

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

The Electronic Application of Duke)
Energy Kentucky, Inc., for: 1) An)
Adjustment of the Electric Rates; 2)) Case No. 2017-00321
Approval of an Environmental)
Compliance Plan and Surcharge)
Mechanism; 3) Approval of New Tariffs;)
4) Approval of Accounting Practices to)
Establish Regulatory Assets and)
Liabilities; and 5) All Other Required)
Approvals and Relief.)

REBUTTAL TESTIMONY OF
LISA M. BELLUCCI
ON BEHALF OF
DUKE ENERGY KENTUCKY, INC.

February 14, 2018

TABLE OF CONTENTS

	<u>PAGE</u>
I. INTRODUCTION AND PURPOSE	1
II. TAX ACT.....	2
III. RESEARCH TAX CREDITS.....	6
IV. CONCLUSION	7

Attachments:

Attachment LMB-Rebuttal-1-ADIT amortization

Attachment LMB-Rebuttal-2-Revised Schedule B-6

Attachment LMB-Rebuttal-3-Revised Schedule B-6 Workpapers

Attachment LMB-Rebuttal-4-Revised Schedule E-1

I. INTRODUCTION AND PURPOSE

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

2 A. My name is Lisa M. Bellucci, and my business address is 550 South 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, Tax
6 Operations. DEBS provides various administrative and other services to Duke
7 Energy Kentucky, Inc., (Duke Energy Kentucky or Company) and other affiliated
8 companies of Duke Energy Corporation (Duke Energy).

9 **Q. ARE YOU THE SAME LISA M. BELLUCCI THAT SUBMITTED**
10 **DIRECT TESTIMONY IN THIS PROCEEDING?**

11 A. Yes.

12 **Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY IN THIS**
13 **PROCEEDING?**

14 A. The purpose of my rebuttal testimony is to respond to specific recommendations
15 by Justin Bieber made on behalf of the Kroger Company and Lane Kollen made
16 on behalf of the Kentucky Attorney General. Specifically, I address issues related
17 to the recently enacted Tax Cuts and Jobs Act (Tax Act) related to the calculation
18 of protected and unprotected excess accumulated deferred income taxes (ADITs).
19 Duke Energy Kentucky witness Stephen G. De May describes the Tax Act and its
20 impact on Duke Energy Kentucky's financial condition in the short and long-term
21 in his testimony. Duke Energy Kentucky witnesses William Don Wathen Jr., and
22 Sarah Lawler describe the impact of the Tax Act on the Company's rates and

1 revenue requirement, respectively. I also sponsor the updated B-6 and E-1
2 schedules to reflect the changes from the Tax Act.

II. TAX ACT

3 **Q. PLEASE BRIEFLY DESCRIBE THE TAX ACT.**

4 A. On December 22, 2017, President Donald Trump signed the Tax Act into Law.
5 This legislation represents the most significant revision to the Federal Tax Code
6 in the last thirty years. The voluminous Tax Act brings comprehensive change to
7 the individual, corporate and international tax law. The key provisions of the Tax
8 Act that will affect Duke Energy Kentucky and its customers' rates are as follows:
9 (1) reduction of the corporate tax rate from 35 percent to 21 percent; (2) retention
10 of net interest expense deductibility; (3) elimination of bonus depreciation; (4)
11 elimination of the manufacturing deduction; and (5) normalization of excess
12 ADITs resulting from the Tax Act. Mr. De May discusses the Tax Act and its
13 impacts in greater detail in his testimony.

14 **Q. PLEASE DESCRIBE THE RECOMMENDATIONS MADE BY MR.
15 KOLLEN AND MR. BIEBER IN THEIR RESPECTIVE TESTIMONIES.**

16 A. Both Mr. Kollen and Mr. Bieber recommend that the full impacts of the Tax Act
17 be reflected in Duke Energy Kentucky's electric rates as part of this proceeding.
18 Mr. Kollen goes further to recommend specific adjustments based upon his own
19 calculations to the Company's proposed revenue requirement to reflect these
20 changes. Mr. Bieber further recommends that the Commission direct the vast
21 majority of the Tax Act benefits to non-residential customers.

1 **Q. DOES DUKE ENERGY KENTUCKY AGREE WITH THOSE**
2 **RECOMMENDATIONS?**

3 A. Duke Energy Kentucky agrees that the changes related to the reduction in the
4 federal income tax rate should be reflected in the Company's base rates going
5 forward. Duke Energy Kentucky further agrees that customers should receive the
6 benefits (and costs) of the Tax Act in this proceeding. However, the Company
7 disagrees with Mr. Kollen's quantification of the impact of these changes. Duke
8 Energy Kentucky Witness Bruce Sailors addresses Mr. Bieber's rate design
9 proposal in his rebuttal testimony.

10 **Q. PLEASE EXPLAIN WHY DUKE ENERGY KENTUCKY DISAGREES**
11 **WITH MR. KOLLEN'S QUANTIFICATION OF THE TAX ACT**
12 **IMPACTS.**

13 A. Mr. Kollen makes two primary adjustments to the Company's revenue
14 requirement as a result of the Tax Act. He first reduces the Company's tax
15 expense and revenue requirement by \$10.255 million as a result in the change in
16 the corporate tax rate. He then reduces the revenue requirement by \$6.054 million
17 through an amortization of the excess ADITs. Mr. Wathen discusses the
18 calculation to reflect the change in the corporate tax rate in the Company's
19 revenue requirement from what was in effect when the Company filed its
20 application in this proceeding.

21 With respect to Mr. Kollen's calculation of the excess ADITs and
22 proposed amortization, his adjustment makes no distinction between protected
23 and unprotected excess ADITs, or between excess ADITs that are subject to

1 normalization rules and those that are not, incorrectly assuming a straight twenty-
2 year amortization period adjustment for the entire excess ADIT balance. This is
3 significant because, as explained by Mr. De May, in accordance with the Tax Act,
4 the property-related excess ADITs that are derived from tax versus book
5 depreciation differences are considered “protected.” These protected excess
6 ADITs are subject to explicit normalization rules that utilities must follow. For
7 this reason, the Company will use the Average Rate Assumption Method
8 (ARAM)¹ to amortize the balance of protected excess ADITs. Non-property-
9 related excess ADITs and property-related excess ADITs that did not result from
10 depreciation differences are considered “unprotected” and the Company is not
11 required to follow strict normalization principles.

12 With respect to Mr. Kollen’s proposal to amortize ALL of the excess
13 ADITs over twenty years, such a proposal would result in a violation of the Tax
14 Act, if approved by the Commission, and would subject the Company to
15 significant penalties. The Commission should ignore Mr. Kollen’s
16 recommendation for amortizing ALL excess ADITs over a twenty-year period.

17 **Q. HAS THE COMPANY QUANTIFIED THE BALANCE OF THE**
18 **PROTECTED AND UNPROTECTED EXCESS ADITS?**

¹ AVERAGE RATE ASSUMPTION METHOD.—The average rate assumption method is the method under which the excess in the reserve for deferred taxes is reduced over the remaining lives of the property as used in its regulated books of account which gave rise to the reserve for deferred taxes. Under such method, during the time period in which the timing differences for the property reverse, the amount of the adjustment to the reserve for the deferred taxes is calculated by multiplying—

- (i) the ratio of the aggregate deferred taxes for the property to the aggregate timing differences for the property as of the beginning of the period in question, by
- (ii) the amount of the timing differences which reverse during such period.

1 A. Yes. The total balance of the excess ADITs for the Company's electric operations
2 as of December 31, 2017 is as follows:

3	Protected Excess ADITs	\$34,912,797
4	Unprotected Excess ADITs	<u>33,032,786</u>
5	Total Excess ADITs	<u>\$67,945,583</u>

6 The protected excess ADITs represent the remeasurement of property
7 related deferred tax liabilities resulting from accelerated tax depreciation. The
8 unprotected excess ADITs represent the remeasurement of all other property and
9 non-property related deferred tax liabilities and assets.

10 As I previously stated, the reversal of the excess ADITs related to
11 accelerated depreciation should follow ARAM normalization accounting
12 principles consistent with the Tax Act. Attachment LMB-Rebuttal-1 contains an
13 amortization schedule for the protected ADITs. I provided this information to Ms.
14 Lawler and Mr. Wathen for their use in factoring the impact of this reversal in the
15 Company's revised revenue requirement.

16 The amortization for these protected excess ADITs is dynamic and will
17 change annually. The ARAM method, as set forth in the Tax Act, reduces the
18 excess tax reserve over the remaining regulatory lives of the property that gave
19 rise to the reserve for deferred taxes during the years in which the deferred tax
20 reserve related to such property is reversing. The reversal of timing differences
21 generally occurs when the amount of the tax depreciation is less than the amount
22 of book depreciation for any given asset. Therefore, the ARAM calculation is
23 calculated on each individual asset and is dependent on the remaining book and

1 tax bases for that asset. For purposes of reflecting the adjustment for the protected
2 ADITS in the revenue requirement, the Company is calculating an adjustment that
3 factors in the normalization of these balances for the 2018 as well as the first three
4 months of 2019, to reflect the forecasted test year impact.

5 The unprotected excess ADITs are not required to be normalized in the
6 same manner as the protected ADITs. Therefore, I have prepared an amortization
7 schedule for this balance using a twenty-year amortization period in compliance
8 with this Commission's December 27, 2017, Order, in Case No. 2017-00477,
9 where the Commission directed Duke Energy Kentucky to "record a deferred
10 liability starting January 1, 2018, to reflect both the reduced federal corporate tax
11 rate expense of 21 percent and the excess deferred accumulated income taxes to
12 be returned to ratepayers over the next 20 years." I provided this information to
13 Ms. Lawler and Mr. Wathen.

14 **Q. PLEASE DESCRIBE THE UPDATED B-6 AND E-1 SCHEDULES YOU**
15 **ARE SPONSORING.**

16 **A.** As a result of the changes embodied in the Tax Act as it relates to the changes in
17 the ADITs that I previously described, the Company is submitting a revised B-6
18 Schedule, revised Schedule B-6 Workpapers and a revised E-1 Schedule. These
19 Schedules are included as Attachment LMB-Rebuttal-2, 3 and 4.

III. RESEARCH TAX CREDITS

20 **Q. MR. KOLLEN PROPOSED TO ELIMINATE RESEARCH TAX CREDITS**
21 **CLAIMED BY THE COMPANY FROM THE CALCULATION OF**
22 **INCOME TAXES. DO YOU AGREE WITH THAT ADJUSTMENT?**

1 A. Yes. The Company agreed that this recommended adjustment was appropriate as
2 part of discovery. Ms. Lawler has made this adjustment to the Company's revised
3 revenue requirement included in her Rebuttal Testimony.

IV. CONCLUSION

4 **Q. WERE ATTACHMENTS LMB-REBUTTAL-1 THROUGH 4 PREPARED**
5 **BY YOU AND UNDER YOUR DIRECTION AND CONTROL?**

6 A. Yes.

7 **Q. DOES THIS CONCLUDE YOUR PRE-FILED REBUTTAL TESTIMONY?**

8 A. Yes

VERIFICATION

STATE OF NORTH CAROLINA)
) **SS:**
COUNTY OF MECKLENBURG)

The undersigned, Lisa M. Bellucci, Director, Tax Operations, being duly sworn, deposes and says that she has personal knowledge of the matters set forth in the foregoing rebuttal testimony and that it is true and correct to the best of her knowledge, information and belief.

Lisa M. Bellucci
Lisa M. Bellucci Affiant

Subscribed and sworn to before me by Lisa M. Bellucci on this 14 day of February 2018.

Natalie W. Polk
NOTARY PUBLIC

My Commission Expires: 4/29/18



AMORTIZATION OF EXCESS ADITS

Protected Excess ADITs		\$34,912,797
Year 1 Estimated ARAM Rate		3.12%
No. of months (April 1- December 31, 2018)		9/12
Amortization 9 months ended 12/31/18		\$816,959
Year 2 Estimated ARAM Rate		4.03%
No. of months (January 1 – March 31, 2019)	3/12	351,746
Total TY Amortization Protected Excess ADITs		1,168,705
Unprotected Excess ADITs		\$33,032,786
No. of years		20
Total TY Amortization Unprotected Excess ADITs		1,651,639
Total Amortization of Excess ADITs in Test Year		<u>\$2,820,344</u>

DUKE ENERGY KENTUCKY, INC.
CASE NO. 2017-00321
CERTAIN DEFERRED CREDITS AND ACCUMULATED DEFERRED INCOME TAXES
AS OF MARCH 31, 2019

DATA: BASE PERIOD "X" FORECASTED PERIOD
TYPE OF FILING: "X" ORIGINAL UPDATED REVISED
WORK PAPER REFERENCE NO(S): WPB-6b, WPB-6d

SCHEDULE B-6
PAGE 2 OF 2
WITNESS RESPONSIBLE:
L. M. BELLUCCI

LINE NO.	ACCOUNT NUMBER	DESCRIPTION	13 MONTH	JURISDICTIONAL		JURIS.	ADJUSTMENT	ADJUSTED
			AVERAGE FORECAST PERIOD	CODE	%	AMOUNT		JURIS. AMOUNT
			(1)	(2)		(3)	(4)	(5)
1	255	Investment Tax Credits: (A)						
2		3% Credit	0	DALL	100.000	0	0	0
3		4% Credit	0	DALL	100.000	0	0 (D)	0
4		10% Credit	(4,475)	DALL	100.000	(4,475)	4,475 (D)	0
5		30% Credit	(4,350,000)	DALL	100.000	(4,350,000)	4,350,000 (D)	0
6		Total Investment Tax Credits	<u>(4,354,475)</u>			<u>(4,354,475)</u>	<u>4,354,475</u>	<u>0 (B)</u>
7								
8		Deferred Income Taxes:						
9	190, 282, 283	Total Deferred Income Taxes	<u>(135,880,165)</u>	DALL	100.000	<u>(135,880,165)</u>	<u>0</u>	<u>(135,880,165) (C)</u>
10								
11	254	Total Regulatory Liability - Excess Deferred Taxes	<u>(65,877,674)</u>	DALL	100.000	<u>(65,877,674)</u>	<u>0</u>	<u>(65,877,674)</u>

Sources:

- (A) The company elected the ratable flow through option in 1971 as provided under Section 46(f)(2).
- (B) Included on Schedule B-1 as Investment Tax Credits, Line 9.
- (C) Included on Schedule B-1 as Deferred Income Taxes, Line 10.
- (D) Excluded from Rate Base.

