80 **Q. PLEASE EXPLAIN HOW YOU PERFORMED YOUR DEPRECIATION**
81 **STUDY.**

82 A. I used the straight line remaining life method of depreciation, with the average
83 service life procedure. The annual depreciation is based on a method of depreciation
84 accounting that seeks to distribute the unrecovered cost of fixed capital assets over
85 the estimated remaining useful life of each unit, or group of assets, in a systematic
86 and rational manner.

87 For General Plant Accounts 391.0, 391.04, 391.1, 391.11, 391.13, 391.14,
88 391.21, 393.0, 394.0, 395.0, 397.0, 397.01, 397.02 and 398.0, I used the straight line
89 remaining life method of amortization. The annual amortization is based on

90 amortization accounting that distributes the unrecovered cost of fixed capital assets
91 over the remaining amortization period selected for each account and vintage.

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

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

99 **III. THE FIRST PHASE OF THE DEPRECIATION STUDY**

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

103 A. The service life and net salvage study consisted of compiling historic data from
104 records related to MidAmerican's plant; analyzing these data to obtain historic trends
105 of survivor and net salvage characteristics; obtaining supplementary information
106 from Company management, other consultants and operating personnel concerning
107 practices and plans as they relate to plant operations; and interpreting the above data
108 and the estimates used by other gas utilities to form judgments of average service life
109 and net salvage characteristics.

110 **Q. WHAT HISTORIC DATA DID YOU ANALYZE FOR THE PURPOSE OF**
111 **ESTIMATING SERVICE LIFE CHARACTERISTICS?**

112 A. I analyzed the Company's accounting entries that record plant transactions during the
113 period 1988 through 2015. The transactions included additions, retirements,
114 transfers, sales and the related balances. The Company records also included
115 surviving dollar value by year installed for each plant account as of December 31,
116 2015.

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

119 A. I used the retirement rate method. This is the most appropriate method when aged
120 retirement data are available, because this method determines the average rates of
121 retirement actually experienced by the Company during the period of time covered by
122 the study.

123 **Q. PLEASE DESCRIBE HOW YOU USED THE RETIREMENT RATE**
124 **METHOD TO ANALYZE MIDAMERICAN'S SERVICE LIFE DATA.**

125 A. I applied the retirement rate method to each different group of property in the study.
126 For each property group, I used the retirement rate method to form a life table which,
127 when plotted, shows an original survivor curve for that property group. Each original
128 survivor curve represents the average survivor pattern experienced by the several
129 vintage groups during the experience band studied. The survivor patterns do not
130 necessarily describe the life characteristics of the property group; therefore,
131 interpretation of the original survivor curves is required in order to use them as valid
132 considerations in estimating service life. The Iowa-type survivor curves were used to
133 perform these interpretations.

134 **Q. WHAT IS AN “IOWA-TYPE SURVIVOR CURVE” AND HOW DID YOU**
135 **USE SUCH CURVES TO ESTIMATE THE SERVICE LIFE**
136 **CHARACTERISTICS FOR EACH PROPERTY GROUP?**

137 A. Iowa-type curves are a widely used group of generalized survivor curves that contain
138 the range of survivor characteristics usually experienced by utilities and other
139 industrial companies. The Iowa curves were developed at the Iowa State College
140 Engineering Experiment Station through an extensive process of observing and
141 classifying the ages at which various types of property used by utilities and other
142 industrial companies had been retired.

143 Iowa-type curves are used to smooth and extrapolate original survivor curves
144 determined by the retirement rate method. The Iowa curves and truncated Iowa
145 curves were used in this study to describe the forecasted rates of retirement based on
146 the observed rates of retirement and the outlook for future retirements.

147 The estimated survivor curve designations for each depreciable property
148 group indicate the average service life, the family within the Iowa system to which
149 the property group belongs, and the relative height of the mode. For example, the
150 Iowa 68-R3 indicates an average service life of sixty-eight years; a right-moded, or R,
151 type curve (the mode occurs after average life for right-moded curves); and a
152 moderate height, 3, for the mode (possible modes for R type curves range from 1 to
153 5).

154 **Q. PLEASE DESCRIBE HOW YOU ESTIMATED NET SALVAGE**
155 **PERCENTAGES.**

156 A. I estimated the net salvage percentages by incorporating the historical data for the
157 period 1988 through 2015 and considered estimates for other gas companies.

158 **IV. THE SECOND PHASE OF THE DEPRECIATION STUDY**

159 **Q. PLEASE DESCRIBE THE SECOND PHASE OF THE PROCESS THAT YOU**
160 **USED IN THE DEPRECIATION STUDY IN WHICH YOU CALCULATED**
161 **COMPOSITE REMAINING LIVES AND ANNUAL DEPRECIATION**
162 **ACCRUAL RATES.**

163 A. After I estimated the service life and net salvage characteristics for each depreciable
164 property group, I calculated the annual depreciation accrual rates for each group
165 based on the straight line remaining life method, using remaining lives weighted
166 consistent with the average service life procedure. The calculation of annual
167 depreciation accrual rates were developed as of December 31, 2015.

168 **Q. PLEASE DESCRIBE THE STRAIGHT LINE REMAINING LIFE METHOD**
169 **OF DEPRECIATION.**

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

173 **Q. PLEASE DESCRIBE AMORTIZATION ACCOUNTING.**

174 A. Amortization accounting is used for accounts with a large number of units, but small
175 asset values. In amortization accounting, units of property are capitalized in the same
176 manner as they are in depreciation accounting. However, depreciation accounting is
177 difficult for these assets because periodic inventories are required to properly reflect
178 plant in service. Consequently, retirements are recorded when a vintage is fully

179 amortized rather than as the units are removed from service. That is, there is no
180 dispersion of retirement. All units are retired when the age of the vintage reaches the
181 amortization period. Each plant account or group of assets is assigned a fixed period
182 which represents an anticipated life during which the asset will render service. For
183 example, in amortization accounting, assets that have a 10-year amortization period
184 will be fully recovered after 10 years of service and taken off the Company books,
185 but not necessarily removed from service. In contrast, assets that are taken out of
186 service before 10 years remain on the books until the amortization period for that
187 vintage has expired.

188 **Q. AMORTIZATION ACCOUNTING IS BEING IMPLEMENTED FOR WHICH**
189 **PLANT ACCOUNTS?**

190 A. Amortization accounting is only appropriate for certain General Plant accounts.
191 These accounts are 391.0, 391.04, 391.1, 391.11, 391.13, 391.14, 391.21, 393.0,
192 394.0, 395.0, 397.0, 397.01, 397.02, and 398.0, which represent slightly less than two
193 percent of depreciable plant.

194 **Q. PLEASE USE AN EXAMPLE TO ILLUSTRATE THE DEVELOPMENT OF**
195 **THE ANNUAL DEPRECIATION ACCRUAL RATE FOR A PARTICULAR**
196 **GROUP OF PROPERTY IN YOUR DEPRECIATION STUDY.**

197 A. I will use Account 376.0, Mains, as an example because it is the largest depreciable
198 group and represents 47% of depreciable plant.

199 The retirement rate method was used to analyze the survivor characteristics of
200 the combined property group in Accounts 376.0 and 376.01. Aged plant accounting
201 data were compiled from 1988 through 2015 and analyzed in periods that best

202 represent the overall service life of this property. The life tables for the 1988-2015
203 and 1996-2015 experience bands are presented on pages VII-18 through VII-23. The
204 life tables display the retirement and surviving ratios of the aged plant data exposed
205 to retirement by age interval. For example, page VII-18 shows \$214,232 retired
206 during age interval 0.5-1.5 with \$506,164,436 exposed to retirement at the beginning
207 of the interval. Consequently, the retirement ratio is 0.0004 ($\$214,232/\$506,164,436$)
208 and the surviving ratio is .9996 ($1-.0004$). The percent surviving at age 0.5 of 1.0000
209 percent is multiplied by the survivor ratio of 99.96 to derive the percent surviving at
210 age 1.5 of 99.96 percent. This process continues for the remaining age intervals for
211 which plant was exposed to retirement during the period 1988-2015. The resultant
212 life tables, or original survivor curves, are plotted along with the estimated smooth
213 survivor curve, the 68-R3 on page VII-17.

214 The net salvage percent is presented on pages VIII-8 and VIII-9. The
215 percentage is based on the result of annual gross salvage minus the cost of remove
216 plant assets as compared to the original cost of plant retired during the period 1988
217 through 2015. The 28-year period experienced negative \$14,843,994 ($\$3,472,495 -$
218 $\$18,316,489$) in net salvage for \$35,561,785 plant retired. The result is negative net
219 salvage of 42 percent ($\$14,843,994/\$35,561,785$); however, the most recent five-year
220 average is negative 86%. Therefore, based on the overall statistics for this account as
221 well as the estimates of other gas utilities, the recommended net salvage for Mains is
222 negative 40%.