DUKE ENERGY KENTUCKY, INC.
CASE NO. 2017-00321
ADJUSTED JURISDICTIONAL FEDERAL AND STATE INCOME TAXES
FOR THE TWELVE MONTHS ENDED NOVEMBER 30, 2017
FOR THE TWELVE MONTHS ENDED MARCH 31, 2019

DATA: "X" BASE PERIOD "X" FORECASTED PERIOD
TYPE OF FILING: "X" ORIGINAL UPDATED REVISED
WORK PAPER REFERENCE NO(S): WPE-1a, WPE-1b

SCHEDULE E-1
PAGE 1 OF 3
WITNESS RESPONSIBLE:
L. M. BELLUCCI

LINE NO.	DESCRIPTION	AT CURRENT RATES				AT PROPOSED RATES		
		BASE PERIOD	ADJUSTMENTS	FORECASTED PERIOD	PRO FORMA ADJ. TO FORECAST	PRO FORMA FORECASTED PERIOD	ADJUSTMENTS	ADJUSTED
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
		(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
1	Operating Income before Federal and State Income Taxes	53,904,591	(30,613,497)	23,291,094	3,768,389	27,059,483	48,512,630	75,572,113
4	Reconciling Items:							
5	Interest Charges	(9,152,456)	(5,003,054)	(14,155,510)	(34,155)	(14,189,665)	0	(14,189,665)
6	Net Interest Charges	(9,152,456)	(5,003,054)	(14,155,510)	(34,155)	(14,189,665)	0	(14,189,665)
8	Permanent Differences	838,491	320,386	1,158,877	0	1,158,877	0	1,158,877
10	Tax Depreciation	(87,812,531)	16,007,531	(71,805,000)	0	(71,805,000)	0	(71,805,000)
11	Book Depreciation	35,375,930	9,186,332	44,542,262	6,427,052	50,969,314	0	50,969,314
12	Excess of Tax over Book Depreciation	(52,436,601)	25,173,863	(27,262,738)	6,427,052	(20,835,686)	0	(20,835,686)
14	Other Reconciling Items:							
15	Other Temporary Differences	(50,183,571)	24,043,388	(26,140,183)	0	(26,140,183)	0	(26,140,183)
17	Total Other Reconciling Items	(50,183,571)	24,043,388	(26,140,183)	0	(26,140,183)	0	(26,140,183)
18	Total Reconciling Items	(110,934,137)	44,534,583	(66,399,554)	6,392,897	(60,006,657)	0	(60,006,657)

DUKE ENERGY KENTUCKY, INC.
CASE NO. 2017-00321
ADJUSTED JURISDICTIONAL FEDERAL AND STATE INCOME TAXES
FOR THE TWELVE MONTHS ENDED NOVEMBER 30, 2017
FOR THE TWELVE MONTHS ENDED MARCH 31, 2019

DATA: "X" BASE PERIOD "X" FORECASTED PERIOD
TYPE OF FILING: "X" ORIGINAL UPDATED REVISED
WORK PAPER REFERENCE NO(S): WPE-1a, WPE-1b

SCHEDULE E-1
PAGE 2 OF 3
WITNESS RESPONSIBLE:
L. M. BELLUCCI

LINE NO.	DESCRIPTION	AT CURRENT RATES					AT PROPOSED RATES	
		BASE PERIOD	ADJUSTMENTS	FORECASTED PERIOD	PRO FORMA ADJ. TO FORECAST	PRO FORMA FORECASTED PERIOD	ADJUSTMENTS	ADJUSTED
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
		(\$)	(\$)	(\$)			(\$)	(\$)
1	Operating Income before Federal and State Income Tax from Page 1	53,904,591	(30,613,497)	23,291,094	3,788,389	27,059,483	48,512,630	75,572,113
2								
3								
4	Total Reconciling Items from Page 1	(110,834,137)	44,534,583	(66,369,554)	6,392,897	(60,006,657)	0	(60,006,657)
5								
6	Federal Taxable Income before State Income Tax to Page 3	(57,029,546)	13,921,086	(43,108,460)	10,161,286	(32,947,174)	48,512,630	15,565,456
7								
8								
9	Kentucky Income Tax Adjustments:							
10	Kentucky Tax Inc. Adjustment - Misc	45,151,759	(37,014,458)	8,137,301	0	8,137,301	0	8,137,301
11	Total Kentucky Income Tax Adjustments	45,151,759	(37,014,458)	8,137,301	0	8,137,301	0	8,137,301
12								
13	Kentucky Taxable Income - Electric	(11,677,787)	(23,083,372)	(34,971,159)	10,161,286	(24,809,873)	48,512,630	23,702,757
14								
15	Percent of Business Taxable In State	89.0867%	89.0867%	89.0867%	89.0867%	89.0867%	89.0867%	89.0867%
16								
17	Total Kentucky Taxable Income	(10,581,526)	(20,573,123)	(31,154,652)	9,052,354	(22,102,297)	43,218,301	21,118,004
18								
19	Kentucky Income Tax @ 6.0%	(634,892)	(1,234,387)	(1,869,279)	543,140	(1,326,136)	2,593,098	1,268,959
20	Cincinnati Income Tax	0	0	0	0	0	0	0
21	State Income Tax - Deductible to Page 3	(634,892)	(1,234,387)	(1,869,279)	543,140	(1,326,136)	2,593,098	1,268,959
22	Prior Year Adjustments	16,205	(16,205)	0	0	0	0	0
23	State Income Tax - Current to Page 3	(618,687)	(1,250,582)	(1,869,279)	543,140	(1,326,136)	2,593,098	1,268,959

(A) Calculation may be different due to rounding.

6.00% 6.00% 6.00% 6.00% 6.00%

DUKE ENERGY KENTUCKY, INC.
CASE NO. 2017-00321
ADJUSTED JURISDICTIONAL FEDERAL AND STATE INCOME TAXES
FOR THE TWELVE MONTHS ENDED NOVEMBER 30, 2017
FOR THE TWELVE MONTHS ENDED MARCH 31, 2019

DATA: "X" BASE PERIOD "X" FORECASTED PERIOD
TYPE OF FILING: "X" ORIGINAL UPDATED REVISED
WORK PAPER REFERENCE NO(S): WPE-1a, WPE-1b

SCHEDULE E-1
PAGE 3 OF 3
WITNESS RESPONSIBLE:
L. M. BELLUCCI

LINE NO.	DESCRIPTION	AT CURRENT RATES					AT PROPOSED RATES	
		BASE PERIOD	ADJUSTMENTS	FORECASTED PERIOD	PRO FORMA ADJ. TO FORECAST	PRO FORMA FORECASTED PERIOD	ADJUSTMENTS	ADJUSTED
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
		(\$)	(\$)	(\$)		(\$)	(\$)	
1	State Income Tax - Current from Page 2	(618,687)	(1,250,592)	(1,889,279)	543,140	(1,326,139)	2,593,098	1,286,959
2								
3	Deferred State Income Taxes - Net	3,071,803	(852,284)	2,419,539	(343,539)	2,076,000	0	2,076,000
4	Deferred State Income Taxes - ARAM	(118,650)	27,956	(90,694)		(90,694)		(90,694)
5	Deferred State Income Taxes - Prior Year	0	0	0		0		0
6	Deferred Taxes - Net	2,953,153	(824,308)	2,328,845	(343,539)	1,985,306	0	1,985,306
7								
8	Total State Income Tax Expense	2,334,466	(1,874,900)	458,566	199,601	659,167	2,593,098	3,252,265
9								
10								
11	Federal Taxable Income before State Income Tax from Page 2	(57,029,548)	13,921,086	(43,108,460)	10,161,266	(32,947,174)	48,512,830	15,565,456
12								
13								
14	State Income Tax Deductible from Page 2	(634,892)	(1,234,387)	(1,889,279)	543,140	(1,326,139)	2,593,098	1,286,959
15	Federal Taxable Income	(58,394,654)	15,155,473	(41,239,181)	9,618,146	(31,621,035)	45,919,532	14,298,497
16								
17	Federal Income Tax @ 21% (A)	(11,842,877)	3,182,649	(8,660,228)	2,019,810	(6,640,418)	9,643,102	3,002,684
18	Fuel Tax Credit	0	0	0	0	0	0	0
19	Prior Year Adjustments	(197,047)	197,047	0	0	0	0	0
20	Federal Income Tax - Current	(12,039,924)	3,379,696	(8,660,228)	2,019,810	(6,640,418)	9,643,102	3,002,684
21								
22	Deferred Federal Income Taxes - Current	20,905,157	(10,198,647)	10,706,510	(1,360,135)	9,346,375	0	9,346,375
23	Deferred Federal Income Taxes - ARAM + EPRI Credits	(50,114)	(77,316)	(127,430)		(127,430)		(127,430)
24	Deferred Federal Income Taxes - Amort. of Excess Deferred Taxes		(2,820,345)	(2,820,345)		(2,820,345)		(2,820,345)
25	Deferred Federal Income Taxes - Prior Year	0	0	0		0		0
26	Deferred Taxes - Net	20,855,043	(13,098,308)	7,758,735	(1,360,135)	6,398,600	0	6,398,600
27								
28	Amortization of Investment Tax Credit	(11,950)	634	(11,316)	0	(11,316)	0	(11,316)
29								
30	Total Federal Income Tax Expense	8,803,169	(9,715,978)	(912,809)	659,675	(253,134)	9,643,102	6,389,988

(A) Calculation may be different due to rounding.

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

The Electronic Application of Duke)
Energy Kentucky, Inc., for: 1) An)
Adjustment of the Electric Rates; 2)) Case No. 2017-00321
Approval of an Environmental)
Compliance Plan and Surcharge)
Mechanism; 3) Approval of New Tariffs;)
4) Approval of Accounting Practices to)
Establish Regulatory Assets and)
Liabilities; and 5) All Other Required)
Approvals and Relief.)

REBUTTAL TESTIMONY OF
STEPHEN G. DE MAY
ON BEHALF OF
DUKE ENERGY KENTUCKY, INC.

February 14, 2018

TABLE OF CONTENTS

	<u>PAGE</u>
I. INTRODUCTION AND PURPOSE	1
II. THE TAX ACT	4
III. IMPACT OF THE TAX ACT	11
IV. THE UTILITY MONEYPool AGREEMENT	16
V. ADOPTION OF DIRECT TESTIMONY OF JOHN L. SULLIVAN	18
VI. CONCLUSION	19

Attachment:

Attachment SGD – Rebuttal-1 Capitalization Adjustment For Loans to Affiliates

I. INTRODUCTION AND PURPOSE

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

2 A. My name is Stephen G. De May, and my business address is 550 South Tryon
3 Street, 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 Senior Vice
6 President Tax and Treasurer. DEBS provides various administrative and other
7 services to Duke Energy Ohio, Inc., (Duke Energy Ohio or the Company) and
8 other affiliated companies of Duke Energy Corporation (Duke Energy).

9 **Q. PLEASE BRIEFLY SUMMARIZE YOUR EDUCATIONAL
10 BACKGROUND AND PROFESSIONAL EXPERIENCE.**

11 A. I have a Bachelor of Arts degree in Political Science from the University of North
12 Carolina at Chapel Hill, and a Master of Business Administration degree from the
13 McColl School of Business at Queens University in Charlotte, North Carolina. In
14 2010, I completed the Advanced Management Program at the Wharton School of
15 the University of Pennsylvania. I am a Certified Public Accountant (CPA) in the
16 state of North Carolina and I am a member of the American Institute of Certified
17 Public Accountants and the North Carolina Association of CPAs.

18 My professional work experience began in 1986 with the public
19 accounting firm of Price Waterhouse (now PricewaterhouseCoopers) and,
20 subsequently, Deloitte, Haskins and Sells (now Deloitte & Touche), where my
21 work focused on tax accounting and consulting for a variety of clients. In 1990, I
22 joined Crescent Resources, Inc., a then wholly owned real estate development

1 subsidiary of Duke Power Company (a predecessor company to today's Duke
2 Energy) where I was responsible for real estate accounting and finance. In 1994, I
3 moved to the Treasury and Corporate Finance Department where I have held,
4 except for a two-year period of time, various positions of increasing
5 responsibility. The two-year exception was for the majority of 2004 and 2005,
6 during which time I had the lead responsibility for developing and managing
7 Duke Energy's energy and regulatory policies. I was named Treasurer in
8 November 2007 and led the Investor Relations function for Duke Energy from
9 October 2009 through June 2012. Upon closing of the merger with Progress
10 Energy, I was named Vice President and Treasurer. In 2015, I was promoted to
11 my current position as Senior Vice President Tax and Treasurer.

12 **Q. PLEASE SUMMARIZE YOUR RESPONSIBILITIES AS SENIOR VICE**
13 **PRESIDENT, TAX AND TREASURER.**

14 A. As Senior Vice President, Tax and Treasurer, I have overall responsibility for
15 corporate tax compliance, planning, and accounting for Duke Energy. The Duke
16 Energy Tax Department prepares and files federal, state, and local income, sales
17 and use, excise, and property tax returns for Duke Energy. The department also
18 files tax returns for various joint ventures if Duke Energy is the designated tax
19 matters partner.

20 The Tax Department maintains and reconciles Duke Energy's tax accounts
21 and manages audits with the Internal Revenue Service and state and local tax
22 authorities. Additionally, the Tax Department is responsible for the reporting and
23 disclosure of tax-related matters, to the extent required.

1 In my role as Treasurer, I am also responsible for treasury related services
2 to Duke Energy and its subsidiaries, including Duke Energy Kentucky. I monitor
3 trends in the investment markets and maintain key relationships with debt
4 investors, analysts, and financial institutions. Under my supervision, the Treasury
5 Department arranges and executes all capital raising and liquidity transactions,
6 including credit facilities and commercial paper, debt securities, preferred and
7 hybrid securities, and common stock, as well as daily cash management for Duke
8 Energy and its subsidiaries. My responsibilities include managing Duke Energy's
9 and its subsidiaries' credit ratings and interactions with the major credit rating
10 agencies, commercial banks, and the capital markets.

11 **Q. HAVE YOU PREVIOUSLY PROVIDED TESTIMONY BEFORE THE**
12 **KENTUCKY PUBLIC SERVICE COMMISSION?**

13 A. Yes. I previously provided testimony on behalf of Duke Energy Kentucky in Case
14 No. 2009-00202, in support of its last natural gas base rate case. Most recently, I
15 submitted testimony in Case No. 2018-0036 discussing the impact of the recently
16 enacted Tax Cuts and Jobs Act on Duke Energy Kentucky.

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

19 A. My testimony responds to the recommendations made by the Kentucky Attorney
20 General's witness Lane Kollen and Kroger's witness Justin Bieber regarding the
21 recently enacted Tax Cuts and Jobs Act (Tax Act).¹ I also address Mr. Kollen's

¹ Tax Cuts and Jobs Act, H.R. 1, Public Law 115-97, 131 Stat. 2054 (Dec. 22, 2017).

1 recommendation to reduce Capitalization for loans that occur under Duke Energy
2 Kentucky's Commission-approved Money Pool Agreement.

3 In responding to the intervenor recommendations regarding the Tax Act, I
4 first discuss the key components of the Tax Act and its overall impact on the rates
5 (in the short-term and long-term) of Duke Energy Kentucky. I explain the
6 requirements of the Tax Act both in terms of the change in the federal corporate
7 tax rate, changes in the treatment of bonus depreciation, and other deductions, as
8 well as the law's requirements for the treatment of excess Accumulated Deferred
9 Income Taxes (ADITs). I then describe the impact of the Tax Act as it relates to
10 Duke Energy Kentucky's Application in this proceeding. Finally, through my
11 testimony, I adopt the direct the Direct Testimony and data responses originally
12 sponsored by Duke Energy Kentucky witness John L. Sullivan that was submitted
13 in support of the Company's application in this proceeding.

II. THE TAX ACT

14 **Q. PLEASE BRIEFLY DESCRIBE THE RECOMMENDATIONS BY MR.**
15 **KOLLEN AND MR. BIEBER REGARDING THE TAX ACT THAT YOU**
16 **ARE ADDRESSING.**

17 **A.** I respond to the recommendations of both Mr. Kollen and Mr. Bieber that the
18 impacts of the Tax Act be reflected in the Company's rates as part of this
19 proceeding. Mr. Kollen makes several adjustments to the Company's revenue
20 requirement to incorporate his estimation of the Tax Act Impacts which are
21 addressed by the rebuttal testimony of Ms. Lisa Bellucci and Mr. Don Wathen.
22 Mr. Bieber further recommends that the Commission allocate fifty percent of the

1 change in the corporate tax rate to all customers and the remaining fifty percent be
2 allocated to non-residential customers to reduce interclass subsidies. Mr. Sailers
3 addresses this in his rebuttal testimony.

4 **Q. DOES DUKE ENERGY KENTUCKY AGREE THAT CUSTOMERS**
5 **SHOULD RECEIVE THE BENEFIT FROM THE TAX ACT BEING IN**
6 **THE COMPANY'S BASE ELECTRIC RATES?**

7 A. Yes, customers should benefit, and they will. It is incumbent on the Commission
8 to ensure that customers receive and the utility is providing reliable service at
9 reasonable rates. But without the thoughtful consideration of the Commission of
10 all aspects of the Tax Act, the Company could be adversely affected by the
11 legislation, particularly through a material reduction of much-needed cash flow.

12 As this Commission is well aware, utilities are one of the most capital
13 intensive industries in the country. The Company invests in infrastructure not
14 because of federal tax policy, but because it is critical, necessary and often legally
15 required that it does so. Our legal obligation to serve requires the financial
16 wherewithal to support our commitments to our customers on a reliable and cost-
17 effective basis. Credit quality drives access to affordable capital and for this
18 reason it is in the best interest of customers to prevent a weakening of the
19 Company's cash flow and credit quality from pre-Tax Act levels.

20 The Commission should also take into account all other impacts of the Tax
21 Act as well as other non-tax inputs that could affect rates. The Tax Act represents
22 a unique opportunity to deliver savings to customers, but as with all ratemaking
23 actions, the interests of customers and the Companies must be balanced.

1 The Commission’s overall guiding principle is, and should continue to be,
2 whether the regulated utility’s rates as a whole, given all changes that may have
3 occurred since those rates were last set, remain just and reasonable. If, upon
4 examination of all facts and circumstances impacting the utility, the Commission
5 determines that the Company’s rates are unreasonable, then the rates should be
6 adjusted.

7 **Q. PLEASE BRIEFLY DESCRIBE THE TAX ACT.**

8 A. On December 22, 2017, President Donald Trump signed the Tax Act into Law.
9 This legislation represents the most significant revision to the Federal Tax Code
10 in the last thirty years. The voluminous Tax Act brings comprehensive change to
11 the individual, corporate and international tax law. The headline change to the
12 corporate tax code is a reduction of the statutory corporate tax rate from 35
13 percent to 21 percent, but this reduction in rate is accompanied by many other
14 provisions that serve to broaden the tax base and to “pay for” the effect of the 21
15 percent tax rate. Most provisions of the Tax Act take effect beginning January 1,
16 2018.

17 **Q. WHAT WAS THE PURPOSE BEHIND THE PASSAGE OF THE TAX
18 ACT?**

19 A. The purpose of the Tax Act was to stimulate business investments, create jobs and
20 grow the economy. An expectation that the financial health of the Company be
21 unharmd by tax reform is reasonable and is consistent with these policy
22 objectives and serves as a theme of my testimony.