223 My calculation of the annual depreciation related to original cost of gas utility
224 plant as of December 31, 2015 for Account 376.0, Mains, is presented on pages IX-

225 18 through IX-20. The calculation is based on the 68-R3 survivor curve, 40%
226 negative net salvage, the attained age, and the allocated book reserve. The tabulation
227 sets forth the installation year, the original cost, calculated accrued depreciation,
228 allocated book reserve, future accruals, remaining life and annual accrual. These
229 totals are brought forward to the table on page VI-6.

230 **V. CONCLUSION**

231 **Q. WAS THE DEPRECIATION EXHIBIT PREPARED UNDER YOUR**
232 **DIRECTION AND CONTROL?**

233 A. Yes.

234 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

235 A. Yes.

Schedule JJS-1

JOHN SPANOS

DEPRECIATION EXPERIENCE

Q. Please state your name.

A. My name is John J. Spanos.

Q. What is your educational background?

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

Q. Do you belong to any professional societies?

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

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

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

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

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

companies in the railroad industry: Union Pacific Railroad, Burlington Northern Railroad, and Wisconsin Central Transportation Corporation.

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

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

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

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

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

In January, 1996, I was assigned to the position of Supervisor of Depreciation Studies. In July, 1999, I was promoted to the position of Manager, Depreciation and

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

Since January 1996, I have conducted depreciation studies similar to those previously listed including assignments for Pennsylvania-American Water Company; Aqua Pennsylvania; Kentucky-American Water Company; Virginia-American Water Company; Indiana-American Water Company; Hampton Water Works Company; Omaha Public Power District; Enbridge Pipe Line Company; Inc.; Columbia Gas of Virginia, Inc.; Virginia Natural Gas Company National Fuel Gas Distribution Corporation - New York and Pennsylvania Divisions; The City of Bethlehem - Bureau of Water; The City of Coatesville Authority; The City of Lancaster - Bureau of Water; Peoples Energy Corporation; The York Water Company; Public Service Company of Colorado; Enbridge Pipelines; Enbridge Gas Distribution, Inc.; Reliant Energy-HLP; Massachusetts-American Water Company; St. Louis County Water Company; Missouri-American Water Company; Chugach Electric Association; Alliant Energy; Oklahoma Gas & Electric Company; Nevada Power Company; Dominion Virginia Power; NUI-Virginia Gas Companies; Pacific Gas & Electric Company; PSI Energy; NUI - Elizabethtown Gas Company; Cinergy Corporation – CG&E; Cinergy Corporation – ULH&P; Columbia Gas of Kentucky; South Carolina Electric & Gas Company; Idaho Power Company; El Paso Electric Company; Aqua North Carolina; Aqua Ohio; Aqua Texas, Inc.; Ameren Missouri;

Central Hudson Gas & Electric; Centennial Pipeline Company; CenterPoint Energy-
Arkansas; CenterPoint Energy – Oklahoma; CenterPoint Energy – Entex; CenterPoint
Energy - Louisiana; NSTAR – Boston Edison Company; Westar Energy, Inc.; United
Water Pennsylvania; PPL Electric Utilities; PPL Gas Utilities; Wisconsin Power & Light
Company; TransAlaska Pipeline; Avista Corporation; Northwest Natural Gas; Allegheny
Energy Supply, Inc.; Public Service Company of North Carolina; South Jersey Gas
Company; Duquesne Light Company; MidAmerican Energy Company; Laclede Gas;
Duke Energy Company; E.ON U.S. Services Inc.; Elkton Gas Services; Anchorage Water
and Wastewater Utility; Kansas City Power and Light; Duke Energy North Carolina; Duke
Energy South Carolina; Monongahela Power Company; Potomac Edison Company; Duke
Energy Ohio Gas; Duke Energy Kentucky; Duke Energy Indiana; Northern Indiana Public
Service Company; Tennessee-American Water Company; Columbia Gas of Maryland;
Bonneville Power Administration; NSTAR Electric and Gas Company; EPCOR
Distribution, Inc.; B. C. Gas Utility, Ltd; Entergy Arkansas; Entergy Texas; Entergy
Mississippi; Entergy Louisiana; Entergy Gulf States Louisiana; the Borough of Hanover;
Louisville Gas and Electric Company; Kentucky Utilities Company; Madison Gas and
Electric; Central Maine Power; PEPCO; PacifiCorp; Minnesota Energy Resource Group;
Jersey Central Power & Light Company; Cheyenne Light, Fuel and Power Company;
United Water Arkansas; Central Vermont Public Service Corporation; Green Mountain
Power Corporation; Portland General Electric Company; Atlantic City Electric; Nicor Gas
Company; Black Hills Power; Black Hills Colorado Gas; Black Hills Kansas Gas; Black
Hills Service Company; Black Hills Utility Holdings; Public Service Company of
Oklahoma; City of Dubois; Peoples Gas Light and Coke Company; North Shore Gas
Company; Connecticut Light and Power; New York State Electric and Gas Corporation;

Rochester Gas and Electric Corporation; Greater Missouri Operations; Tennessee Valley Authority; Omaha Public Power District; Indianapolis Power & Light Company; Vermont Gas Systems, Inc.; Metropolitan Edison; Pennsylvania Electric; West Penn Power; Pennsylvania Power; PHI Service Company - Delarva Power and Light; Atmos Energy Corporation; Citizens Energy Group; and Alabama Gas Corporation.