1 **Q. WHAT ARE THE KEY PROVISIONS OF THE TAX ACT AS IT**
2 **RELATES TO DUKE ENERGY KENTUCKY?**

3 A. Most changes to the corporate tax code apply to all U.S. corporations equally;
4 while a limited set of others affect regulated utilities uniquely. For utilities in
5 general, and for Duke Energy Kentucky in particular, the key provisions of the
6 Tax Act that will affect customer rates are as follows: (1) reduction of the
7 corporate tax rate from 35 percent to 21 percent; (2) retention of net interest
8 expense deductibility; (3) elimination of bonus depreciation; (4) elimination of the
9 manufacturing deduction; and (5) normalization of excess ADITs resulting from
10 the Tax Act.

11 **Q. PLEASE SUMMARIZE HOW THESE KEY PROVISIONS COULD**
12 **IMPACT DUKE ENERGY KENTUCKY AND CUSTOMER RATES.**

13 A. **REDUCTION IN CORPORATE TAX RATE:** The new statutory income tax rate
14 of 21 percent represents a 40 percent reduction from the previous rate of 35
15 percent. This will lower a key component of cost of service, *i.e.*, income taxes. In
16 combination with the elimination of bonus depreciation (see below), a lower
17 corporate tax rate will slow the accumulation of deferred income taxes and will
18 have an increasing effect on rate base, thereby causing an effect that is opposite to
19 the lower cost of service effect.

20 **INTEREST EXPENSE DEDUCTIBILITY:** The Tax Act generally provides that
21 net interest expense is deductible only to the extent it does not exceed a stated
22 percentage of an adjusted taxable income calculation, a calculation that becomes
23 even more restrictive four years hence. However, regulated utilities are exempt

1 from this limitation provision and may deduct their interest expense without
2 limitation. Duke Energy and the Edison Electric Institute (EEI), the trade
3 association for all investor-owned electric utilities, fought hard to achieve this
4 important exemption, and our customers will retain the significant benefits that
5 flow from it.

6 DEPRECIATION AND EXPENSING OF CAPITAL: The Tax Act generally
7 provides that corporations may immediately expense capital as it is placed in
8 service, akin to 100 percent bonus depreciation. However, the Tax Act
9 specifically prohibits the immediate expensing of capital by regulated utilities.
10 Instead, utilities are directed to use MACRS (modified accelerated cost recovery
11 system) depreciation for capital investment placed in service. Though no longer
12 accompanied by “bonus” depreciation, MACRS still represents a significantly
13 accelerated rate of depreciation compared to book depreciation. As a result,
14 deferred taxes will continue to accrue under MACRS, but will do so at a slower
15 rate compared to bonus depreciation and at a much slower rate under the lower 21
16 percent corporate tax rate (see above)—this will cause a more rapid increase to
17 rate base relative to pre-Tax Act.

18 MANUFACTURING DEDUCTION: Prior to the Tax Act, domestic
19 manufacturers were granted a tax deduction based on a certain percentage of
20 qualifying manufacturing income, and the production of electricity qualified for
21 this tax benefit. In order to avail itself of this deduction, a corporation had to be in
22 a taxable income position—this was often not the case recently for most regulated
23 utilities because of the impact of bonus depreciation. Unfortunately, the

1 elimination of bonus depreciation for utilities in the Tax Act coincided with the
2 elimination of this tax deduction for all manufacturers, which is directionally
3 detrimental to customer rates.

4 EXCESS DEFERRED INCOME TAXES: At the end of 2017, Duke Energy
5 Kentucky has a significant net deferred tax liability, booked at a 35 percent
6 corporate tax rate and driven overwhelmingly by accelerated and bonus
7 depreciation of fixed assets for tax purposes. Because a deferred tax liability
8 represents taxes collected from customers but not yet paid to taxing authorities,
9 and because the ultimate payment of these taxes will now occur at a 21 percent
10 corporate tax rate (down from 35 percent), the balance of deferred tax liability
11 must be remeasured. The resulting “excess” deferred tax balance becomes a
12 regulatory liability. The Tax Act requires that excess deferred taxes generally
13 associated with property, and specifically connected to the accelerated
14 depreciation of property, must be normalized into customers rates in a highly-
15 prescribed manner that mimics the remaining life of the underlying assets. These
16 are known as “protected” excess deferred taxes. All other excess deferred taxes
17 may be treated by the commission like any other regulatory liability in the rate-
18 setting process.

19 **Q. PLEASE DISCUSS THE CONCEPT OF BONUS DEPRECIATION.**

20 A. Bonus depreciation is an enhanced form of accelerated depreciation for tax
21 purposes. Congress has used bonus depreciation for well over a decade to
22 encourage capital investment, at varying times renewing the provision just as it is
23 set to expire and modifying the degree to which depreciation in the first year (the

1 “bonus”) could be claimed. Prior to the Tax Act, existing bonus depreciation laws
2 were scheduled to sunset in 2021, but could very well have been extended as in
3 years past. In 2017, prior to the Tax Act, bonus depreciation was 50 percent--this
4 means that corporate taxpayers could depreciate 50 percent of capital placed in
5 service in the first year *in addition to* a normal level of tax depreciation (MACRS)
6 on the remaining 50 percent.

7 Bonus depreciation has the effect, generally, of reducing taxable income,
8 and therefore deferring associated cash taxes. However, utilities, being very
9 capital-intensive businesses, were often put into tax loss positions (net operating
10 losses, or NOLs) from an abundance of bonus depreciation and therefore were
11 limited in their ability to incrementally delay cash taxes. To the extent that a
12 utility could defer cash taxes due to bonus depreciation, however, a deferred tax
13 liability was established. The cash collected from customers but deferred from the
14 taxing authorities was used to fund the operations and investments of the utility
15 and avoided a commensurate level of third-party financings that would otherwise
16 have been necessary but for the additional deferred income taxes.

17 **Q. PLEASE DISCUSS THE CONCEPT OF ADITs.**

18 A. Many timing differences exist between when income taxes are collected from
19 customers in rates and when a company pays those taxes in cash to the IRS.
20 Sometimes the taxes are paid sooner than when they are collected from customers
21 (which creates a deferred tax asset on a company’s books), and sometimes they
22 are paid later (creating a deferred tax liability). Deferred taxes balances, therefore,
23 result from book/tax timing differences between the recognition of income and

1 expenses. All deferred tax balances, whether they are assets or liabilities, reverse
2 over time and converge to zero over the life of the underlying item giving rise to
3 the “deferred” tax balance.

4 **Q. HOW DOES THE TAX ACT ADDRESS THE ACCOUNTING**
5 **TREATMENT OF EXCESS ADITS?**

6 A. Because of the passage of the Tax Act, the deferred tax assets and liabilities on
7 the Company’s books as of December 31, 2017, which were established at a rate
8 of 35 percent, will be revalued at a rate of 21 percent creating “excess” ADITs.

9 Under the Tax Act, the protected excess ADIT reserve may be reduced
10 with a corresponding reduction in the revenue that the utility collects from
11 ratepayers no more rapidly than the reserve would be reduced under the Average
12 Rate Assumption Method (ARAM).²

III. IMPACT OF THE TAX ACT

13 **Q. PLEASE EXPLAIN THE IMPACTS OF THE TAX ACT ON DUKE**
14 **ENERGY KENTUCKY AND ITS CUSTOMERS?**

15 A. As I previously stated, the key components of the Tax Act reduce the corporate
16 tax rate, eliminate bonus depreciation, and cause the revaluation of tax assets and
17 liabilities and the normalization of certain specified balances. These provisions
18 will impact Duke Energy Kentucky in several ways. First, the lower federal
19 statutory tax rate has the effect of reducing the amount of federal income tax

² AVERAGE RATE ASSUMPTION METHOD.—The average rate assumption method is the method under which the excess in the reserve for deferred taxes is reduced over the remaining lives of the property as used in its regulated books of account which gave rise to the reserve for deferred taxes. Under such method, during the time period in which the timing differences for the property reverse, the amount of the adjustment to the reserve for the deferred taxes is calculated by multiplying—(i) the ratio of the aggregate deferred taxes for the property to the aggregate timing differences for the property as of the beginning of the period in question, by (ii) the amount of the timing differences which reverse during such period.

1 expense that the Company must collect through rates. The revenue requirement
2 would also be lowered through the amortization and normalization of excess
3 deferred income taxes. At the same time, the lower tax rate, the elimination of
4 bonus depreciation and the amortization of excess ADIT balances will increase
5 the Company's rate base, driving a higher revenue requirement starting right away
6 and continuing over time.

7 **Q. PLEASE EXPLAIN HOW THE CHANGES IN THE TAX ACT WILL**
8 **ACTUALLY CAUSE DUKE ENERGY KENTUCKY'S RATE BASE TO**
9 **GROW FASTER THAN IT WOULD ABSENT TAX REFORM.**

10 A. In summary, the lower corporate tax rate and the elimination of bonus
11 depreciation have the effect of reducing the tax depreciation and the resulting
12 ADIT going forward. ADIT acts as a reduction to rate base as part of the rate-
13 making process, and this offsetting effect will be lower than it otherwise would be
14 at the former 35 percent rate. Thus, rate base will be higher going forward.

15 **Q. IN ITS DECEMBER 27, 2017, ORDER IN CASE NO 2017-00477, THE**
16 **COMMISSION DIRECTED EACH UTILITY TO "RECORD A**
17 **DEFERRED LIABILITY STARTING JANUARY 1, 2018, TO REFLECT**
18 **BOTH THE REDUCED FEDERAL CORPORATE TAX RATE EXPENSE**
19 **OF 21 PERCENT AND THE EXCESS DEFERRED ACCUMULATED**
20 **INCOME TAXES TO BE RETURNED TO RATEPAYERS OVER THE**
21 **NEXT 20 YEARS." HAS DUKE ENERGY KENTUCKY DONE THIS?**

22 A. On December 31, 2017, the Company estimated the amount of the excess
23 accumulated deferred income tax and recorded a regulatory liability to reflect that

1 estimate. Beginning in 2018, the Company will defer the impacts of the lower tax
2 rate until such time as new rates are in effect.

3 **Q. HAS DUKE ENERGY KENTUCKY ATTEMPTED TO QUANTIFY THE**
4 **INITIAL IMPACT OF THE TAX ACT?**

5 A. Yes. The Tax Act is complex and the law was only enacted at the end of 2017.
6 Determining the actual impacts of the entire legislation will take some time, but
7 the Company has an ability to estimate the impacts with reasonable accuracy. At a
8 high-level, the Company has performed estimates on the change in the federal tax
9 rate. Mr. Wathen and Ms. Bellucci discuss these impacts in their respective
10 rebuttal testimony.

11 **Q. HOW IS DUKE ENERGY KENTUCKY SUGGESTING THE TAX ACT**
12 **IMPACTS BE REFLECTED IN ITS BASE RATES AS PART OF THIS**
13 **PROCEEDING?**

14 A. In determining that customers are receiving and utilities are providing reliable
15 service at reasonable rates, the Commission should ensure that the result of the
16 current Duke Energy Kentucky rate proceeding is a rate outcome that is
17 reasonable and that the Commission's final order does not unfairly harm either
18 customers or the utility. Mr. Wathen and Ms. Lawler discuss and quantify how the
19 Company is proposing to reflect the changes resulting from the Tax Act in this
20 case.

21 I previously explained, the Tax Act has created two categories of excess
22 ADITs, protected (specifically property-related ADITs resulting from accelerated
23 depreciation) and unprotected (which result from remaining property-related and

1 other temporary differences). The Tax Act is clear on the treatment of excess
2 ADITs that are considered protected, and those must be reversed over the life of
3 those assets under the ARAM method of amortization. Ms. Bellucci has
4 calculated the estimated balances of these excess ADITs, as well as an
5 amortization schedule for protected ADIT balance that should follow the ARAM
6 normalization methodology. With respect to the unprotected ADITs, the
7 Commission's Order in Case No. 2017-00477 required the Company to create a
8 deferred liability to reflect the amount of the ADITs to be returned to customers
9 over twenty years. Ms. Bellucci has performed that analysis and provided that
10 information to Mr. Wathen.

11 Unlike the balance of the ADITs that must follow the ARAM method of
12 amortization, there is flexibility in how the value of unprotected ADITs can be
13 shared with customers. The Commission should take the opportunity now, to
14 consider opportunities that will provide a longer-term benefit to customers and the
15 utility and not harm either customers or the Company's financial condition.

16 **Q. SHOULD THE COMMISSION CONSIDER THE FINANCIAL**
17 **CONDITION OF DUKE ENERGY KENTUCKY AS IT CONSIDERS THE**
18 **IMPACT OF THE TAX ACT ON THE UTILITY?**

19 **A.** Yes. The issue for Duke Energy Kentucky is simple. The implementation of the
20 Tax Act has the potential to adversely affect the Company's cash flow needed to
21 fund ongoing operations and new infrastructure investments. An unmitigated cash
22 flow shortfall could force the Company to rely excessively on third-party capital
23 to fund itself, to the ultimate detriment of its financial condition.

1 Duke Energy Kentucky has worked hard over the years to keep customers'
2 rates well below the national average. The Company has accomplished this while
3 providing safe, reliable and increasingly clean energy. These federal tax law
4 changes provide the Commission an opportunity to help reduce and smooth out
5 customer rates over the short- and longer-term, while maintaining the utility's
6 ability to provide safe, reliable and affordable rates. Keeping with this strong
7 tradition, and as further described by Mr. Wathen, Duke Energy Kentucky
8 proposes appropriate adjustments to reflect the impact of the Tax Act.

9 The Company urges the Commission to look beyond just the reductions in
10 tax expense afforded under the Tax Act and to focus on the bigger picture of the
11 Tax Act as it relates to the reasonableness of the utility's rates now and going
12 forward. This approach is beneficial for both customers and the utilities and
13 necessarily includes consideration of both the immediate and longer term impacts
14 of the Tax Act, the current financial condition of the utility, and an appreciation of
15 what the impact of a sudden reduction in utility rates will have.

16 **Q. PLEASE SUMMARIZE HOW THE COMPANY IS PROPOSING THE**
17 **COMMISSION BALANCE INTERESTS IN ACHIEVING IMMEDIATE**
18 **BENEFIT FOR CUSTOMERS WITHOUT CREATING AN ADVERSE**
19 **FINANCIAL IMPACT ON DUKE ENERGY KENTUCKY.**

20 **A.** As I explained above, the Tax Act creates multiple complex issues that impact the
21 utility's over-all cost of service, both in the short- and-long-term. While the
22 change in the statutory federal tax rate will certainly impact the Company's
23 revenue requirement, that reduction alone does not offset all other increases that

1 the Company has experienced since its last base rate proceedings, nor those that
2 will now result in the future due to the other changes resulting from the Tax Act,
3 as I previously described. The Commission has a unique opportunity to use its
4 rate-making authority to address these issues in a fair and balanced way that can
5 provide both immediate benefits to customers, preserve the short-and-long-term
6 financial integrity of the utility, and perhaps have a meaningful impact on
7 customer rates in the future as well.

IV. THE UTILITY MONEY POOL AGREEMENT

8 **Q. PLEASE BRIEFLY EXPLAIN THE PURPOSE OF DUKE ENERGY'S**
9 **UTILITY MONEY POOL AGREEMENT.**

10 A. The Utility Money Pool Agreement authorizes Duke Energy, its regulated utility
11 subsidiaries, and other named parties under the agreement, to participate in a
12 money pool arrangement to better manage cash and working capital requirements.

13 **Q. PLEASE DESCRIBE MR. KOLLEN'S RECOMMENDED**
14 **CAPITALIZATION ADJUSTMENT RELATED TO THE MONEY POOL**
15 **AGREEMENT.**

16 A. Mr. Kollen recommends that short-term investments made by Duke Energy
17 Kentucky under the terms of its Commission- approved Money Pool Agreement
18 be excluded from the Company's capitalization. His rationale is that if the
19 Company earned a return on its rate base instead of its capitalization, these short-
20 term investments would not be included. The impact of his adjustment is a
21 reduction to the Company's revenue requirement of \$451,000.

1 **Q. DOES DUKE ENERGY KENTUCKY AGREE WITH THIS**
2 **ADJUSTMENT?**

3 A. No.

4 **Q. PLEASE EXPLAIN WHY THE COMPANY DOES NOT AGREE.**

5 A. On any given day, the Company will either have more cash than it needs that day
6 to meet its obligations, or it will have less. If it has less, the Company will enter
7 into a short-term borrowing to bridge its cash needs. If the Company has more
8 cash than it needs, it will make a short-term investment of that cash in liquid, low-
9 risk investments that favor preservation of capital over return. The Duke Energy
10 money pool arrangement is the vehicle by which the Company and its sister utility
11 companies manage their short-term cash positions.

12 Mr. Kollen points out that Duke Energy Kentucky has an average
13 investment (loan) position of approximately \$5.1 million in the money pool
14 during the 13-month forecast period. Mr. Kollen's position is that the Company
15 should reduce its capitalization by the \$5.1 million on the premise that if revenue
16 requirements were calculated using rate base, this investment would be excluded
17 from rate base. Mr. Kollen also recommends that the \$5.1 million reduction to
18 capitalization be made on a pro rata basis across the entire capital structure,
19 apportioning 10.4% to Short Term Debt, 40.7% to Long Term Debt and 48.9% to
20 Equity.

21 The Company is an investor (lender) into the money pool for roughly the
22 first half of the forecast period and is a borrower from the money pool during the
23 second half of the forecast period. In reality, the Company will manage its cash

1 position to minimize unutilized cash. Investing in short-term investments is not a
2 long-term corporate finance strategy—certainly not one that Duke Energy
3 employs. Cash on hand is almost always used to pay down short-term
4 indebtedness when it exists. For this reason, the Company believes any reduction
5 to its capitalization due to money pool investments should be solely attributed to
6 the short-term debt portion of the capital structure and not attributed ratably
7 across the entire capital structure. Off-setting either long-term debt or equity for
8 the effects of short-term capitalization variations is punitive and does not reflect
9 the true capitalization of the Company, i.e., short-term debt (net of cash), long-
10 term debt, and equity. Adjusting only the short-term debt component of
11 capitalization changes Mr. Kollen’s proposed reduction to \$153.202 as
12 demonstrated on Attachment SGD-Rebuttal-1.

V. ADOPTION OF DIRECT TESTIMONY OF JOHN L. SULLIVAN

13 **Q. HAVE YOU REVIEWED THE DIRECT TESTIMONY AND RESPONSES**
14 **TO DATA REQUESTS SPONSORED BY WITNESS JOHN L. SULLIVAN**
15 **IN THIS PROCEEDING?**

16 A. Yes.

17 **Q. DO YOU HEREBY ADOPT THAT TESTIMONY AND THOSE**
18 **RESPONSES TO DATA REQUESTS AS YOUR OWN?**

19 A. Yes.

20 **Q. PLEASE EXPLAIN WHY YOU ARE ADOPTING MR. SULLIVAN’S**
21 **TESIMONY AND DATA RESPONSES.**

1 A. As I previously described, in my role as Senior Vice President Tax and Treasury,
2 I have ultimate responsibility for the tax planning, compliance and reporting for
3 Duke Energy. I also have responsibility for all treasury-related services for the
4 Duke Energy family of companies. Mr. Sullivan reports to me and his testimony
5 focuses on the credit quality and capital structure for Duke Energy Kentucky. My
6 adoption of his testimony is simply to avoid duplication of subject matter experts
7 in this proceeding.

VI. CONCLUSION

8 **Q. DOES THIS CONCLUDE YOUR PRE-FILED REBUTTAL TESTIMONY?**

9 A. Yes.

VERIFICATION

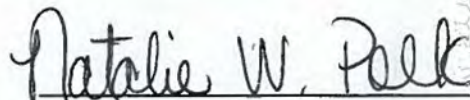
STATE OF NORTH CAROLINA)
) SS:
COUNTY OF MECKLENBURG)

The undersigned, Stephen G. De May, SVP, Tax and Treasurer, being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing rebuttal testimony and that it is true and correct to the best of his knowledge, information and belief.



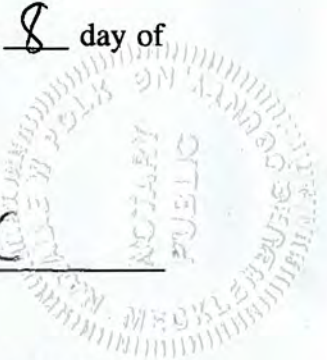
Stephen G. De May Affiant

Subscribed and sworn to before me by Stephen G. De May on this 8 day of February, 2018.



NOTARY PUBLIC

My Commission Expires: 4-29-18



**Duke Energy Kentucky, Inc. Capitalization, Cost of Capital, and Gross Revenue Conversion Factor Adjusting Capitalization to:
Capitalization Adjustment #1 - Reduce Capitalization for Loans to Other Duke Energy Affiliates from Sep 2018 to March 2019**

	Duke Energy KY Electric Capitalization	AG Proforma Adjustment 1	AG Adjusted Electric Capitalization	AG Adjusted Capital Ratio	Component Costs	Weighted Avg Cost	Grossed Up Cost	Revenue Requirement	Incremental Revenue Requirement
Short Term Debt	73,522,733	(5,125,578)	68,397,154	9.772%	3.08%	0.30%	0.30%	2,112,577	(156,869)
Long Term Debt	286,807,753		286,807,753	40.977%	4.24%	1.74%	1.74%	12,205,221	2,530
Common Equity	344,720,654		344,720,654	49.251%	10.30%	5.07%	6.80%	47,614,717	1,138
Total Capital	705,051,140	(5,125,578)	699,925,562	100.00%		7.11%	8.85%	61,932,515	(153,202)

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

The Electronic Application of Duke)
Energy Kentucky, Inc., for: 1) An)
Adjustment of the Electric Rates; 2)) Case No. 2017-00321
Approval of an Environmental)
Compliance Plan and Surcharge)
Mechanism; 3) Approval of New Tariffs;)
4) Approval of Accounting Practices to)
Establish Regulatory Assets and)
Liabilities; and 5) All Other Required)
Approvals and Relief.)

REBUTTAL TESTIMONY OF
APRIL N. EDWARDS
ON BEHALF OF
DUKE ENERGY KENTUCKY, INC

February 14, 2018

TABLE OF CONTENTS

	<u>PAGE</u>
I. INTRODUCTION AND PURPOSE	1
II. DUKE ENERGY KENTUCKY'S VEGETATION.....	3
MANAGEMENT PRACTICES.....	3
III. TEST YEAR VEGETATION MANAGEMENT EXPENSE	
ADJUSTMENT	9
IV. CONCLUSION	17

Attachment:

Attachment ANE-Rebuttal - 1: Vegetation Management Contract 2018-2020
(Confidential)

I. INTRODUCTION AND PURPOSE

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

2 A. My name is April N. Edwards and my business address is 1000 East Main Street,
3 Plainfield, Indiana 46168.

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

5 A. I am employed by Duke Energy Business Services LLC (DEBS) as Manager of
6 Distribution Vegetation Management for Kentucky, Ohio, and Indiana. DEBS
7 provides various administrative and other services to Duke Energy Kentucky,
8 Inc., (Duke Energy Kentucky or the Company) and other affiliated companies of
9 Duke Energy Corporation (Duke Energy).

10 **Q. PLEASE BRIEFLY DESCRIBE YOUR EDUCATIONAL BACKGROUND**
11 **AND BUSINESS EXPERIENCE.**

12 A. I received a Bachelor of Science Degree in Electrical Engineering Technology
13 from Indiana University – Purdue University Indianapolis (IUPUI). Throughout
14 my seventeen-year career with Duke Energy, I have held various positions of
15 increasing responsibility in the areas of Substation Engineering, Transmission
16 Planning, Work Management Support, Project Management and Vegetation
17 Management. Prior to my current role, I was Manager I, Midwest Distribution
18 Vegetation Management, responsible for managing all of Duke Energy Midwest's
19 Distribution Vegetation Management day to day operations from 2015 to 2017. I
20 was the Business Consultant of Vegetation Management for Duke Energy
21 Midwest from 2008 to 2011. I have held my current role responsible for all of
22 Duke Energy's Midwest Distribution Vegetation Management as a developmental

1 assignment beginning February 2017 and received the permanent promotion in
2 July 2017.

3 **Q. PLEASE SUMMARIZE YOUR RESPONSIBILITIES AS MANAGER OF**
4 **DISTRIBUTION VEGETATION.**

5 A. As Manager of Distribution Vegetation Management, I am responsible for
6 providing strategic direction in the execution of the vegetation management
7 programs for Duke Energy's Operations in Kentucky, Ohio, and Indiana. The
8 primary focus is to achieve the desired safety and reliability results, customer
9 satisfaction, regulatory compliance and execution of the vegetation management
10 work plan within financial constraints. I provide direction and guidance to
11 company and contractor leadership on the execution of the vegetation
12 management programs and measure contactor work performance.

13 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE KENTUCKY**
14 **PUBLIC SERVICE COMMISSION?**

15 A. No.

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

18 A. The purpose of my testimony is to respond to the proposed adjustment to the
19 Company's test year vegetation management expense that was recommended by
20 the Kentucky Attorney General's witness, Lane Kollen. In doing so, I first
21 provide an overview of the Company's vegetation management program, and then
22 discuss the importance of vegetation management in maintaining reliability for
23 the distribution system. I then explain why Mr. Kollen's proposal to reduce the

1 Company's forecasted vegetation management expenses based upon historic costs
2 is unreasonable.

**II. DUKE ENERGY KENTUCKY'S VEGETATION
MANAGEMENT PRACTICES**

3 **Q. PLEASE GENERALLY DESCRIBE HOW DUKE ENERGY**
4 **KENTUCKY'S DISTRIBUTION SYSTEM IS MAINTAINED.**

5 A. Duke Energy Kentucky maintains its distribution infrastructure in accordance
6 with good utility practice by adhering to inspections, monitoring, testing, and
7 periodic maintenance programs, including following a vegetation management
8 program that is currently designed to allow the Company to perform complete
9 system trimming over a 4.5 year period. As part of this case, the Company is
10 proposing to move to a 5-year trimming cycle to better manage its costs and
11 external resources, and to provide greater flexibility without impacting reliability
12 performance.

13 **Q. PLEASE DISCUSS THE OBJECTIVE OF VEGETATION**
14 **MANAGEMENT PROGRAMS.**

15 A. The primary objective of the Duke Energy Kentucky's Vegetation Management
16 Program is to control the growth of incompatible vegetation along its electric lines
17 in order to help provide safe and reliable service to our customers. This is
18 accomplished by using qualified personnel to monitor the condition of the utility
19 rights-of-way and by initiating various vegetation control practices to reduce,
20 manage or eliminate incompatible growth. This integrated vegetation
21 management program is essential in providing safe and reliable electric service by

1 ensuring that trees and brush near or within rights-of-way are periodically
2 trimmed or removed to help reduce potential outages and hazards near our
3 facilities.

4 **Q. PLEASE PROVIDE AN OVERVIEW OF THE COMPANY'S**
5 **VEGETATION MANAGEMENT PROGRAM.**

6 A. Duke Energy Kentucky's vegetation management program is a plan for
7 maintaining and clearing all of the Company's distribution circuits every 4.5
8 years. Consistent with the Kentucky Public Service Commission's Order in Case
9 No. 2006-00494, the Company developed a vegetation management plan that is
10 on file with the Commission. The current full-system maintenance inspection and
11 trim cycle is 1,441 miles of distribution overhead lines. A 4.5-year trim cycle is
12 approximately 320 miles per year. The Company's vegetation management plan
13 includes a description of the Company's tree care standards, and trimming
14 specifications that include minimum clearances, brush and wood removal and
15 customer notifications. The Company provides the Commission with an annual
16 progress report of its vegetation management plan. The last progress report was
17 filed on or about May 1, 2017.

18 Duke Energy Kentucky works consistently to balance aesthetics with our
19 goal to provide safe, reliable power to the households and businesses that depend
20 on us. It is our responsibility to ensure power lines are free of trees and other
21 obstructions that could disrupt electric service. Trees that are close to power lines
22 must be trimmed or cut down to ensure they do not cause power outages, and
23 Duke Energy Kentucky does much of this work proactively. The necessary crews

1 use a variety of methods to manage vegetation growth along distribution circuits
2 and transmission power line rights of way, including vegetation pruning, felling
3 (cutting down) and herbicides. These methods are based on widely accepted
4 standards developed by the tree care industry. All work is performed in
5 conformance with Duke Energy Kentucky's vegetation management
6 requirements, OSHA regulations, American National Standards Institute (ANSI)
7 A300, ANSI Z133, Tree Care Industry Association's (formerly the National
8 Arborist Association) standards, Dr. Shigo's *Field Guide for Qualified Line*
9 *Clearance Tree Workers*, National Electrical Safety Code (NESC), International
10 Society of Arboriculture Best Management Practices, and all federal, state,
11 county, and municipal laws, statutes, ordinances and regulations applicable to said
12 work.

13 **Q. PLEASE DESCRIBE WHO PERFORMS THE COMPANY'S**
14 **VEGETATION MANAGEMENT WORK?**

15 A. This service is performed almost exclusively by outside contractors. While Duke
16 Energy Kentucky manages this process, the Company does not employ internal
17 tree-trimmers. Historically, it has been far more cost effective for the Company to
18 outsource this service, than to invest in the equipment, personnel, and ongoing
19 training and certifications to provide this service internally.

20 **Q. DO EMPLOYEES AND CONTRACTORS HAVE SPECIFIC**
21 **QUALIFICATIONS TO ENGAGE IN VEVEGATION MANAGEMENT**
22 **ACTIVITIES?**

1 A. Yes. Activities related to vegetation management, or tree trimming, occur in close
2 proximity to energized power lines. As such, individuals, whether they are
3 employees or contractors, must be properly trained and qualified in order to
4 engage in such activities.

5 **Q. HOW DOES THE COMPANY SOURCE ITS VEGETATION**
6 **MANAGEMENT FUNCTIONS?**

7 A. Duke Energy sourcing specialists engage in a Request For Proposal (RFP) process
8 to seek out companies that can provide the best service at the least cost. The
9 Company looks for contractors that have the expertise, resources and safety
10 record to support the work needed. Then the Company monitors the ongoing
11 work to ensure that it meets Company specifications and requirements.

12 **Q. HAS DUKE ENERGY KENTUCKY RECENTLY EXPERIENCED ANY**
13 **NEW CHALLENGES IN MEETING ITS VEGETATION MANAGEMENT**
14 **GOALS?**

15 A. Yes. The market for resources eligible to properly engage in vegetation
16 management activities has become constricted and extremely competitive for
17 limited qualified resources. The scarcity of the resource locally and the need to
18 bring in qualified contractors from outside the Kentucky territory has combined to
19 result in higher prices for Commission-mandated and critically important
20 compliance activities. Indeed, current, competitively bid prices for vegetation
21 management resources are significantly higher than in years past.

22 **Q. HAS DUKE ENERGY KENTUCKY KEPT THE COMMISSION**
23 **INFORMED OF THESE RESOURCE CHALLENGES?**

1 A. Yes. As part of the Company's 2017 Vegetation Management Report that was
2 filed in May 2017, Duke Energy Kentucky described the resource challenges it
3 was experiencing and explained that Company's tree trimming vendor's contract
4 expired at the end of 2016. The Company described that during the fourth quarter
5 of 2016, Duke Energy Kentucky began negotiations with its supplier for a new
6 contract to commence with the 2017 vegetation management cycle. In late 2016,
7 and prior to the execution of a new contract, this supplier informed the Company
8 that they were not able to retain sufficient resources to perform routine vegetation
9 maintenance work in Kentucky and that they would not agree to a new contract.
10 This resulted in the Company not having a secured supplier to perform routine
11 vegetation maintenance in the early part of 2017. This supplier did agree to
12 provide limited resources to perform reactive (emergency responsive) vegetation
13 maintenance work until the Company was able to secure a new supplier. As a
14 result, Duke Energy Kentucky reached out to other qualified suppliers to meet its
15 2017 vegetation management plan requirements.

16 **Q. HAVE THESE HIGHER COSTS PROMPTED DUKE ENERGY**
17 **KENTUCKY TO ALTER ITS VEGETATION MANGEMENT**
18 **ACTIVITIES?**

19 A. Yes. Duke Energy Kentucky is intent on adhering to Commission regulation and
20 is committed to the completion of vegetation clearing activities so as to provide
21 customers with safe and reliable service. But to realize these intentions, Duke
22 Energy Kentucky must be permitted to timely recover the actual and reasonable
23 costs of its vegetation management program.

1 The Company also appreciates the impact that these unexpected and
2 significantly higher costs can have on customers. Consequently, and with the goal
3 of mitigating such impacts, Duke Energy Kentucky is proposing a slight alteration
4 to its vegetation management plan, moving from a 4.5-year cycle to a 5-year
5 cycle, to allow a greater level of flexibility to manage its costs. The 5-year cycle
6 results in the Company reducing its trimming requirement to approximately 288
7 miles per year.

8 **Q. WILL THIS MINOR CHANGE TO THE VEGETATION MANAGEMENT**
9 **PROGRAM IMPACT SYSTEM RELIABILITY?**

10 A. We believe this minor change does not pose a significant risk to reliability.
11 Reliability is routinely monitored; therefore, concerns are investigated and
12 mitigated in a timely manner.