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

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

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

Service Commission; District of Columbia Public Service Commission; the Mississippi Public Service Commission; Delaware Public Service Commission; Virginia State Corporation Commission; Colorado Public Utility Commission; Oregon Public Utility Commission; South Dakota Public Utilities Commission; Wisconsin Public Service Commission; Wyoming Public Service Commission; Maine Public Utility Commission; Iowa Utilities Board; Connecticut Public Utilities Regulatory Authority; West Virginia Public Service Commission; New Mexico Public Regulation Commission and the North Carolina Utilities Commission.

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

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

Q. Does this conclude your qualification statement?

A. Yes.

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY

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

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>
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	
55.	2006	AK Reg Com	U-06-6	Municipal Light and Power	Depreciation
56.	2006	DE PSC	06-284	Delmarva Power and Light	Depreciation
57.	2006	IN URC	IURC43081	Indiana American Water Company	Depreciation
58.	2006	AK Reg Com	U-06-134	Chugach Electric Association	Depreciation
59.	2006	MO PSC	WR-2007-0216	Missouri American Water Company	Depreciation
60.	2006	FERC	ISO82, ETC. AL	TransAlaska Pipeline	Depreciation
61.	2006	PA PUC	R-00061493	National Fuel Gas Distribution Corp. (PA)	Depreciation
62.	2007	NC Util Com.	E-7 SUB 828	Duke Energy Carolinas, LLC	Depreciation

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>
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
94.	2009	TX PUC	37744	Entergy Texas	Depreciation
95.	2009	TX PUC	37690	El Paso 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>
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
128.	2011	IN URC	43114 IGCC 4S	Duke Energy Indiana	Depreciation
129.	2011	FERC	IS11-146-000	Enbridge Pipelines (Southern Lights)	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>
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	KCPL Greater Missouri Operations Co.	Depreciation
152.	2012	MO PSC	GO-2012-0363	Laclede Gas Company	Depreciation
153.	2012	MN PUC	G007,001/D-12-533	Integrays – 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, 13-S-0032	Consolidated Edison of New York	Depreciation
162.	2013	PA PUC	2013-2355886	Peoples TWP LLC	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>
163.	2013	TN Reg Auth	12-0504	Tennessee American Water	Depreciation
164.	2013	ME PUC	2013-168	Central Maine Power Company	Depreciation
165.	2013	DC PSC	Case 1103	PHI Service Co. – PEPCO	Depreciation
166.	2013	WY PSC	2003-ER-13	Cheyenne Light, Fuel and Power Co.	Depreciation
167.	2013	FERC	ER13- -0000	Kentucky Utilities	Depreciation
168.	2013	FERC	ER13- -0000	MidAmerican Energy Company	Depreciation
169.	2013	FERC	ER13- -0000	PPL Utilities	Depreciation
170.	2013	PA PUC	R-2013-2372129	Duquesne Light Company	Depreciation
171.	2013	NJ BPU	ER12111052	Jersey Central Power and Light Co.	Depreciation
172.	2013	PA PUC	R-2013-2390244	Bethlehem, City of – Bureau of Water	Depreciation
173.	2013	OK CC	UM 1679	Oklahoma, Public Service Company of	Depreciation
174.	2013	IL CC	13-0500	Nicor Gas Company	Depreciation
175.	2013	WY PSC	20000-427-EA-13	PacifiCorp	Depreciation
176.	2013	UT PSC	13-035-02	PacifiCorp	Depreciation
177.	2013	OR PUC	UM 1647	PacifiCorp	Depreciation
178.	2013	PA PUC	2013-2350509	Dubois, City of	Depreciation
179.	2014	IL CC	14-0224	North Shore Gas Company	Depreciation
180.	2014	FERC	ER14-	Duquesne Light Company	Depreciation
181.	2014	SD PUC	EL14-026	Black Hills Power Company	Depreciation
182.	2014	WY PSC	20002-91-ER-14	Black Hills Power Company	Depreciation
183.	2014	PA PUC	2014-2428304	Hanover, Borough of – Municipal Water Works	Depreciation
184.	2014	PA PUC	2014-2406274	Columbia Gas of Pennsylvania	Depreciation
185.	2014	IL CC	14-0225	Peoples Gas Light and Coke Company	Depreciation
186.	2014	MO PSC	ER-2014-0258	Ameren Missouri	Depreciation
187.	2014	KS CC	14-BHCG-502-RTS	Black Hills Service Company	Depreciation
188.	2014	KS CC	14-BHCG-502-RTS	Black Hills Utility Holdings	Depreciation
189.	2014	KS CC	14-BHCG-502-RTS	Black Hills Kansas Gas	Depreciation
190.	2014	PA PUC	2014-2418872	Lancaster, City of – Bureau of Water	Depreciation
191.	2014	WV PSC	14-0701-E-D	First Energy – MonPower/PotomacEdison	Depreciation
192.	2014	VA St CC	PUC-2014-00045	Aqua Virginia	Depreciation
193.	2014	VA St CC	PUE-2013	Virginia American	Depreciation
194.	2014	OK CC	PUD201400229	Oklahoma Gas and Electric	Depreciation
195.	2014	OR PUC	UM1679	Portland General Electric	Depreciation
196.	2014	IN URC	Cause No. 44576	Indianapolis Power & Light	Depreciation