13 **Q. HOW HAS DUKE ENERGY KENTUCKY'S SYSTEM PERFORMED AS**
14 **MEASURED BY RELIABILITY INDICES?**

15 A. As was discussed by Duke Energy Kentucky witness Mr. Tony Platz, the
16 Company's system has performed well. Duke Energy Kentucky's reliability
17 scores have exceeded industry average reliability scores and are among the best
18 performing throughout Duke Energy's six state electric service areas. The latest
19 reliability index scores available are for calendar year 2017, and are reported
20 below.

Table 1 – 2017 Reliability Indexes

Reliability Index	Duke Energy KY Actual excl. MED	Duke Energy KY Actual w MED
CAIDI	122.65	207.60
SAIFI	0.81	1.11
SAIDI	98.91	230.38

1 **Q. IS IT IMPORTANT TO ADEQUATELY FUND VEGETATION**
2 **MANAGEMENT?**

3 **A.** Failing to adequately fund and adequately provide for vegetation management
4 will negatively affect the Company’s reliability and performance. Duke Energy
5 Kentucky’s customers have grown to expect high-performance and reliability
6 from their electric utility.

III. TEST YEAR VEGETATION MANAGEMENT EXPENSE ADJUSTMENT

7 **Q. WHAT IS DUKE ENERGY KENTUCKY’S FORECASTED TEST YEAR**
8 **DISTRIBUTION VEGETATION MANAGEMENT EXPENSE?**

9 **A.** The Company’s forecasted Test Year distribution vegetation management
10 expense is \$4.036 million. The total forecasted Test Year expense including
11 distribution and transmission is \$4.480 million. This number is based upon the
12 Company’s experience in the Midwest market in its three jurisdictions (Kentucky,
13 Indiana, and Ohio) for the period that extends into the first quarter of 2019.

14 **Q. PLEASE DESCRIBE MR. KOLLEN’S PROPOSED ADJUSTMENT TO**
15 **THE COMPANY’S TEST YEAR VEGETATION MANAGEMENT**
16 **EXPENSE.**

1 A. Mr. Kollen's recommendation reduces the Company's test year vegetation
2 management expense by \$2.4 million and correspondingly, a reduction in the
3 Company's revenue requirement of \$2.407 million. He is basing his adjustment
4 on an average of Duke Energy Kentucky's distribution vegetation management
5 expense for the period of 2012 through 2016.

6 **Q. DOES DUKE ENERGY KENTUCKY AGREE WITH THIS PROPOSED**
7 **ADJUSTMENT?**

8 A. No. Mr. Kollen's adjustment is arbitrary, unreasonable, unrealistic and is not
9 reflective of actual and current costs. His use of a simple average for five
10 historical years ignores the very real and well documented increase in the cost for
11 vegetation management. In response to a data request, Mr. Kollen acknowledged
12 that he has no knowledge of the Commission's requirements for utility vegetation
13 management plans.¹ Mr. Kollen's adjustment significantly understates the
14 Company's actual and reasonable distribution vegetation management expenses
15 for providing a necessary service.

16 **Q. IS MR. KOLLEN'S RELIANCE ON HISTORICAL AVERAGES AN**
17 **APPROPRIATE METHOD FOR ESTIMATING THE COMPANY'S**
18 **VEGETATION MANAGEMENT COSTS FOR THE FORECASTED TEST**
19 **YEAR?**

20 A. If nothing was known about any trend in a forecasted cost, it might be reasonable
21 to use historical data, adjusted for inflation, to estimate future costs. In the case of
22 vegetation management, however, much is known about what the cost will be for

¹ See Attorney General response to Duke Energy Kentucky Question No. 50.

1 the test year. Mr. Kollen acknowledges in his testimony that the Company relied
2 on “indicative bids” for its estimates of distribution vegetation management
3 expenses. Mr. Kollen dismisses these indicative bids that were the basis of the
4 Company’s forecasted test year distribution vegetation management expense, and
5 that inform us about the expected costs for distribution vegetation management.
6 Additionally, in response to the Company’s discovery, Mr. Kollen further
7 concedes that his recommended adjustment did not take into account the later bid
8 estimates submitted for 2018 vegetation management expense as was provided in
9 response to AG-DR-02-011. Mr. Kollen further conceded in discovery that he
10 does not know the Company’s actual vegetation management expense for
11 calendar year 2017.² All this is to say that there is no evidence to support Mr.
12 Kollen’s conclusion that past distribution vegetation management expenses are
13 comparable to current and future expense. Rather, there is sufficient evidence to
14 demonstrate that these costs are rising significantly.

15 Mr. Kollen’s rationale suggests that the Commission ignore data already
16 known and measurable about the cost of distribution vegetation management
17 expense and, instead, substitute an average of historical years.

18 **.Q. PLEASE EXPLAIN WHY MR. KOLLEN’S ADJUSTMENT IS**
19 **UNREASONABLE, AND NOT REFLECTIVE OF ACTUAL AND**
20 **CURRENT COSTS?**

21 A. First, Mr. Kollen’s proposed adjustment is arbitrary and unsupportable. The
22 Company’s historic costs are just that, in the past. They are not representative of

² See Response to Company’s Data Request to AG No. 54.

1 the current market for distribution vegetation management contractors. Costs from
2 2012 through 2016 were set through multi-year contracts that were negotiated
3 years in the past. Those contracts were based upon conditions that existed at that
4 time, which included a larger number of vendors and availability of resources that
5 made pricing more competitive. As a result, Mr. Kollen's adjustment places too
6 great an emphasis on rates and conditions that existed years ago, and does not
7 reflect the current going rates for distribution vegetation management contractors.

8 Second, Mr. Kollen's adjustment ignores the Company's current and
9 actual 2017 distribution vegetation management expenses. Duke Energy
10 Kentucky's actual 2017 distribution vegetation management costs were
11 approximately \$4.3 million. Its actual 2017 cost per mile was significantly higher
12 than that of 2016 and prior years. Additionally, the actual 2017 distribution
13 vegetation management expense was nearly double what the Company had
14 initially budgeted in 2016 for its estimated 2017 spend. The actual 2017 costs
15 were higher than what was presumed for the base period used for the preparation
16 of this rate case filing³ and are comparable to what the Company included in its
17 forecasted test period used in the preparation of this case.

Period	Distribution	
	Miles Trimmed	Cost Per Mile
2015	366.4	\$4,626
2016	272.9	\$5,867
2017	230.6	\$18,227

³ The base period included the twelve months ended November 2017 and used six months of actual costs and six months of forecasted expense. It should be noted that the base period expense included periods and pricing data that fell under the 2016 contract that expired at the end of 2016.

1 The Company provided the Attorney General with the amount of the estimated
2 base period vegetation management expense as a cost per mile in response to AG-
3 DR-02-001. Clearly, this response shows the escalation of vegetation
4 management costs year over year.

5 Moreover, Mr. Kollen's adjustment does not include the Company's costs
6 for distribution vegetation management that have been secured for 2018.
7 Therefore Mr. Kollen's adjustment is unreasonable and results in a significant
8 deficiency from the Company's known, measurable, reasonable and actual
9 distribution vegetation management expense.

10 **Q. DO YOU BELIEVE THAT THE COMPANY'S HISTORIC LEVEL OF**
11 **VEGETATION MANAGEMENT EXPENSE IS SUFFICIENT FOR THE**
12 **COMPANY TO MAINTAIN ITS PRESENT LEVEL OF SERVICE,**
13 **RELIABILITY AND MEET CUSTOMER EXPECTATIONS?**

14 **A.** I do not believe so. Customer expectations are evolving as technology changes.
15 Customers are requiring a higher degree of reliability, performance, and response.
16 Customers are expecting service restorations to be made more quickly, as so
17 much of their daily life depends upon the availability of electricity. This ranges
18 from the ability to power and charge cellular phones, computers, and other mobile
19 devices, in order to maintain communication access, beyond just heating and
20 cooling homes.

21 Although Duke Energy Kentucky has successfully managed its vegetation
22 management expense in the past, the historic levels of expense are no longer
23 reflective of costs to continue its existing distribution vegetation management

1 requirements. As Mr. Platz explained in his direct testimony, the Company is
2 experiencing rising cost pressure for its routine operations and maintenance
3 (O&M) costs, including vegetation management. Recently, the Company issued a
4 request for proposal (RFP) for its distribution vegetation management work
5 within the Commonwealth and the indicative bids were returned at close to triple
6 the annual expense from what the Company has previously experienced. This is
7 because vegetation management contractors are resources used by all utilities in
8 the Midwest. So Duke Energy Kentucky is finding itself competing against
9 utilities in surrounding states with less bargaining power.

10 **Q. WHY ARE THE COSTS FOR VEGETATION MANAGEMENT RISING?**

11 A. Duke Energy Kentucky competes for vegetation management services with other
12 utilities in Kentucky, Indiana, and Ohio. These resources are not infinite and
13 unfortunately have been able to command higher prices for their services than in
14 the past.

15 It is undeniable that the costs for distribution vegetation management are
16 rising and exceed historic levels. As a result, Duke Energy Kentucky's historic
17 costs cannot serve as a proxy for what its current costs are or what its ongoing
18 costs will be. The contracts that were the basis of the historic costs have expired
19 and the vendors that performed under those contracts are unwilling to provide
20 services at those historic costs. Duke Energy Kentucky has worked diligently to
21 secure adequate resources that can meet the Company's vegetation management
22 requirements at a reasonable price. The Company has done this through market

1 requests for proposals and secured a vendor to provide vegetation management
2 services at a price that is significantly higher than what Mr. Kollen suggests.

3 **Q. DO YOU BELIEVE THE COMPANY'S ACTUAL 2017 VEGETATION**
4 **MANAGEMENT COSTS IS REPRESENTATIVE OF THE CURRENT**
5 **MARKET FOR VEGETATION MANAGEMENT SERVICES?**

6 A. Yes. Based upon my experience in multiple jurisdictions and managing vegetation
7 management contracts for three (3) years, I do believe the Company's actual 2017
8 costs are representative of the current market conditions. I believe that these costs
9 are going to continue to increase as qualified labor resources continue to be
10 limited. Based upon the current multi-year vegetation management contract for
11 Duke Energy Kentucky, annual escalations tied to industry indicies applicable to
12 labor and equipment will be negotiated and mutually agreed upon by the
13 Company and the vendor. The Company anticipates that going forward, its
14 distribution vegetation management expense will increase annually by
15 approximately 3 to 5 percent.

16 **Q. DO YOU HAVE AN ESTIMATE OF THE OPERATING AND**
17 **MAINTENANCE (O&M) EXPENSE DUKE ENERGY KENTUCKY**
18 **EXPECTS TO INCUR FOR VEGETATION MANAGEMENT COSTS IN**
19 **THE FUTURE?**

20 A. Yes. Currently, the Company is expecting to spend approximately \$4 million in
21 2018 for O&M related to distribution vegetation management. The Company
22 secured a vendor in late 2017 to provide vegetation management services for
23 2018-2020. The contract with that vendor was executed on January 15, 2018. A

1 copy of this contract is attached to my testimony as Confidential Attachment
2 ANE-Rebuttal-1. This contract was based upon a recently accepted bid for
3 distribution vegetation management services. This bid was the result of a RFP
4 solicitation process that involved negotiation with the vendor to achieve the
5 lowest possible cost for the Company.

6 **Q. DO YOU BELIEVE THAT DUKE ENERGY KENTUCKY'S**
7 **FORECASTED TEST PERIOD VEGETATION MANAGEMENT**
8 **EXPENSE IS REASONABLE?**

9 A. Yes. The Company forecasted its test period distribution vegetation management
10 expense to be \$4,036,724. This is comparable to the \$4,342,951 that the Company
11 actually spent for the calendar year 2017 and what the Company is now
12 forecasting for 2018 with its contract. Importantly, this future cost information is
13 based upon the contract that was entered into for 2018 distribution vegetation
14 management. Therefore, the Company believes that its proposed test year
15 expense is reasonable, necessary and in no way excessive. The Commission
16 should reject Mr. Kollen's proposed adjustment to reduce the Company's test year
17 vegetation management expense.

18 **Q. WHAT IS THE COMPANY DOING TO HELP MANAGE THESE RISING**
19 **COSTS GOING FORWARD?**

20 A. To help mitigate these rising costs, the Company is moving to a 5-year trim cycle.
21 The Company continues to look for opportunities to combine with its sister
22 utilities in the Duke Energy family with the hope of leveraging economies of
23 scale to offer greater contracting opportunities for vendors. In 2017, the Company

1 has had some success with this strategy. Although initially, the Company was not
2 able to get a vendor to offer to include Kentucky work as part of its bid
3 solicitation, the Company was able to secure a vendor in December with a multi-
4 year contract with unit pricing that was able to leverage the entire Duke Energy
5 Midwest service territories.

IV. CONCLUSION

6 **Q. WAS THE INFORMATION YOU PROVIDED CONFIDENTIAL**
7 **ATTACHMENT ANE-1 PREPARED BY YOU OR UNDER YOUR**
8 **SUPERVISION?**

9 A. Yes.

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

11 A. Yes.

VERIFICATION

STATE OF INDIANA)
) SS:
COUNTY OF HENDRICKS)

The undersigned, April Edwards, Manager II Distribution Vegetation, being duly sworn, deposes and says that she has personal knowledge of the matters set forth in the foregoing rebuttal testimony and that it is true and correct to the best of her knowledge, information and belief.

April Edwards
April Edwards, Affiant

Subscribed and sworn to before me by April Edwards on this 7th day of February, 2018.

Paula M. Roseman
NOTARY PUBLIC Paula M. Roseman

My Commission Expires: 3-17-25
Resident: Hendricks County



**ATTACHMENT ANE-Rebuttal-1
(Confidential)**

BEING FILED UNDER SEAL

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

The Electronic Application of Duke)
Energy Kentucky, Inc., for: 1) An)
Adjustment of the Electric Rates; 2)) Case No. 2017-00321
Approval of an Environmental)
Compliance Plan and Surcharge)
Mechanism; 3) Approval of New Tariffs;)
4) Approval of Accounting Practices to)
Establish Regulatory Assets and)
Liabilities; and 5) All Other Required)
Approvals and Relief.)

REBUTTAL TESTIMONY OF
SARAH E. LAWLER
ON BEHALF OF
DUKE ENERGY KENTUCKY, INC.

February 14, 2018

TABLE OF CONTENTS

	<u>PAGE</u>
I. INTRODUCTION AND PURPOSE	1
II. SUMMARY OF REVENUE REQUIREMENT UPDATES	2
III. RESPONSE TO THE AG TESTIMONY.....	6
1. THE INCLUSION OF DEFERRED DSM COSTS IN CAPITALIZATION	6
2. THE INCLUSION OF OFF-SYSTEM SALES MARGINS IN BASE RATES.....	7
IV. PROPOSEDRIDER ESM UPDATES	12
V. CONCLUSION.....	14

Attachments:

Attachment SEL-Rebuttal 1(a) Rider ESM – Redline Version

Attachment SEL-Rebuttal 1(b) Rider ESM – Clean Copy

Attachment SEL-Rebuttal 2(a) ESM Template – Redline Version

Attachment SEL-Rebuttal 2(b) ESM Template – Clean Copy

I. INTRODUCTION AND PURPOSE

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

2 A. My name is Sarah E. Lawler, and my business address is 139 East Fourth Street,
3 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 Utility
6 Strategy Director, Midwest. DEBS provides various administrative and other
7 services to Duke Energy Kentucky, Inc., (Duke Energy Kentucky or Company)
8 and other affiliated companies of Duke Energy Corporation (Duke Energy).

9 **Q. ARE YOU THE SAME SARAH E. LAWLER THAT SUBMITTED**
10 **DIRECT TESTIMONY IN THIS PROCEEDING?**

11 A. Yes. However, although my job title is the same, my job duties have changed. I
12 am now responsible for the preparation of financial and accounting data used in
13 retail rate filings and various other rate recovery mechanisms for Duke Energy
14 Kentucky and Duke Energy Ohio, Inc.

15 **Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?**

16 A. The purpose of my rebuttal testimony is to summarize the various adjustments
17 made by the Company to its originally proposed revenue requirement, including
18 those recommendations made by intervening parties that the Company does not
19 oppose.

20 I also respond to certain opinions and recommendations expressed by
21 Attorney General (AG) witness Lane Kollen. Specifically, I address: (1) Mr.
22 Kollen's recommendation that deferred demand-side management (DSM) costs

1 should be removed from the Company's jurisdictional electric capitalization; and
2 (2) Mr. Kollen's recommendation that off-system sales margins be included in
3 base rates and the Profit Sharing Mechanism (Rider PSM) be reset to zero.

4 Finally, I propose several clerical and formatting changes to the
5 Company's proposed Environmental Surcharge Mechanism (ESM) that are
6 necessary as a result of responding to STAFF-DR-02-011 and further review of
7 the Company's initial proposal. Specifically, I propose revisions to Sheet No. 76,
8 Rider ESM, Environmental Surcharge Mechanism Rider, and to the Company's
9 ESM template originally filed as Attachment SEL-2 in the Company's
10 application, to correct inconsistencies that were identified in response to STAFF-
11 DR-02-011.

II. SUMMARY OF REVENUE REQUIREMENT UPDATES

12 **Q. IS THE COMPANY PROPOSING CHANGES TO ITS REVENUE**
13 **REQUIREMENT?**

14 **A.** Yes. After review of intervenor testimony, the Company agrees with certain
15 adjustments proposed by the Attorney General's witness Lane Kollen.
16 Additionally, the Company has made updates to its revenue requirement to reflect
17 a revised cost of service as a result of the Tax Cuts and Jobs Act of 2017 (Tax
18 Act). The following table summarizes the changes and revised revenue
19 requirement.

Requested Base Rate Increase	\$ 48,646,222
Operating Income Adjustments	
1 Reduce Income Tax Expense to Reflect Reduction in FIT Rate	\$ (10,622,916)
2 Reduce Income Tax Expense to Reflect Amortization of Excess ADITs	(3,782,045)
3 Increase Income Tax Expense to Reflect Changes in Deferred Income Taxes	209,019
4 FIT credit for January through March 2018	(110,762)
5 Reduce Income Tax Expense for Research Tax Credits	(119,514)
6 Reduce Carbon Management Research Group Regulatory Asset Amortization Expense	(200,551)
7 Reduce Forecasted RTEP Expense	(410,346)
8 Reduce Amortization of East Bend O&M Regulatory Asset Amortization	(375,550)
9 Reduce Revenue Requirement for Long-Term Debt Return on East Bend O&M Regulatory Asset	(1,536,562)
Capitalization Adjustments	
# Remove Coal Ash ARO Regulatory Asset from Capitalization	(1,629,904)
# Capitalization impacts of Carbon Management Regulatory Asset Amortization adjustment	<u>17,612</u>
Total Adjustments	\$ (18,561,519)
Revised Base Rate Increase	\$ 30,084,703

1 Q. PLEASE EXPLAIN THE REASONS FOR THESE CHANGES.

2 A. **Income Tax Adjustments.** As mentioned in the Rebuttal Testimony of Company
3 witness William Don Wathen Jr., the Company has adjusted its revenue
4 requirement to reflect changes resulting from the Tax Act. First, the Company
5 has updated the Gross Revenue Conversion Factor (GRCF) to reflect a 21 percent
6 Federal Income Tax (FIT) Rate. Changing the GRCF from 35 percent to 21
7 percent results in a new GRCF of 1.3409866 and reduces the Company's
8 requested revenue requirement by \$10,622,916. Second, the Company is
9 proposing to amortize the excess Accumulated Deferred Income Taxes (ADITs)
10 as outlined in the Rebuttal Testimony of witness Wathen and witness Lisa M.
11 Bellucci. The amortization of excess ADITs reduces the Company's requested
12 revenue requirement by \$3,782,045. Third, as discussed in witness Wathen's and
13 witness Bellucci's Rebuttal Testimony, the Company has recalculated its ADIT

1 balances to reflect the elimination of bonus depreciation and the projection of
2 deferred income taxes at the lower FIT rate. These changes to ADITs increase the
3 Company's rate base and resulting rate base ratio calculation which then changes
4 capitalization. This change increases the Company's requested revenue
5 requirement by \$209,019. Finally, as discussed in Mr. Wathen's Rebuttal
6 Testimony, the Company is also proposing to reduce its revenue requirement to
7 provide a credit to customers for the lower FIT rate that was in effect from
8 January 1, 2018, through the time new base rates for this instant case will be
9 effective. The result of this adjustment is to reduce the Company's proposed
10 revenue requirement by \$110,762.

11 As witness Bellucci notes in her Rebuttal Testimony, the Company agrees
12 with AG witness Kollen that the forecasted research tax credit should be a
13 reduction to the forecasted test year income tax expense. However, based on
14 further review of the data, the Company became aware that incorrect data had
15 been provided on AG-DR-02-005. The data provided on that response for the test
16 period was actually the base period. The test period should have been \$89,124 (9
17 months of 2018 and 3 months of 2019 as provided on AG-DR-02-005) and the
18 resulting reduction to the revenue requirement should be \$119,514.

19 **Carbon Management Research Group Regulatory Asset Amortization.** The
20 Company proposed an adjustment to the forecasted test year on Schedule D-2.31
21 to amortize the Carbon Management Research Group Regulatory Asset over a
22 five year period. The Company obtained authorization from the Commission to
23 defer these costs for accounting purposes in Case No. 2008-00308. The

1 Company's application in that case stated the intent to amortize this regulatory
2 asset over a ten year period. As such, the Company is modifying its revenue
3 requirement to reflect a ten year amortization period. The effect of the adjustment
4 is a \$200,551 reduction to the Company's requested revenue requirement.
5 Capitalization has also been updated to reflect the reduction in amortization
6 expense. The effect of the adjustment to capitalization is a \$17,612 increase to
7 the Company's requested revenue requirement.

8 **Adjustment to RTEP Expense.** The Company has reviewed AG witness
9 Kollen's proposed adjustment for RTEP expenses and finds his approach
10 reasonable. Therefore, the Company agrees to reduce its revenue requirement by
11 \$410,346 to reflect lower forecasted RTEP expenses.

12 **East Bend O&M Regulatory Asset.** The Company is proposing two
13 adjustments to its regulatory requirement related to the East Bend O&M
14 Regulatory Asset. First, The Company has reviewed Mr. Kollen's proposed
15 adjustment to amortization expense. Mr. Wathen's Rebuttal Testimony provides
16 some corrections and enhancements to that adjustment and calculates a new
17 annual amortization expense of approximately \$4.438 million. This results in a
18 reduction to the Company's proposed revenue requirement of \$375,550. Second,
19 Mr. Wathen also proposes to reduce the Company's revenue requirement for the
20 debt return it is already accruing on this regulatory asset. The effect of that
21 adjustment is a \$1,536,562 reduction to the Company's requested revenue
22 requirement.

1 **Adjustments to Capitalization to Remove the Coal Ash Regulatory Asset.**
2 The Company agrees to remove this regulatory asset from capitalization given the
3 asset is accruing carrying costs at the Weighted-Average Cost of Capital
4 (WACC). The effect of that adjustment is a \$1,629,904 reduction to the
5 Company's requested revenue requirement.

III. RESPONSE TO AG TESTIMONY

1. THE INCLUSION OF DEFERRED DSM COSTS IN CAPITALIZATION

6 **Q. PLEASE DESCRIBE MR. KOLLEN'S PROPOSAL REGARDING THE**
7 **COMPANY'S INCLUSION OF DEFERRED DSM COSTS IN THE**
8 **COMPANY'S CAPITALIZATION.**

9 A. Mr. Kollen believes that the Company erred by not removing the DSM regulatory
10 asset on its books from the jurisdictional electric capitalization used to calculate
11 the revenue requirement in this proceeding. He points to the Company's response
12 to AG-DR-02-04(a), that all revenue and expenses related to Rider DSM were
13 eliminated from the test period because they are recovered via Rider DSM, as
14 admission by the Company that the Rider DSM regulatory asset should be
15 removed from jurisdictional electric capitalization.

16 **Q. DO YOU AGREE WITH MR. KOLLEN THAT THE COMPANY MADE**
17 **AN ERROR BY NOT REMOVING THE DSM REGULATORY ASSET**
18 **FROM ITS CAPITALIZATION?**

19 A. No.

1 **Q. PLEASE EXPLAIN.**

2 A. Although the revenue and expenses have been removed from the test period, the
3 deferred balance whether it is an asset or liability should not be removed from
4 capitalization. The deferral balance is exclusively related to a cash flow issue
5 (*i.e.*, over-and under-collection) that must be financed by shareholders.

6 **Q. WHAT IS YOUR RECOMMENDATION REGARDING MR. KOLLEN'S**
7 **PROPOSED ADJUSTMENT?**

8 A. The Commission should reject Mr. Kollen's recommended adjustment. This is an
9 asset on the Company's balance sheet that is not accruing carrying costs.

2. INCLUSION OF OFF-SYSTEM SALES MARGINS IN BASE RATES

10 **Q. PLEASE DESCRIBE MR. KOLLEN'S RECOMMENDATION**
11 **REGARDING THE TREATMENT OF OFF-SYSTEM SALES SHARED**
12 **THROUGH THE COMPANY'S PROFIT SHARING MECHANISM,**
13 **RIDER PSM.**

14 A. Mr. Kollen claims that the Commission has historically included off-system sales
15 in the base revenue requirement and therefore proposes that the Company's base
16 revenue requirement reflect 100 percent of the Company's projected \$3.8 million
17 in off-system sales margins and that the Company Profit Sharing Mechanism
18 (Rider PSM) be set to \$0. Mr. Kollen's proposal would be a significant departure
19 from the formula for Rider PSM that the Commission has approved on multiple
20 occasions since 2007.

1 **Q. MR. KOLLEN'S TESTIMONY SUGGESTS THAT ONLY OFF-SYSTEM**
2 **SALES MARGINS ARE INCLUDED IN RIDER PSM. IS THAT THE**
3 **CASE?**

4 A. No. The Company provided direct testimony from Mr. Wathen describing the
5 components and mechanics of the existing Rider PSM and the proposed Rider
6 PSM. Mr. Kollen's testimony appears to suggest that the Company only shares
7 its margins on off-system sales. It is important to clarify that the Company's
8 existing and proposed Rider PSM includes more benefits to be shared with
9 customers than just the margins on off-system sales.

10 **Q. DO YOU AGREE WITH MR. KOLLEN'S RECOMMENDATION?**

11 A. No. The Company does not agree with Mr. Kollen's recommendation. Despite
12 Mr. Kollen's assertion that the Commission has "historically...included off-
13 system sales margins" in base rates, Duke Energy Kentucky has never included
14 off-system sales margins in base rates. For the entire history of Rider PSM, the
15 amount of off-system sales included in base rates has been \$0.

16 Mr. Kollen is similarly off the mark in suggesting that 100 percent of the
17 margins on off-system sales should be included in base rates. Unfortunately, the
18 full details of Mr. Kollen's recommendation for Rider PSM are not clear as he
19 stops at the recommendation of including 100 percent of the forecasted amount of
20 off-system sales margin in base rates and resetting Rider PSM to \$0. Mr. Kollen
21 fails to make any recommendation as to how actual margins on off-system sales
22 would be shared with customers or whether he opposes the sharing of other
23 benefits. To clarify, all of the investor-owned electric utilities regulated by the

1 Commission have mechanisms to ‘share’ the profits on off-system sales. The
2 typical sharing percentage is 75 percent to customers. As explained in the direct
3 testimony of Company witnesses Wathen and John Verderame, the Company is
4 proposing in this case to modify the Rider PSM to, among other things, share 90
5 percent of the net benefits derived from selling generation and generation-related
6 products into the PJM wholesale market.

7 **Q. PLEASE BRIEFLY DESCRIBE THE HISTORY OF RIDER PSM.**

8 A. The Company’s Profit Sharing Mechanism was initially approved in Case No.
9 2003-00252 with the approval of the Company’s acquisition of generating assets.
10 This off-system sales sharing construct was authorized in such a way that
11 customers would receive the first \$1 million in net off-system sales and 50
12 percent of any additional net off-system sales margins.¹ After thoroughly
13 considering the sharing construct, the Commission found that “[w]hile it
14 represents a departure from standard rate-making, it represents an improvement
15 for rate payers compared to the current purchased power contract.”²

16 Rider PSM went into effect for customers beginning in January 2007, as
17 approved in Case No 2006-00172, when the Company first brought its generating
18 assets into its base rates after completing the acquisition. Rider PSM has been in
19 effect since then with some minor modifications to add new benefits to be shared
20 with customers.

¹ Customers receive 100 percent of net margins from emission allowance sales.

²In the Matter of the Application of the Union Light, Heat and Power Company for a Certificate of Public Convenience and Necessity to Acquire Certain Generation Resources and Related Property. For Approval of Certain Purchase Power Agreements; For Approval of Certain Accounting Treatment; and for Approval of Deviation From Requirements of KRS 278.2207 and 278.2213, Case No. 2003-00252, (Ky.P.S.C. Dec.5, 2003).

1 In Case No. 2008-00489, Duke Energy Kentucky filed an application to
2 modify Rider PSM to begin including net revenues for off-system sales resulting
3 from the Midcontinent ISO f/k/a Midwest ISO (MISO)'s initiation of an Ancillary
4 Services Market (ASM). As part of that case, the Commission authorized the
5 Company's request to include the monthly net revenues from the Company's
6 participation in ASM markets in off-system sales margins shared under Rider
7 PSM.³

8 Then, in Case No. 2010-00203, as part of Duke Energy Kentucky's
9 application for approval to transfer functional control of its transmission assets
10 from MISO to PJM Interconnection LLC, (PJM) the Commission conditioned the
11 Company's PJM membership, in part, upon a change in the profit sharing
12 percentages for customers from 50 percent to 75 percent.⁴

13 Finally, in Case No. 2014-00201, as part of Duke Energy Kentucky's
14 application to acquire the remaining 31% of East Bend generating station, the
15 Company requested and received authorization, among other things, to begin
16 sharing 75% of the net margins on capacity transactions with its customers.⁵ In
17 none of the above mentioned cases was the Company ordered to include any off-

³ In the Matter of the Application of Duke Energy Kentucky, Inc. to Modify Rider PSM Off-System Sales Profit Sharing Mechanism to Account for Changes in Off-System Sales Due to the Initiation of the Midwest Independent System Operator Ancillary Services Market, Case No 2008-00489, (Ky.P.S.C. Jan. 30, 2009).

⁴ In the Matter of the Application of Duke Energy Kentucky, Inc. for Approval to Transfer Functional Control of its Transmission Assets from The Midwest Independent Transmission System Operator to the PJM Interconnection Regional Transmission Organization and Request for Expedited Treatment, Case No 2010-00203, (Ky.P.S.C. Jan. 25, 2011).

⁵ In the Matter of the Application of Duke Energy Kentucky for (1) A Certificate of Public Convenience and Necessity Authorizing the Acquisition of the Dayton Power & Light Company's 31 % Interest in the East Bend Generating Station; Approval of Duke Energy Kentucky, Inc.'s Assumption of Certain Liabilities in Connection with the Acquisition' (3) Deferral of Costs Incurred as Part of the Transaction; and (4) All Other Necessary Waivers, Approvals, and Relief, Case No. 2015-00201, (Ky. P.S.C. Dec. 4, 2014).

1 system sales margins in base rates. The Company has always netted 100 percent
2 of its off-system sales through its Rider PSM. This should not change now.
3 Customers receive no more and no less than the actual net amount of off-system
4 sales as a result of Rider PSM.

5 **Q. DOES IT MAKE SENSE TO RESET THE RIDER TO ZERO?**

6 A. No. The components of the current Rider PSM are (1) off-system sales margins
7 (including capacity margins and ASM net revenues) allocated to customers, (2)
8 net margins on sales of emission allowances, (3) remaining credits due to or from
9 customers and (4) actual amounts credited to or collected from customers. These
10 components are totaled and then divided by kWh sales for a given quarter to
11 compute the rate. Rider PSM is not a rider that needs to be reset to zero or have
12 amounts rolled into base rates.

13 **Q. WOULD THE COMPANY BE OPPOSED TO INCLUDING OFF-SYSTEM**
14 **SALES MARGINS IN BASE RATES?**

15 A. The Company believes maintaining the rather uncomplicated current structure
16 where 100 percent of net off-system sales, and all of the other components of
17 Rider PSM, are handled through the Rider PSM is the most logical and reasonable
18 way to handle the netting of off-system sales. Mr. Kollen's proposal adds an
19 unnecessary layer of confusion and opaqueness to the Rider PSM that does not
20 exist now. The Company's proposal is to essentially continue the process that has
21 been vetted and approved by the Commission for over more than a decade
22 without any prior controversy or even any objection. Should the Commission
23 find that it is necessary to include an amount in base rates, all other components

1 of the formula as recommended by the Company, including the sharing
2 percentages, should be approved by the Commission. The Rider PSM should then
3 symmetrically track incrementally above and below the amount that is included in
4 base rates.