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>
197.	2014	MA DPU	DPU. 14-150	NSTAR Gas	Depreciation
198.	2014	CT PURA	14-05-06	Connecticut Light and Power	Depreciation
199.	2014	MO PSC	ER-2014-0370	Kansas City Power & Light	Depreciation
200.	2014	KY PSC	2014-00371	Kentucky Utilities Company	Depreciation
201.	2014	KY PSC	2014-00372	Louisville Gas and Electric Company	Depreciation
202.	2015	PA PUC	R-2015-2462723	United Water Pennsylvania Inc.	Depreciation
203.	2015	PA PUC	R-2015-2468056	Columbia Gas of Pennsylvania	Depreciation
204.	2015	NY PSC	15-E-0283/15-G-0284	New York State Electric and Gas Corporation	Depreciation
205.	2015	NY PSC	15-E-0285/15-G-0286	Rochester Gas and Electric Corporation	Depreciation
206.	2015	MO PSC	WR-2015-0301/SR-2015-0302	Missouri American Water Company	Depreciation
207.	2015	OK CC	PUD 201500208	Oklahoma, Public Service Company of	Depreciation
208.	2015	WV PSC	15-0676-W-42T	West Virginia American Water Company	Depreciation
209.	2015	PA PUC	2015-2469275	PPL Electric Utilities	Depreciation
210.	2015	IN URC	Cause No. 44688	Northern Indiana Public Service Company	Depreciation
211.	2015	OH PSC	14-1929-EL-RDR	First Energy-Ohio Edison/Cleveland Electric/ Toledo Edison	Depreciation
212.	2015	NM PRC	15-00127-UT	El Paso Electric	Depreciation
213.	2015	TX PUC	PUC-44941; SOAH 473-15-5257	El Paso Electric	Depreciation
214.	2015	WI PSC	3370-DU-104	Madison Gas and Electric Company	Depreciation
215.	2015	OK CC	PUD 201500273	Oklahoma Gas and Electric	Depreciation
216.	2015	KY PSC	Doc. No. 2015-00418	Kentucky American Water Company	Depreciation
217.	2015	NC UC	Doc. No. G-5, Sub 565	Public Service Company of North Carolina	Depreciation
218.	2016	WA UTC		Puget Sound Energy	Depreciation
219.	2016	NY PSC	Case No. 16-W-0130	Suez Water New York, Inc.	Depreciation
220.	2016	MO PSC	ER-2016-0156	KCPL – Greater Missouri	Depreciation
221.	2016	WI PSC		Wisconsin Public Service Commission	Depreciation
222.	2016	KY PSC	Case No. 2016-00026	Kentucky Utilities Company	Depreciation
223.	2016	KY PSC	Case No. 2016-00027	Louisville Gas and Electric Company	Depreciation
224.	2016	OH PUC		Aqua Ohio	Depreciation
225.	2016	MD PSC	Case 9417	Columbia Gas of Maryland	Depreciation
226.	2016	KY PSC	2016-00162	Columbia Gas of Kentucky	Depreciation
227.	2016	DE PSC	16-0649	Delmarva Power and Light Co. – Gas	Depreciation
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

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>
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	KCPL Missouri	Depreciation
237.	2016	AR PSC	16-052-U	Oklahoma Gas & Electric Co	Depreciation
238.	2016	PSCW	6680-DU-104	Wisconsin Power and Light	Depreciation