IV. PROPOSED RIDER ESM UPDATES

5 **Q. PLEASE DESCRIBE THE CLERICAL CHANGES AND CORRECTIONS**
6 **THAT THE COMPANY IS MAKING TO ITS ESM TARIFF.**

7 A. The Company became aware, in responding to STAFF-DR-02-011, that the tariff
8 language in the Company's proposed Rider ESM needed to be corrected for
9 certain inadvertent errors and inconsistencies with the proposed rider schedules.
10 In response to STAFF-DR-02-011, the Company indicated that it would be
11 amenable to changing the tariff language to address issues that the Staff noticed
12 such as the fact that: (1) the proposed tariff language did not provide for the
13 separation of residential and non-residential customers as intended by the
14 Company; (2) the proposed tariff language did not provide for the exclusion of
15 fuel revenues from the non-residential $R_{(m)}$ as intended by the Company; and (3)
16 the words "all rider revenues" was intended to say "all Rider ESM revenues."
17 While reviewing the tariff for these issues raised by Staff discovery, the Company
18 also identified additional clarifications that should be made to make the tariff
19 easier to understand and to make the tariff consistent with the Rider ESM
20 schedules. Attachment SEL-Rebuttal-1(a) Rider ESM – Redline Version is a
21 redline (tracked-changes) version of the as filed Rider ESM tariff and clearly
22 shows all of the changes proposed by the Company. Attachment SEL-Rebuttal-

1 1(b) Rider ESM – Clean Copy is a clean version of the corrected Rider ESM
2 tariff. The Company is aware that, other than STAFF-DR-02-011, no other
3 concerns were raised by any party in this proceeding in regards to the language in
4 the Rider ESM tariff. The Company’s intent in proposing the changes to the tariff
5 language is only to provide clarity to customers and make the tariff consistent
6 with the Rider ESM schedules that were submitted in this case. It is not the
7 intention of the Company and the Company does not believe that the proposed
8 changes make any substantive changes to the tariff.

9 **Q. PLEASE DESCRIBE THE CORRECTIONS AND CLARICAL CHANGES**
10 **TO THE RIDER ESM SCHEDULES THAT YOU ARE NOW**
11 **PROPOSING.**

12 A. Similar to what occurred with the Company’s review of the proposed Rider ESM
13 tariff in response to discovery requests, the Company also reviewed the Rider
14 ESM template that was initially submitted in this case. As a result, the Company
15 is proposing to make clerical changes and corrections to the template which it
16 believes will make the rider schedules included in the template cleaner and easier
17 to understand. Like the proposed changes to the tariff, it is not the intention of the
18 Company to make any changes that substantively change how the template
19 calculates jurisdictional $E_{(m)}$ or the environmental surcharge billing factor, except
20 to update the WACC on Form 1.20 to reflect the lower 21 percent federal income
21 tax rate resulting from the Tax Act. Attachment SEL-Rebuttal-2(a) ESM
22 Template– Redline Version is a redline version of the originally filed template
23 and clearly shows all of the changes proposed by the Company. Changes have

1 been made to Form 1.00, Form 1.10, Form 1.20, and Form 3.00. Sections
2 highlighted in yellow denote the changes. Other wording changes have been
3 made in red font. Attachment SEL-Rebuttal-2(b) ESM Template – Clean
4 Copy is a clean version of the revised template.

V. CONCLUSION

5 **Q. WERE ATTACHMENTS SEL-REBUTTAL-1(A), SEL-REBUTAL-1(B),**
6 **SEL-REBUTTAL-2(A), SEL-REBUTTAL-2(B) PREPARED BY YOU OR**
7 **UNDER YOUR DIRECTION AND SUPERVISION?**

8 A. Yes.

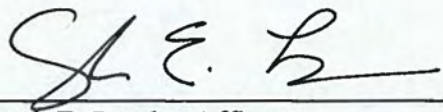
9 **Q. DOES THIS CONCLUDE YOUR PRE-FILED REBUTTAL TESTIMONY?**

10 A. Yes.

VERIFICATION

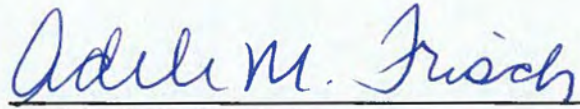
STATE OF OHIO)
)
COUNTY OF HAMILTON) SS:

The undersigned, Sarah E. Lawler, Utility Strategy Director, being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing rebuttal testimony and that it is true and correct to the best of her knowledge, information and belief.



Sarah E. Lawler Affiant

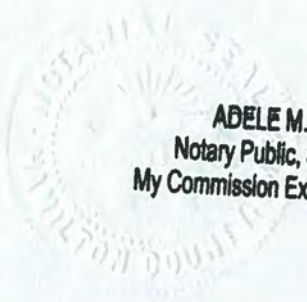
Subscribed and sworn to before me by Sarah E. Lawler on this 7TH day of FEBRUARY, 2018.



NOTARY PUBLIC

ADELE M. FRISCH
Notary Public, State of Ohio
My Commission Expires 01-05-2019

My Commission Expires: 1/5/2019



Duke Energy Kentucky, Inc.
4580 Olympic Blvd.
Erlanger, Kentucky 41018

KY. P.S.C. Electric No. 2
Original Sheet No. 76
Page 2 of 2

applicable environmental projects adjusted for accumulated depreciation, accumulated deferred taxes, accumulated investment tax credits, CWIP and emission allowance inventory.

ROR = the Rate of Return on the Environmental Compliance Rate Base, designated as the cost of debt and pretax cost of equity for environmental compliance plan projects approved by the Commission.

OE = the Operating Expenses, defined as the monthly depreciation expense, taxes other than income taxes, amortization expense, emission allowance expense and environmental reagent expense.

EAS = proceeds from Emission Allowance Sales

Prior Period Adjustment is the amount resulting from the amortization of amounts determined by the Commission during six-month and two-year reviews

(Over) or Under Recovery is ~~the~~ one-month "true-up" adjustment.

~~Plans are the environmental surcharge compliance plans submitted to and approved by the Kentucky Public Service Commission~~

~~Monthly Kentucky Retail Revenue R(m) – the average monthly revenue, excluding all rider revenues, for the last 12 month period.~~

~~The current expense month shall be the second month preceding the month in which the MESF is billed.~~

- ~~(1) Total E(m), (the environmental compliance plan revenue requirement), is multiplied by the Jurisdictional Allocation Factor. Jurisdictional E(m) is adjusted for any (Over)/Under collection or prior period adjustment to arrive at Adjusted Jurisdictional E(m). Adjusted Jurisdictional E(m) is allocated to Residential and Non-Residential on the basis of Revenue as a Percentage of Total Revenue for the 12 months ending with the Current Month. BESF is the Base Period Environmental Revenue Requirement associated with the Commission approved environmental compliance projects.~~
- ~~(2) Residential R(m) is the average of total monthly residential revenue for the 12 months ending with the current expense month. Total revenue includes residential revenue, including all riders, but excluding environmental surcharge mechanism revenue.~~
- ~~(3) Non-Residential R(m) is the average of total monthly non-residential revenue for the 12 months ending with the current expense month. Total revenue includes non-residential revenue, including all riders, but excluding environmental surcharge mechanism revenue, base fuel revenue and FAC~~

Issued by authority of an Order of the Kentucky Public Service Commission dated _____ in Case No. 2017-00321.

Issued: September 1, 2017

Effective: October 1, 2018

Issued by James P. Henning, President

Duke Energy Kentucky, Inc.
4580 Olympic Blvd.
Erlanger, Kentucky 41018

KY. P.S.C. Electric No. 2
Original Sheet No. 76
Page 2 of 2

Prior Period Adjustment is the amount resulting from the amortization of amounts determined by the Commission during six-month and two-year reviews

(Over) or Under Recovery is a one-month "true-up" adjustment.

Plans are the environmental surcharge compliance plans submitted to and approved by the Kentucky Public Service Commission

- (1) Total E(m), (the environmental compliance plan revenue requirement), is multiplied by the Jurisdictional Allocation Factor. Jurisdictional E(m) is adjusted for any (Over)/Under collection or prior period adjustment to arrive at Adjusted Jurisdictional E(m). Adjusted Jurisdictional E(m) is allocated to Residential and Non-Residential on the basis of Revenue as a Percentage of Total Revenue for the 12 months ending with the Current Month.
- (2) Residential R(m) is the average of total monthly residential revenue for the 12 months ending with the current expense month. Total revenue includes residential revenue, including all riders, but excluding environmental surcharge mechanism revenue.
- (3) Non-Residential R(m) is the average of total monthly non-residential revenue for the 12 months ending with the current expense month. Total revenue includes non-residential revenue, including all riders, but excluding environmental surcharge mechanism revenue, base fuel revenue and FAC revenue.
- (4) The current expense month (m) shall be the second month preceding the month in which the Environmental Surcharge is billed.

SERVICE REGULATIONS, TERMS AND CONDITIONS

The supplying and billing for service and all conditions applying thereto, are subject to the jurisdiction of the Kentucky Public Service Commission, and to Company's Service Regulations currently in effect, as filed with the Public Service Commission of Kentucky.

Issued by authority of an Order of the Kentucky Public Service Commission dated _____ in Case No. 2017-00321.

Issued: September 1, 2017

Effective: October 1, 2018

Issued by James P. Henning, President

ES FORM 1.00

**DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT**

Calculation of Monthly Environmental Surcharge Factor
Summary of Jurisdictional E(m), Jurisdictional R(m) and Environmental Surcharge Billing Factors
For the Expense Month of April 2018

MESF = CESF - BESF

Where:
CESF – Current Period Environmental Surcharge Factor
BESF – Base Period Environmental Surcharge Factor
MESF – Monthly Environmental Surcharge Factor

Calculation of MESF:	Source	Residential
CESF	ES Form 1.10	0.00%
BESF	Case No. 2017-00324	0.00%
MESF		0.00%

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 14	=	\$	-
Jurisdictional R(m)	ES Form 1.10, Line 15	=	\$	-
Environmental Surcharge Billing Factor	ES Form 1.10, Line 16	=		0.00%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 14	=	\$	-
Jurisdictional R(m)	ES Form 1.10, Line 15	=	\$	-
Environmental Surcharge Billing Factor	ES Form 1.10, Line 16	=		0.00%

Effective Date for Billing: _____

Submitted by: _____

Title: _____

Date Submitted: _____

ES FORM 1.10

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Calculation of Current Month Environmental Surcharge Factors

Line No.	E(m) = RORB + OE - EAS + Prior Period Adjustment + (Over)/Under Recovery	Source	Environmental Compliance Plans
1	Environmental Compliance Rate Base (RB)	ES Form 2.00	\$ -
2	RB + 12 months	(1) + 12	\$ -
3	Pretax Rate of Return (ROR)	ES Form 1.20	10.23%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ -
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ -
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ -
8	Jurisdictional Allocation Ratio for Expense Month	(A)	100.00%
9	Jurisdictional E(m)	(7) x (8)	\$ -
10	Prior Period Adjustment (if necessary)	(B)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ -
12	Total <i>Adjusted</i> Jurisdictional E(m)	(9) + (10) + (11)	\$ -

Calculation of Environmental Surcharge Billing Factors

		Residential (Total Revenue)	Non-Residential (Net Revenue)
13	Revenues as a Percentage of <i>12 Month Average</i> Total Revenues	0.00%	0.00%
14	<i>Adjusted</i> Jurisdictional E(m) - Allocated	\$ -	\$ -
15	<i>R(m)</i> Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	\$ -	\$ -
16	<i>CESF</i> - Jurisdictional E(m) / R(m)	0.00%	0.00%

Note: (A) Duke Energy Kentucky has no firm wholesale customers.
(B) Amounts determined by the Commission during six-month and two-year reviews.

ES FORM 1.20

**DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT**

Cost of Capital

Line No.	Capital Structure	Ratio	Cost	Weighted Cost (A)	Gross up for Tax Rate (B)	Pre-Tax Rate of Return (A)x(B)
1	Short-term Debt	10.428%	3.083%	0.321%		0.321%
2	Long-term Debt	40.679%	4.243%	1.726%		1.726%
3	Common Equity	48.893%	10.300%	5.036%	1.6253392	8.185%
4	Total	100.000%		7.083%		10.232%

Note: Capital structure and cost of debt as requested in this case per Schedule J-1 page 2.
Gross up for tax rate per Schedule H excluding uncollectible accounts expenses and KPSC maintenance tax factors.

ES FORM 2.00

**DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT**

Revenue Requirement of Environmental Compliance Costs

For the Expense Month of April 2018

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant)	ES Form 2.10	\$ -
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	\$ -
3	Subtotal		\$ -
4	Additions:		
5	Inventory - Emission Allowances	ES Form 2.30	\$ -
6	Subtotal		\$ -
7	Deductions:		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ -
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	\$ -
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	\$ -
11	Subtotal		\$ -
12	Environmental Compliance Rate Base		\$ -
13	Determination of Environmental Compliance Operating Expenses (OE)		
14	Monthly Depreciation Expense	ES Form 2.10	\$ -
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ -
16	Monthly Amortization Expense	ES Form 2.20	\$ -
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ -
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ -
19	Total Environmental Compliance Operating Expense		\$ -
20	Proceeds from Emission Allowance Sales (EAS)		
21	SO ₂ Allowance Sales		\$ -
22	NO _x Allowances Sales		\$ -
23	Total Emission Allowance Sales		\$ -
24	(Over) / Under Recovery		
25	Net Jurisdictional E(m) Authorized for Expense Month two Months Prior		
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		
27	(Over) / Under Recovery		\$ -

Note: (Over) recovery will be deducted from Jurisdictional E(m)
Under recovery will be added to Jurisdictional E(m)

ES FORM 2.20

**DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT**

Amortization Calculation for Coal Ash ARO

Line No.	Period (1)	Cash Spend (2)	COR Credit (3)	Carrying Cost (4)	Recovery (5)	Ending Balance (6)
1	2015 Total <i>Actual</i>					\$0
2	2016 Total <i>Actual</i>					-
3	Jan-17 <i>Actual</i>					-
4	Feb-17 <i>Actual</i>					-
5	Mar-17 <i>Actual</i>					-
6	Apr-17 <i>Actual</i>					-
7	May-17 <i>Actual</i>					-
8	Jun-17 <i>Actual</i>					-
9	Jul-17 <i>Projection</i>					-
10	Aug-17 <i>Projection</i>					-
11	Sep-17 <i>Projection</i>					-
12	Oct-17 <i>Projection</i>					-
13	Nov-17 <i>Projection</i>					-
14	Dec-17 <i>Projection</i>					-
15	Jan-18 <i>Projection</i>					-
16	Feb-18 <i>Projection</i>					-
17	Mar-18 <i>Projection</i>					-
18	Apr-18 <i>Projection</i>					-
19	May-18 <i>Projection</i>					-
20	Jun-18 <i>Projection</i>					-
21	Jul-18 <i>Projection</i>					-
22	Aug-18 <i>Projection</i>					-
23	Sep-18 <i>Projection</i>					-
24	Oct-18 <i>Projection</i>					-
25	Nov-18 <i>Projection</i>					-
26	Dec-18 <i>Projection</i>					-
27	Jan-19 <i>Projection</i>					-
28	Feb-19 <i>Projection</i>					-
29	Mar-19 <i>Projection</i>					-
30	Apr-19 <i>Projection</i>					-
31	May-19 <i>Projection</i>					-
32	Jun-19 <i>Projection</i>					-
33	Jul-19 <i>Projection</i>					-
34	Aug-19 <i>Projection</i>					-
35	Sep-19 <i>Projection</i>					-
36	Oct-19 <i>Projection</i>					-
37	Nov-19 <i>Projection</i>					-
38	Dec-19 <i>Projection</i>					-
39	Jan-20 <i>Projection</i>					-
40	Feb-20 <i>Projection</i>					-
41	Mar-20 <i>Projection</i>					-
42	Apr-20 <i>Projection</i>					-
43	May-20 <i>Projection</i>					-
44	Jun-20 <i>Projection</i>					-
45	Jul-20 <i>Projection</i>					-
46	Aug-20 <i>Projection</i>					-
47	Sep-20 <i>Projection</i>					-
48	Oct-20 <i>Projection</i>					-
49	Nov-20 <i>Projection</i>					-
50	Dec-20 <i>Projection</i>					-
51	Jan-21 <i>Projection</i>					-
52	Feb-21 <i>Projection</i>					-
53	Mar-21 <i>Projection</i>					-
54	Apr-21 <i>Projection</i>					-
55	May-21 <i>Projection</i>					-
56	Jun-21 <i>Projection</i>					-
57	Jul-21 <i>Projection</i>					-

ES FORM 2.20

**DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT**

Amortization Calculation for Coal Ash ARO

Line No.	Period (1)	Cash Spend (2)	COR Credit (3)	Carrying Cost (4)	Recovery (5)	Ending Balance (6)
58	Aug-21	Projection				-
59	Sep-21	Projection				-
60	Oct-21	Projection				-
61	Nov-21	Projection				-
62	Dec-21	Projection				-
63	Jan-22	Projection				-
64	Feb-22	Projection				-
65	Mar-22	Projection				-
66	Apr-22	Projection				-
67	May-22	Projection				-
68	Jun-22	Projection				-
69	Jul-22	Projection				-
70	Aug-22	Projection				-
71	Sep-22	Projection				-
72	Oct-22	Projection				-
73	Nov-22	Projection				-
74	Dec-22	Projection				-
75	Jan-23	Projection				-
76	Feb-23	Projection				-
77	Mar-23	Projection				-
78	Apr-23	Projection				-
79	May-23	Projection				-
80	Jun-23	Projection				-
81	Jul-23	Projection				-
82	Aug-23	Projection				-
83	Sep-23	Projection				-
84	Oct-23	Projection				-
85	Nov-23	Projection				-
86	Dec-23	Projection				-
87	Jan-24	Projection				-
88	Feb-24	Projection				-
89	Mar-24	Projection				-
90	Apr-24	Projection				-
91	May-24	Projection				-
92	Jun-24	Projection				-
93	Jul-24	Projection				-
94	Aug-24	Projection				-
95	Sep-24	Projection				-
96	Oct-24	Projection				-
97	Nov-24	Projection				-
98	Dec-24	Projection				-
99	Jan-25	Projection				-
100	Feb-25	Projection				-
101	Mar-25	Projection				-
102	Apr-25	Projection				-
103	May-25	Projection				-
104	Jun-25	Projection				-
105	Jul-25	Projection				-
106	Aug-25	Projection				-
107	Sep-25	Projection				-
108	Oct-25	Projection				-
109	Nov-25	Projection				-
110	Dec-25	Projection				-
111	Jan-26	Projection				-
112	Feb-26	Projection				-
113	Mar-26	Projection				-
114	Apr-26	Projection				-

ES FORM 2.20

**DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT**

Amortization Calculation for Coal Ash ARO

Line No.	Period (1)	Cash Spend (2)	COR Credit (3)	Carrying Cost (4)	Recovery (5)	Ending Balance (6)
115	May-26	Projection				-
116	Jun-26	Projection				-
117	Jul-26	Projection				-
118	Aug-26	Projection				-
119	Sep-26	Projection				-
120	Oct-26	Projection				-
121	Nov-26	Projection				-
122	Dec-26	Projection				-
123	Jan-27	Projection				-
124	Feb-27	Projection				-
125	Mar-27	Projection				-
126	Apr-27	Projection				-
127	May-27	Projection				-
128	Jun-27	Projection				-
129	Jul-27	Projection				-
130	Aug-27	Projection				-
131	Sep-27	Projection				-
132	Oct-27	Projection				-
133	Nov-27	Projection				-
134	Dec-27	Projection				-
135	Jan-28	Projection				-
136	Feb-28	Projection				-
137	Mar-28	Projection				-
138	Apr-28	Projection				-
139	May-28	Projection				-
		-	-	-	-	-

Amortization Period (yrs) 10
 Monthly Amortization Amount -
 Annualized Amortization Amount -

ES FORM 2.30

**DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT**

Inventory and Expense of Emission Allowances

For the Expense Month Ending April 2018

Total SO₂ and NOx Emission Allowances						
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory	
SO₂ Allowances						
Quantity	-	-	-	-	-	-
Dollars	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$/Allowance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NOx Allowances						
Quantity	-	-	-	-	-	-
Dollars	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$/Allowance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Emission Allowances						
Quantity	-	-	-	-	-	-
Dollars	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

ES FORM 2.50

**DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT**

Environmental Reagent Expenses

For the Expense Month of April 2018

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020	\$ -	\$ -
2	Limestone	502040	\$ -	\$ -
3	Trona	502040	\$ -	\$ -
4	Total		\$ -	\$ -

ES FORM 3.00

**DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT**

Monthly Average Revenue Computation of R(m) for Residential and Non-Residential Customers
For the Expense Month of April 2018

Residential - Kentucky Jurisdictional Revenues							
(1)	(2)	(3)	(4)	(5)	(6)(5)	(7)	(6)(8)
Month	Total Non-Fuel Base-Rate Revenues	Base-Rate Fuel Component	Fuel Clause Revenues	Other Rider Revenues	Environmental Surcharge Revenues	Total	Total Excluding Environmental Surcharge
						(2) thru (6)	(7) - (6)(2) - (5)
May-17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Jun-17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Jul-17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Aug-17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sep-17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Oct-17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Nov-17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Dec-17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Jan-18	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Feb-18	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Mar-18	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Apr-18	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month							\$ -
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month							\$ -
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month							0.00%

Non-Residential - Kentucky Jurisdictional Revenues								
(1)	(2)	(3)	(4)	(5)	(6)(5)	(7)	(6)(8)	(9)(7)
Month	Total Non-Fuel Base-Rate Revenues	Base Rate Fuel Component	Fuel Clause Revenues	Other Rider Revenues	Environmental Surcharge Revenues	Total	Total Excluding Environmental Surcharge	Total Non-Fuel Revenue
						(2) thru (6)	(7) - (6)(2) - (5)	(8) - (3) - (4)(6) - (3) - (4)
May-17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Jun-17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Jul-17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Aug-17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sep-17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Oct-17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Nov-17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Dec-17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Jan-18	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Feb-18	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Mar-18	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Apr-18	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month							\$ -	\$ -
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month							\$ -	\$ -
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month							0.00%	

ES FORM 1.00

**DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT**

Summary of Jurisdictional E(m), Jurisdictional R(m) and Environmental Surcharge Billing Factors

For the Expense Month of November 2017

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 14	=	\$	-
Jurisdictional R(m)	ES Form 1.10, Line 15	=	\$	-
Environmental Surcharge Billing Factor	ES Form 1.10, Line 16	=		0.00%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 14	=	\$	-
Jurisdictional R(m)	ES Form 1.10, Line 15	=	\$	-
Environmental Surcharge Billing Factor	ES Form 1.10, Line 16	=		0.00%

Effective Date for Billing: _____

Submitted by: _____

Title: _____

Date Submitted: _____

ES FORM 1.10

**DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT**

Calculation of Current Month Environmental Surcharge Factors

Line No.	$E(m) = RORB + OE - EAS + \text{Prior Period Adjustment} + (\text{Over})/\text{Under Recovery}$	Source	Environmental Compliance Plans
1	Environmental Compliance Rate Base (RB)	ES Form 2.00	\$ -
2	RB + 12 months	(1) + 12	\$ -
3	Pretax Rate of Return (ROR)	ES Form 1.20	8.782%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ -
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ -
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ -
8	Jurisdictional Allocation Ratio for Expense Month	(A)	100.00%
9	Jurisdictional E(m)	(7) x (8)	\$ -
10	Prior Period Adjustment (if necessary)	(B)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ -
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ -

Calculation of Environmental Surcharge Billing Factors

		Residential (Total Revenue)	Non-Residential (Net Revenue)
13	Revenues as a Percentage of 12 Month Average Total Revenues	ES Form 3.00	0.00%
14	Adjusted Jurisdictional E(m) - Allocated	(12) x (13)	\$ - \$ -
15	R(m) Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	ES Form 3.00	\$ - \$ -
16	Jurisdictional E(m) / R(m)	(14) + (15)	0.00%

Note: (A) Duke Energy Kentucky has no firm wholesale customers.
(B) Amounts determined by the Commission during six-month and two-year reviews.

ES FORM 1.20

**DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT**

Cost of Capital

Line No.	Capital Structure	Ratio	Cost	Weighted Cost (A)	Gross up for Tax Rate (B)	Pre-Tax Rate of Return (A)x(B)
1	Short-term Debt	10.428%	3.083%	0.321%		0.321%
2	Long-term Debt	40.679%	4.243%	1.726%		1.726%
3	Common Equity	48.893%	10.300%	5.036%	1.337304	6.735%
4	Total	100.000%		7.083%		8.782%

Note: Capital structure and cost of debt as requested in this case per Schedule J-1 page 2.
Gross up for tax rate per Schedule H excluding uncollectible accounts expenses and KPSC maintenance tax factors.

ES FORM 2.00

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Revenue Requirement of Environmental Compliance Costs
For the Expense Month of November 2017

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant)	ES Form 2.10	\$ -
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	\$ -
3	Subtotal		\$ -
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ -
6	Subtotal		\$ -
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ -
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	\$ -
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	\$ -
11	Subtotal		\$ -
12	Environmental Compliance Rate Base		\$ -
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ -
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ -
16	Monthly Amortization Expense	ES Form 2.20	\$ -
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ -
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ -
19	Total Environmental Compliance Operating Expense		\$ -
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NOx Allowances Sales		\$ -
23	Total Emission Allowance Sales		\$ -
24	<u>(Over) / Under Recovery</u>		
25	Net Jurisdictional E(m) Authorized for Expense Month two Months Prior		
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		
27	(Over) / Under Recovery		\$ -

Note: (Over) recovery will be deducted from Jurisdictional E(m)
Under recovery will be added to Jurisdictional E(m)

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

Line No.	Period (1)	Cash Spend (2)	COR Credit (3)	Carrying Cost (4)	Recovery (5)	Ending Balance (6)
1	2015 Total <i>Actual</i>					\$0
2	2016 Total <i>Actual</i>					-
3	Jan-17 <i>Actual</i>					-
4	Feb-17 <i>Actual</i>					-
5	Mar-17 <i>Actual</i>					-
6	Apr-17 <i>Actual</i>					-
7	May-17 <i>Actual</i>					-
8	Jun-17 <i>Actual</i>					-
9	Jul-17 <i>Projection</i>					-
10	Aug-17 <i>Projection</i>					-
11	Sep-17 <i>Projection</i>					-
12	Oct-17 <i>Projection</i>					-
13	Nov-17 <i>Projection</i>					-
14	Dec-17 <i>Projection</i>					-
15	Jan-18 <i>Projection</i>					-
16	Feb-18 <i>Projection</i>					-
17	Mar-18 <i>Projection</i>					-
18	Apr-18 <i>Projection</i>					-
19	May-18 <i>Projection</i>					-
20	Jun-18 <i>Projection</i>					-
21	Jul-18 <i>Projection</i>					-
22	Aug-18 <i>Projection</i>					-
23	Sep-18 <i>Projection</i>					-
24	Oct-18 <i>Projection</i>					-
25	Nov-18 <i>Projection</i>					-
26	Dec-18 <i>Projection</i>					-
27	Jan-19 <i>Projection</i>					-
28	Feb-19 <i>Projection</i>					-
29	Mar-19 <i>Projection</i>					-
30	Apr-19 <i>Projection</i>					-
31	May-19 <i>Projection</i>					-
32	Jun-19 <i>Projection</i>					-
33	Jul-19 <i>Projection</i>					-
34	Aug-19 <i>Projection</i>					-
35	Sep-19 <i>Projection</i>					-
36	Oct-19 <i>Projection</i>					-
37	Nov-19 <i>Projection</i>					-
38	Dec-19 <i>Projection</i>					-
39	Jan-20 <i>Projection</i>					-
40	Feb-20 <i>Projection</i>					-
41	Mar-20 <i>Projection</i>					-
42	Apr-20 <i>Projection</i>					-
43	May-20 <i>Projection</i>					-
44	Jun-20 <i>Projection</i>					-
45	Jul-20 <i>Projection</i>					-
46	Aug-20 <i>Projection</i>					-
47	Sep-20 <i>Projection</i>					-
48	Oct-20 <i>Projection</i>					-
49	Nov-20 <i>Projection</i>					-
50	Dec-20 <i>Projection</i>					-
51	Jan-21 <i>Projection</i>					-
52	Feb-21 <i>Projection</i>					-
53	Mar-21 <i>Projection</i>					-
54	Apr-21 <i>Projection</i>					-
55	May-21 <i>Projection</i>					-
56	Jun-21 <i>Projection</i>					-
57	Jul-21 <i>Projection</i>					-

ES FORM 2.20

**DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT**

Amortization Calculation for Coal Ash ARO

Line No.	Period (1)	Cash Spend (2)	COR Credit (3)	Carrying Cost (4)	Recovery (5)	Ending Balance (6)
58	Aug-21	Projection				-
59	Sep-21	Projection				-
60	Oct-21	Projection				-
61	Nov-21	Projection				-
62	Dec-21	Projection				-
63	Jan-22	Projection				-
64	Feb-22	Projection				-
65	Mar-22	Projection				-
66	Apr-22	Projection				-
67	May-22	Projection				-
68	Jun-22	Projection				-
69	Jul-22	Projection				-
70	Aug-22	Projection				-
71	Sep-22	Projection				-
72	Oct-22	Projection				-
73	Nov-22	Projection				-
74	Dec-22	Projection				-
75	Jan-23	Projection				-
76	Feb-23	Projection				-
77	Mar-23	Projection				-
78	Apr-23	Projection				-
79	May-23	Projection				-
80	Jun-23	Projection				-
81	Jul-23	Projection				-
82	Aug-23	Projection				-
83	Sep-23	Projection				-
84	Oct-23	Projection				-
85	Nov-23	Projection				-
86	Dec-23	Projection				-
87	Jan-24	Projection				-
88	Feb-24	Projection				-
89	Mar-24	Projection				-
90	Apr-24	Projection				-
91	May-24	Projection				-
92	Jun-24	Projection				-
93	Jul-24	Projection				-
94	Aug-24	Projection				-
95	Sep-24	Projection				-
96	Oct-24	Projection				-
97	Nov-24	Projection				-
98	Dec-24	Projection				-
99	Jan-25	Projection				-
100	Feb-25	Projection				-
101	Mar-25	Projection				-
102	Apr-25	Projection				-
103	May-25	Projection				-
104	Jun-25	Projection				-
105	Jul-25	Projection				-
106	Aug-25	Projection				-
107	Sep-25	Projection				-
108	Oct-25	Projection				-
109	Nov-25	Projection				-
110	Dec-25	Projection				-
111	Jan-26	Projection				-
112	Feb-26	Projection				-
113	Mar-26	Projection				-
114	Apr-26	Projection				-

ES FORM 2.20

**DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT**

Amortization Calculation for Coal Ash ARO

Line No.	Period (1)	Cash Spend (2)	COR Credit (3)	Carrying Cost (4)	Recovery (5)	Ending Balance (6)
115	May-26	Projection				-
116	Jun-26	Projection				-
117	Jul-26	Projection				-
118	Aug-26	Projection				-
119	Sep-26	Projection				-
120	Oct-26	Projection				-
121	Nov-26	Projection				-
122	Dec-26	Projection				-
123	Jan-27	Projection				-
124	Feb-27	Projection				-
125	Mar-27	Projection				-
126	Apr-27	Projection				-
127	May-27	Projection				-
128	Jun-27	Projection				-
129	Jul-27	Projection				-
130	Aug-27	Projection				-
131	Sep-27	Projection				-
132	Oct-27	Projection				-
133	Nov-27	Projection				-
134	Dec-27	Projection				-
135	Jan-28	Projection				-
136	Feb-28	Projection				-
137	Mar-28	Projection				-
138	Apr-28	Projection				-
139	May-28	Projection				-
		-	-	-	-	-

Amortization Period (yrs) 10
 Monthly Amortization Amount -
 Annualized Amortization Amount -

ES FORM 2.30

**DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT**

Inventory and Expense of Emission Allowances

For the Expense Month Ending November 2017

Total SO₂ and NOx Emission Allowances						
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory	
SO₂ Allowances						
Quantity	-	-	-	-	-	-
Dollars	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$/Allowance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NOx Allowances						
Quantity	-	-	-	-	-	-
Dollars	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$/Allowance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Emission Allowances						
Quantity	-	-	-	-	-	-
Dollars	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

ES FORM 2.50

**DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT**

Environmental Reagent Expenses

For the Expense Month of November 2017

<u>Line No.</u>	<u>Expense Type</u>	<u>Account Number</u>	<u>East Bend Unit 2</u>	<u>Total</u>
1	Ammonia	502020	\$ -	\$ -
2	Limestone	502040	\$ -	\$ -
3	Trona	502040	\$ -	\$ -
4	Total		<u>\$ -</u>	<u>\$ -</u>

ES FORM 3.00

**DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT**

Monthly Average Revenue Computation of R(m) for Residential and Non-Residential Customers

For the Expense Month of November 2017

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge
					(2) - (5)
Dec-16	\$ -			\$ -	\$ -
Jan-17	\$ -			\$ -	\$ -
Feb-17	\$ -			\$ -	\$ -
Mar-17	\$ -			\$ -	\$ -
Apr-17	\$ -			\$ -	\$ -
May-17	\$ -			\$ -	\$ -
Jun-17	\$ -			\$ -	\$ -
Jul-17	\$ -			\$ -	\$ -
Aug-17	\$ -			\$ -	\$ -
Sep-17	\$ -			\$ -	\$ -
Oct-17	\$ -			\$ -	\$ -
Nov-17	\$ -			\$ -	\$ -
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ -
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ -
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					0.00%

Non-Residential - Kentucky Jurisdictional Revenues						
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Month	Total Revenues	Base Rate Fuel Component	Fuel Clause Revenues	Environmental Surcharge Revenues	Total Excluding Environmental Surcharge	Total Non-Fuel Revenue
					(2) - (5)	(6) - (3) - (4)
Dec-16	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Jan-17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Feb-17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Mar-17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Apr-17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
May-17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Jun-17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Jul-17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Aug-17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sep-17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Oct-17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Nov-17	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ -	\$ -
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ -	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					0.00%	